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MINISTRY OF AGRICULTURE

Radio Campaigns for Soil & Water Conservation

Introduction

Radio campaign is a media-based activity that extend over a period and can be used to encourage a target population to adopt a certain behaviour, and to give instruction on how to do it. Radio campaigns will support awareness creation, mobilization and behaviour change and are suitable to reach the (rural) communities with the messages, through use of community radios.This guide is written go provide guidance and tips in setting up the radio campaign, as well as an example script for a radio program.


Photos: Use of radio in local context.

Radio is still the most popular, economic and accessible means of communication for rural populations. In Ethiopia the number of radio sets per head exceeds by far the number of TV sets. In kebeles with high rates of illiteracy, where electricity, phone or access to Internet may be lacking, radio plays a key role in daily local life. Radio can be used as a campaign tool to trigger people into action and to promote soil and water conservation interventions, such as Water Spreading Weirs, Dry Stone Measures. One can use a radio campaign not only to disseminate information, but also to organize events, communicate the venues for meetings with extension workers and advise on where to obtain inputs/services or to get technical support, with a focus on regional or local events.

An important point is that radio also provides opportunities to project implementers for:

- Sensitizing the rural communities about the WSWs and DSMs;
- updating all the stakeholders and the rural communities about the progress of the water and soil conservation programs;
- promoting adoption of various agricultural technologies through clarifying areas not well understood by the communities.

Advantages	Limitations:
• Reaching people with a radio • Responding to actual events • Combine with field schools and local events • Monitoring possible • You can reach everyone, also people who are illiterate • Interaction: possibility of receiving prompt feedback • Opportunity: Drama /storytelling • Sections of the program can be shared through social media messages, for further spread of the information	• Penetration in remote areas can be difficult • Uses only one sense (hearing) • Need for regular replacement of batteries is a cost • Message only temporarily available at time of broadcast • It needs well trained broadcasters • Finding a radio station that is familiar with the target groups • Cost to prepare, record and transmiss the programs

Setting up a radio campaign

Important points to consider:

- ✓ **Gender friendly approach.** In the radio campaign women need to be included in all stages. For example: by having a female voice in the radio broadcast, by choosing the time of the broadcast, so that women in the communities are available to listen. In general, by organizing, supporting, and coordinating activities for women they benefit the most from the radio campaign opportunities.
- ✓ **The broadcast needs to be in a local language**. Using the language or dialect of the pastoralist and semi-pastoralist communities will ensure that they understand the core message, but also feel respected and recognized at the same time.
- ✓ **Campaign music**. The program needs to have an attractive opening musical piece that is a reminder to people that the program is going to start. In addition, when they listen to the music piece, they will automatically make a link with the campaign and create an emotional connection. Be sure that the music piece that you use will not offend or confront the community's religion and beliefs or other cultural values.
- ✓ **Choosing appropriate timing for airing the campaign**. Research the daily activities of pastoralist and semi-pastoralist and choose a time when pastoralist and semi-pastoralist are available to listening to the radio campaign. Is it early in the morning or late in the afternoon? This is a very important part of the radio campaign and its effectivity.
- ✓ **Topics of interest for local communities.** Pastoralist and semi-pastoralist communities have many responsibilities and occupations during the day. They will only listen to a radio program that discusses relatable topics like opportunities to improve their health, livestock, crops, water or marketing.

What do you need to prepare for a radio campaign?

1. **First agree about the target group you want to reach.**

   Be clear about the group you want to reach, are they pastoralist, or semi-pastoralist, women, youth, or all of them? Each of these groups has it own way of perceiving information and getting motivated. Considering also that the time for airing the broadcast differs from group to group, based on their daily activities. You need to choose a time when it is likely for the target group to be listening to the radio: remember your goal is to reach them.

2. **What is the campaign about?**

   Be clear about the message you want to disseminate, have a clear purpose and goal. What you want to achieve is to stimulate the target group to take a specific action, and this needs an appropriate planification according to the topics and the target groups.

3. **Budget: make a financial plan early on.**

   A radio campaign cost money, it is important to make a financial plan early on and to discuss cost, frequency, and duration with the radio station. Also, what are the options to cover those costs: is there a financial support from the government, NGOs or sponsorship?

4. **Duration of the radio campaign.**

   The time of the campaign depends on the topic and the target group. If they need to adopt significantly to new farming practices and innovations, then you need to make the radio campaign to run long enough that it reaches the target population, and that it gives enough time to assimilate and adopt the new practice.

5. **With whom are you working together in the campaign?**

   You do not do a radio campaign alone. This is a great opportunity to work with different partners; who can be those partners? Woredas extension workers, NGOs, donors, pastoralist association, cooperative, women association, universities, government department, etc. Work together with them during the planning but also after the campaign, this will improve quality and effectiveness. The partners can be a good source of ideas, feedback, but most of all, they can help the radio campaign to become a success.

6. **What outcome do you aspect from the radio campaign?**

   If everything goes well, the radio campaign will stimulate pastoralist and semi-pastoralist to a certain action, they will be triggered into a new venture with the information they will be listening to. You need to prepare following steps for pastoralist and semi-pastoralist to access more detailed information and to get enrolled, and what are the points of action. Plan those steps before you start the radio campaign.

7. **Monitor the progress during the campaign.**

   Review how the campaign is going, are you reaching the target group? For this it is important to reserve some time for the campaign to get landed. Take this into account when planning the frequencies of broadcasting and the duration of the campaign. Are you getting some feedback, are the communities getting the right information? Are communities starting to mobilise and getting motivated to search for more detailed information or start to get enrolled? All these points will help you evaluate if the radio campaigns are working well. Do not hesitate to make some changes if it is necessary.

8. **Evaluation.**

   An important part of a radio campaign is the evaluation. At the end of the campaign many facts and findings will come out. You can get a good feedback from the pastoralist and semi-pastoralist communities, about how they received the information send on radio, and how this information helped to create new ideas. Ask what needs to be improved! Furthermore, include evaluation of the partners in this report.

Example of Radio Campaign for soil and water conservation

Objective: To enthuse Community to adapt soil and water conservation, Water Spreading Weirs and Dry-Stone Measures

Target Audience: Pastoralist and semi-pastoralist

Core story: soil degradation can be turned around trough water spreading weirs, and dry-stone measures, with these mechanisms there is a great opportunity for water conservation

Program name: Water and soil conservation
Duration: 8 to 12 weeks, broadcast per week and one repeat.

Topics/content: Water Spreading Weirs (WSW) Dry Stone Measure (DSM)

Features/formats: Opening broadcast of interviews with communities' leaders, Kebele public association, women and pastoralist/semi-pastoralist, field interviews, testimonies, case studies (and core stories), interviews, open broadcast with farmers

Sample Script: Water and soil conservation (see Annex 1)

Sampled broad cast series:

1. Teaser: Bringing fodder to the market – what is value chains
2. Controlling water with WSW and DSM – spreading water, controlling gullies
3. How to build WSWs
4. How to build DSMs
5. Optimizing crop production
6. Maintaining the WSWs and the DSMs
7. Developing wells
8. Women issues

Structure:

1. Spot 130 sec
2. Staged dialogue with farmers – community discussion
3. Spot 130 sec
4. Interview experts
5. Spot 130 sec
6. Announcement, competition, where to get information

Annex 1: Sample Radio Scripts

In this document two sample radio scripts are given, discussing important components of the Dry Valley Rehabilitation and Productive Use Approach:

- Water spreading weirs
- Dry stone measures

As part of Package 2 – Crop production, another radio scrips is prepared on

- Optimizing crop production: growing fodder grasses.

Each complete program will last 8-12 minutes and ideally should be part of a series on the different elements of DVRPU. More programs can be made – giving room to more experience sharing.

Also, a short 30 or 130 second announcement/ pitch can be used to announce all programs in the days before the airing of the program.
Two examples of a spot of 30 seconds and a spot of 130 seconds are provided as part of this document.

A suggested structure of the program:

1. Spot 130 sec
2. Staged dialogue with farmers – community discussion
3. Spot 130 sec
4. Interview experts
5. Spot 130 sec
6. Announcement, competition, where to get information

1. Radio script for water spreading weirs (WSW)

Guidance:

- In this radio program you will need one expert who will explain the Water Spreading Weirs, and a host who have some knowledge of the WSW. The objective is to familiarize the communities with this new technic, and understand the whole approach.
- It is important to have a (music) tune when the program is starting and finalizing. Use for all the soil and water conservation program the same tune, so the listener will make the connection with the topic by listening to the tune.
- Before going on air make sure the host reviews the questions with the guest(s) and be clear on the topic, the objective, and the time available.
- You could use this script as inspiration to research and write a script on a similar topic in your area. Or you might choose to produce this script on your station, using voice actors to represent the speakers. If so, please make sure to tell your audience at the beginning of the program that the voices are those of actors, not the people involved originally.
- Make sure, that you include the right contact for further information on the topic, if there are listeners who are interested they can easily access and obtain more information.
- Estimated running time for the script: 12 minutes, with intro and outro music.

Script:
Introduction with music
(music playing)

Host: Welcome everybody to our weekly soil and water conservation program. Today our guest is technical expert Jamal, he is an expert on water spreading weirs working with [mention organization].
Jamal, welcome to our program! Can you explain to us what are water spreading weirs?

Technical expert Jamal: Thank you for the invitation, I will try not to be too technical so our listener will understand better. Water Spreading Weirs are masonry structures that span the entire width of a river bed or large parts of a valley floor to spread floodwater over the adjacent land area. They are designed to spread and redistribute as much floodwater – including its sediment load – as possible. They also reduce soil erosion.
Different from a dam, which is designed to retain water, a WSW is not blocking the water flow completely but spreads water and its sediments. It reduces the velocity of the water flow by enhancing the length of the water path. The areas upstream and adjacent to a weir are temporarily flooded. This allows water to infiltrate into the soil and sedimentation to accumulate. This improves soil quality, recharges groundwater, increases vegetation and creates favourable drainage patterns. Water Spreading Weirs are made of natural stones and cement. Each weir consists of a spillway, one or more basins in the riverbed itself, and lateral abutments or 'wing walls' which decrease in height away from the spillway

Host: Are water spreading weirs suitable for every terrain?
Technical expert Jamal: The WSW approach is suitable all over the dry lowlands of Ethiopia. Especially dry river valley bottoms for improved crop and forage productions, using the residual moisture of the river bed sediment. But there are some special conditions that need to be taken to account like:

- Rainfall: 200 – 750 mm;
- Climate: Arid to semi-arid areas;
- Soil: For all agricultural soils;
- Slopes: Best to focus on slopes below 2% for most effective water spreading effect; if the slope of the areas is too steep, the WSWs will have many problems
- Topography: Wide, shallow valleys with dry river beds are most suitable.

Host: Jamal can you explain to us who is building the water spreading weirs, or how the work is organized?
Technical expert Jamal: There are many steps to be taken, first you need to agree with communities on locations, user rights and maintenance. We provide the input of engineers for the initial design and profile. Everything needs to be well organized. The setting out should be done by surveyors together with the foreman. Construction should be done by trained masons under supervision of a foreman and experienced technical personal. WSW construction needs skilled masons. Community members can be involved in site clearing. They can do stone and sand collection, undertake excavation and backfilling as well as assisting the masons.

Host: What is the role of the community?
Technical expert Jamal: A WSW will need to be operated and managed by the community. But the WSW construction requires technical skills for design, setting out and construction. The responsibilities for maintenance is discussed in advance with the community.
The community needs to be organized in a group with supportive bylaws to ensure they work improve sustainability.

Host: Is this a difficult job for the communities?
Technical expert Jamal: I cannot call it difficult, but it needs a lot of good organization, and engagement, before, during and after the construction. For example, good maintenance is a must because if there is not a good maintenance arrangement in place it can cause adverse impact, maybe be the creation of new erosion gullies. This can be mitigated by putting in place biological control measures such as the planting of elephant grass. During and soon after the rainy season, WSWs should be regularly checked for damage and be maintained. Furthermore gully erosion downstream of the WSW and destruction of the WSW itself is a potential risk if maintenance doesn't take place in time. Therefore, the community needs to take ownership of the whole process to ensure the optimal functioning of the water spreading weirs

Host: How is the collaboration with other stakeholders?
Technical expert Jamal: In the WSW study and design phase clan leaders, community representatives kebele leaders, NRM experts and Development Agents need to be involved. Kebele leaders and community representatives are responsible for organization of community meetings, discussion, and contribution of community. NRM experts and engineers are responsible for technical designs, technical support, setting out and assure availability of material that cannot be covered by the community.

Host: What are the benefit of the water spreading weirs?
Technical expert Jamal: Water Spreading Weirs have positive effects on people and on nature. Some effects can be on the short term, others on long term. Effects can be classified into

- Production, resilience and livelihood benefits:
- Ecological benefits:
- Socio-cultural benefits:

To finalize I will give you an example of Zehara, a married woman mother of ten children. She is an agro-pastoralist in Teaboy Kebele in the Shakayboru Village of Chifra District. Prior to the construction of the Water Spreading Weirs in her village, Zehara's livestock suffered from shortages of pasture and fodder. At that time, she had little knowledge of crop and fodder cultivation due to the low availability of water. The family was food insecure, supported by relative who donated livestock fodder from their irrigated plot near the Mille River. Since the Water Spreading Weirs have been built, she explains, flood water spreads onto the plain, allowing her and her family to grow crops and fodder for the first time on this land. Last season she grew maize, sorghum and mung beans on 1.5 hectares. The straw from this also made enough fodder for the livestock to last three months.
So, the answer is yes, Water Spreading Weir have many benefits!

Host: Thank you Jamal for the clear explanation about the Water Spreading Weirs. Dear radio listeners if you want to have more information, please go to the nearest Development Agent. Thank you for joining us week after week in our program over water and soil conservation supported by GIZ. Next week we will be back on the same day and same time we a new program over this important topic.

Close the program with the same music you started with…

2. Radio script for Dry Stone Measure Measures

Guidance:

- For this program you will need a Host, a Development Agent, and a Village Representative Pastoralist.
- It is important to have a (music) tune when the program is starting and finalizing. Use for all the soil and water conservation program the same tune, so the listener will make the connection with the topic by listening to the music.
- Before going on air make sure the host reviews the questions with the guests and be clear on the topic, the objective, and on the time available.
- You could use this script as inspiration to research and write a script on a similar topic in your area. Or you might choose to produce this script on your station, using voice actors to represent the speakers. If so, please make sure to tell your audience at the beginning of the program that the voices are those of actors, not the people involved originally. n
- Make sure, that you include the right contact for further information on the topic for the listeners!
- Estimated running time: 8 minutes, with intro and outro music

Script:
Introduction with music
(Music playing)

Host: Dear listeners, today we have two important guests who are going to explain how to conserve the soil and have more agricultural production. We have Mr. Abebe, a development agent, who is going to explain how the Dry Stone Measures (DSM) work, and Mr. Ismail, a village representative, who is going to tell as how his experience has been since the implementation of the Dry Stone Measure
Abebe (Development Agent): Thank you for the introduction. We are happy to be on the program. During the implementation we first met with the village representatives, and they explained their concerns about how the soil has degraded so much that it is no longer fertile, creating major problems for agricultural production and for animal grazing. When it rained the water ran out of the area and does not stay there

Host: Which crops do you grow and how large is your plot of land?
Ismail (Pastoralist village representative): I have less than one hectare, in our village we used to grow sorghum, and some legumes. We had a big problem our crops gave us little yields, no matter how hard we work on the land! In some dry years the sorghum would not have grains. What a challenging time that we have had in the past!

Host: Have you experienced any challenges with the introduction of DSM?
Abebe (DA): Yes, we did, because it is a new technique, all development agents got a DSM training. Many development agents were highly interested, and they are introducing the DSM techniques to other Woreda and Kebeles. This has been nice to see. Also, in the time of the training, the Development Agents were working as one team with the communities, jointly guiding, and managing tasks.

Host: Wow, that sounds good, because the DA are the ones who needs to work together with the village! Mr. Ismael, how did you experience the implementation of the DSM?
Ismail (Pastoralist village representative): With the technical support of the development agents, our villagers started building the dry stone measures, using stones on the field and

in the surrounding areas. We built long bunds that spans the whole valley to slow down and spread the water flow all over all our lands. For the small gullies, we also built small bunds cutting across the gully to stop them from growing further
Ismail (Pastoralist village representative): And just after two years, we already see our land recover, with the gullies quickly filled up with soil. And the bunds were useful to keep the water longer on the land, making it moist with lots of sediment to grow our crops.
We benefit from the dry stone measures in many ways.
Most importantly the erosion of the gullies has decreased. Also our soil is getting more moisture, and more organic content.
The crops grow much better thanks to more water and nutrients, and we have higher yields
Fodder grasses grow better on our land, and our camels and goats have more feed.
And lastly, we are better prepared for droughts. Erosion is now under control!

Host: What about the maintenance of the DSM? Do you need to do something more or after you build it you don't need to do anything else?
DA Abebe: The dry stone measures are very helpful, but the need good maintenance otherwise they will not work optimal and even will create more problems. Let us not forget to take good care of them. Tomorrow, the pastoralist in the village is going to do some maintenance work on the bunds. They will remove tree branches and waste along the bunds. And we must put back all stones that were carried away by heavy rain.
Maintaining a dry-stone measure structure typically requires the removal of bigger branches and waste carried down by rainwater and to put back all stones that have been moved or carried away by heavy rain. Wherever the structure has been overflowed by water causing damage to it, its height needs to be increased or another dry-stone structure constructed higher up the slope.
Ismail, (Pastoralist village representative): Yes, that's a good plan. We already discussed this in our community. We will take care of our useful dry stone measures, so they can help us to keep the land fertile for many years, for our children, and for their children!

Host: What is the benefit of the DSM?
DA Abebe: They have positive effects on people and on nature. Some effects can be on the short term, others on long term. I will mention some of them. They help local food security and increase the availability of fodder. They make the grazing areas richer. All this helps animal production. They increase the organic matter in the soils. This increases the resilience of the land to heavy rainfall and to dry spells. The Dry-Stone Measures also improve the environment. The surface runoff is better regulated. As a result, there is less soil loss and erosion.
There is more water availability due to recharged groundwater. Soil moisture also increases. What you see is that biomass increases and there is more animal and plant diversity. Over time, the entire valley bottom is restored
Ismail, (Pastoralist village representative): I still remember the hard time three years ago. Our land was very dry, and the flood just rushed through the land, taking away all the precious soil to grow our crops. But now, our villagers have learned to protect, and rejuvenate our land with the dry-stone measures. It really helped to save our land and soil.

Host: I want to thank our two guests of today Pastoralist Ismael and DA Abebe for sharing this important information, and all of you for listening to this space on water and soils conservation, every week on the same day and time we will continue with more important information for all the pastoralist and semi-pastoralist. This program was made possible by the support of GIZ.

Close the program with the same music of the introduction

3. Short Spot (30 sec)

Signature tune	(Play the tune developed for the program – short version)
	Hey listeners! Do you know that there is much to do to make our lowlands greener and more productive? Yes, you are hearing it correctly! By better soil and water conservation and new ways of doing farming!! Listen to our program every [mention day] – with first-hand experiences in dry valley rehabilitation and productive use. Go to the nearest local agricultural office for more information, or contact your local development agent today!
Signature tune	(Play the tune developed for the program – short version)

4. Long Spot (130 sec)

Below the two-men version is explained. You can also make a version with two women, and one focusing on dry valley rehabilitation and productive use.

Signature tune	(Play the tune developed for the program)
Market ambient sounds **Voice one**	(In the background, during the conversation) I am so happy now, that after three years of hard work, we stopped erosion and land degradation. We can make good use of our land and the fertile soil again! Look at the grass, our goats and camels now have plenty of fresh grass!
Voice two	We benefit from the dry stone measures in many ways. Our soil is getting more moisture, and more organic content The crops grow much better thanks to more water and nutrients, and we have higher yields Fodder grasses grow better on our land, and our camels and goats have more feed. And lastly, we are better prepared for droughts. Erosion is now under control!
Host	There is so much to do to rehabilitate low land, and get more food, more incomes, more jobs! Go to the nearest local agricultural office for more information or contact your local development agent, today!
Signature tune	(Play the tune developed for the program)

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