



DEVELOPING RADIO PARTNERS

Focus: Soil Erosion

Climate change happens in different ways, ranging from increased gradual changes in temperature and precipitation, to increased frequency and intensity of extreme weather events such as droughts or floods.

Most of the rural populations rely on rain-fed subsistence farming to survive and small-scale farmers in Zambia are among the first to feel the impact of climate change because of their greater dependence on rain to nourish their crops.

Yet, too much rainfall can wash away nutrients that enrich the soil.

It is important to restore and maintain the soil so that it provides the essential air, water and nutrients that crops need to survive.

A farmer can improve the soil with manure. Dried animal manure supplies nutrients to plants and helps to aerate the soil.

Manure also helps to prevent soil and wind erosion by binding sandy soil particles together. It also prevents cracking and water run-off that occurs when clay soil dries out.

The Weekly Information Resource Bulletin

The goals of the Weekly Bulletin are:

- Bring listeners in the project area the latest information on natural resources, the environment and agriculture
- Focus on solutions, what works and what people can do
- Encourage listeners to share both their questions and solutions (African solutions for African problems)
- Raise awareness of issues that need to be discussed to affect public policy.
- Bring the latest solutions and practices that have relevance to this region from around the world
- Identify and link other NGOs working in the region share the project interests and goals
- Give the participating journalists guidance and tips on their reporting on these issues

The Problem: Climate Change & Soil Erosion

Zambia's soils are losing their ability to produce and declining soil fertility is reducing food production.

As the depletion and degradation of Zambia's soil continues, people who depend on farming for survival are finding that their options are severely limited.

Soil fertility loss is caused by erosion which is triggered by heavy rainfall, deforestation, and among other things, poor agricultural practices.

The loss of soil nutrients has forced some farmers to start using chemical fertilizers -- which most people can't afford.

Using large amounts of fertilizer or long periods of time can

decrease soil fertility.

The use of chemical fertilizers makes the soils very acidic and it means certain crops cannot grow in these soils. The more acidic the soil -- the less food produced to feed the community.

Different types of manure can be used to supplement or even replace chemical fertilizers. Manure is a natural fertilizer that can restore the soil structure, improve moisture retention and increase the biological activity in the soil resulting in healthier topsoil.

Manure improves soil by stimulating or feeding the life in the soil. It provides nutrients to bacteria, fungi, earthworms and other organisms in the soil, which in turn recycle the nutrients into forms that are readily available for plants to absorb through their roots -- leading to healthier plants and larger crop yields.

Activities for Journalists

Use your community radio station to help listeners understand the benefits of using manure to regain soil fertility instead of using chemical fertilizers. You should also explain to them the types of manures and how they should be prepared to enhance soil fertility.

Types of manure:

Farmyard Manure

Farmyard manure refers to the decomposed mixture of dung and urine from farm animals along with food waste that is fed to livestock.

The Process

Animal and food waste are mixed with soil and spread in the shed so as to absorb urine. Within 24 hours, the urine-soaked refuse along with dung can be collected and placed in a ditch. Once the ditch is filled up to a height of between 45 and 60 centimeters above the ground, the top of the heap is shaped into a dome and plastered with cow dung. This process is continued and when the first ditch is completely filled, a second trench can be prepared. The manure becomes ready for use in about four to five months. Partially decomposed farmyard manure has to be applied three to four weeks before sowing while fully decomposed manure can be applied immediately before sowing.

Sheep and Goat Manure

The droppings of sheep and goats contain higher nutrients than farmyard manure and compost. It can be applied to the field in two ways.

The droppings of sheep or goats can be placed in pits for decomposition and can be applied later to the field. A second method involves placing the sheep and/or goats directly in the field for several weeks and their

droppings are then turned into the soil with a cultivator.

Chicken Manure

Chicken manure is a good soil nutrient. It adds organic matter to the soil and increases the water holding capacity of soil. However, it is best not to put fresh chicken manure around young, tender plants. Fresh chicken manure is “hot,” meaning it is very high in nitrogen and will “burn” the growing plants.

Do an interview with people from your community and find out if they use manure for farming. Also find out what kind of manure they use. What kind of results are they getting? Are they happy with the results?

Conduct an interview with some farmers from your area who use manure in their gardens/fields. Ask them why they decided to use manure instead of chemical fertilizers, what kind of manure they use and do they recommend it. What kind of crop yields are they getting.

Interview an agricultural extension officer from your community and ask him/her about the advantages of manure over chemical fertilizers. Ask them where manure decomposition pits should be dug – preferably away from water sources.

Useful Link

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