



DEVELOPING RADIO PARTNERS

Focus: Soil Management

Much of the soils in Zambia have become poor due to the persistent use chemical fertilizers and the use of pesticides and herbicides. All of these chemicals reduce the number of nutrients in the soil - and hence affects the crops that are grown within it.

Soil fertility is the ability of a soil to supply nutrients needed for crop production.

The depletion of soil nutrients leads to stunted growth or no growth – leading to food shortages.

There is a need to change from traditional farming practices towards environmental friendly farming methods such as the use of plant waste, animal manure and agroforestry practices for better yield and environmental sustainability.

Good soil management leads to improved crop yields and promotes a healthy environment.

The Weekly for Zambia

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

Problem: Loss of Soil Fertility

Many small-scale farmers in Zambia lose soil fertility due to poor management of their soils. Instead of restoring their soil, they often clear more trees for new fields.

Shifting cultivation commonly called slash and burn has been practiced by most small-scale farmers in search of fertile land.

This has contributed significantly to deforestation and environmental degradation.

Maintaining soil fertility and building soil fertility is a major challenge for many small-scale farmers – and that's why deforestation continues to be such a problem.

Soil fertility declines as a result

of continuous crop production on the same piece of land without giving the soil a break.

As plants grow, they absorb nutrients from the soil such as nitrogen, phosphorous, potassium, and calcium.

Harvesting crops removes these nutrients from the soil. Unless nutrients are restored by keeping areas fallow, planting leguminous crop in rotation with other crops, or applying organic, green and animal manure as fertilizers -- soils will lose fertility.

Another problem – the use of pesticides, herbicides and chemical fertilizers – over time – they deplete soil nutrients and can contaminate the water supply.

Solutions: Activities for Journalists

Farmers can improve their soil fertility by using environmental-friendly farming practices such as cover cropping which brings the following benefits: it protects soil from direct sunlight, protects from wind and water erosion, suppresses weeds, fixes atmospheric nitrogen, builds soil structure, and reduces insect pests.

Are any of your listeners using cover crops to protect their soil? Interview them and find out what benefits they have found from using cover crops.

Some leguminous crops and agroforestry trees such as groundnuts and acacia take nitrogen out of the air and fix in the soil.

Find out from the listeners what they are doing to retain the nutrients in the soil. For instance, are they doing crop rotation or inter-cropping different types of crops?

Among the crops being grown in your community, ask listeners to give examples of the crops that they rotate on their farms.

Green manuring enhances soil fertility and soil structure by feeding soil organisms and improving soil structures and it improves the supply of nutrients for crop production.

Ask listeners if any of them have attended Ministry of Agriculture demonstration plots for crop rotation. Have a Ministry of Agriculture official or a local extension officer on your program to talk about demonstration plots and when they next demonstration will occur in your community.

Increasing soil organic matter improves soil structure. It also increases the water-holding ability of soils, improves drainage in soils, provides a source of slow-release nutrients, reduces wind and water erosion and promotes the growth of earthworms and other beneficial soil organisms.

Ask farmers to talk about when they should start applying green or animal manure to their crop land.

Ask farmers who have used green or animal manure to explain the benefits to other listeners.

Invite an agricultural extension officer to the discussion to explain how animal manure, crop rotation and green manure should be prepared and applied.

Animal manure or green manure has the potential to protect the farmer from incurring the high cost of farming inputs – such as expensive chemical fertilizers – and at the same time – get maximum benefits from organic manure.

Useful Links

Information about farming and the environment: Mr Siny Mbale, Conservation Farming Unit Operations Manager: Mobile: 0965238008

Vincent Ziba, FAO; Email: vinceziba@yahoo.com. Phone: 0966-246-924

Good source of information; Mwape Sichilongo, WWF Conservation Manager. Email: msichilongo@wwfzam.org. Phone: +260 966442540