



DEVELOPING RADIO PARTNERS

Focus: Soil Fertility

Soil fertility is one of the most important elements to increasing agricultural productivity in Africa.

Soil fertility refers to the ability of the soil to supply essential plant nutrients and soil water in sufficient amounts and quantities to ensure plant growth and reproduction.

Soils are composed of five main components: mineral, organic, soil water, soil air and living organisms such as bacteria that help in decomposition.

Soil fertility can be reduced or deteriorate due to a variety of reasons such as burning crop residues, leaving soil bare and leaving it unprotected from the sun and wind. Other things that can reduce soil fertility are excessive or insufficient use of fertilizers and poor crop rotation.

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: Many Farmers Need to Improve Soil Fertility

With the events of climate change, it is expected that more extreme weather events such as flooding and droughts are likely to worsen the problem of soil fertility.

Declining soil fertility has many effects apart from reducing food production.

Poor soil fertility triggers other side effects on the farm, too. Such as reducing the amount of fodder for livestock production, reducing the amount of fuel wood and high deforestation because farmers are forced to abandon poor soils and encroach on forest where they can find more fertile soils.

It is important to look at some traditional and modern practices which can help improve soil

fertility.

For instance, nitrogen fixing trees are an agroforestry technology in which leguminous trees are grown and their root system releases nitrogen and helps restore fertility to soils.

Green manure has been widely tested in Africa as a way to improve soil and restore nutrient sources to crops. Green manure, for instance, can be animal or plant waste. Well-decomposed organic matter will release necessary nutrients that assist in plant growth.

Therefore understanding how soils function can help farmers develop and maintain productive and profitable soils – in other words – bigger crops and a better livelihood.

Solutions: Activities for Journalists

Use your community radio station to help listeners understand the significance of soil fertility.

Soil fertility practices refer to soil conservation techniques that directly provide nutrients to the soil. For instance, the use of crop residue through organic decomposition is one such technique.

A combination of practices that result in improved crop yields or reliability with less need for conventional fertilizer or labor are known as conservation farming.

Discuss with your community about how they view soil fertility. Is it considered something important?

Find out how small-scale farmers manage their soils.

Do many farmers in your community use conventional fertilizers? How costly is it?

Are more farmers using more traditional methods of soil fertility – such as agroforestry and organic composting? Have they found it to be cheaper than conventional fertilizers?

Invite an extension agent to talk about the important of the soil's ability to hold water.

As the extension agent to discuss how small scale farmers can contribute to conservation farming and improve soil fertility. In fact, the Ministry of Agriculture through its extension department is conducting a number of demonstrations on soil management.

Find out how many small scale farmers attend these training meetings and also

practice soil management.

Conservation agriculture can make a significant difference to efficiency of water use, soil quality, capacity to withstand extreme events, and carbon sequestration.

Promoting conservation agriculture focuses on soil management by farmers and contributes to improving crop productivity and reduces the cost of farming. This means – more money for farmers and less chance of food shortages.

Have farmers in your area who use conservation practices noticed an increase in crop yields from soil management?

Discuss the methods agroforestry and any other practices that can contribute to soil management.

Do farmers work closely with the Ministry of Agriculture extension officers for soil management practices in your area?

Useful Links

Information about farming and the environment: Makweti Sishekanu, National Farmers Union Zambia: +260-211-252-649 or +260-965-098-360. Email: makwetiskanu@yahoo.com

Good source of information: Vincent Ziba, National Coordinator, Community-based National Resource Management Forum, Zambia; Email: vinceziba@yahoo.com. Phone: 0966-246-924

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