DEVELOPING RADIO PARTNERS

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

Focus: Soil Organic Matter

Soil is a mixture of organic matter, gasses, liquids and countless organisms that together support life on earth.

Soil organic matter holds the amount of carbon that is commonly referred to as soil carbon. Soil carbon is the largest amount of carbon on land and important for reducing the threat of global climate change.

The carbon that plants fix from the atmosphere through the process of making food is transferred to the soil through dead plant matter, including dead roots, leaves and fruits.

The dead organic matter in the soil is important for procuring minerals needed for plant growth, but decomposes and releases carbon dioxide gas into the air.

Soil carbon improves the physical properties of soil. It increases the soil capacity to hold nutrients and water and it contributes to the structural stability of the soils.

The Problem: Poor Soil

Several factors affect the loss of soil organic matter and soil carbon. The most significant has been the influence of humans and agricultural systems.

Some human activities, such as the use of fire, remove soil cover and lead to immediate and continuing losses of soil organic carbon. Plowing and drainage both expose soil organic matter to oxygen and oxidation. Over-grazing by animals causes the soil to lose its organic matter – and slows down the soil's ability to recover.

It has long been encouraged that farmers adjust practices to maintain or increase the organic component in the soil. On one hand, practices that increase loss of carbon matter (such as burning crop residues or over-cultivation) are discouraged; on the other hand, incorporation of organic material (such as adding manure) has been encouraged.

The use of conservation agricultural practices as promoted by the Ministry of Agriculture are not being used much by farmers -- and yet can lead to good crop yields.

Solutions: Activities for Journalists

Ask listeners what are the causes of climate change.

Carbon dioxide is the main cause of human-induced climate change. It has been emitted in vast quantities from fossil fuel combustion, industrial processes, agriculture, and forestry-related activities.

Soil carbon is important for controlling carbon loss and also improving soil fertility.

Invite an extension officer to your station to explain this process.

Ask listeners who are involved in conservation agriculture to share their experiences. What are they doing to improve their soil? Has it made their crops better?

Adding manure to the soil improves soil carbon matter and improves soil capacity to hold nutrients.

Ask listeners if they have tried to add manure to the soil for increasing soil fertility and improving crop yields. What were their results?

Some conservation agricultural practices:

- No burning of agriculture residues
- Reduced tillage
- Planting agroforestry trees

Ask listeners if they have attended conservation agriculture field days. Get them to share their experiences.

The Ministry of Agriculture has documented increases in crop yields when conservation agriculture techniques are used compared to conventional agricultural methods.

Ask the listeners who have practiced conservation agriculture to talk about the benefits. Any negative aspects?

Climate change is a global problem we are all affected and we must all be involved.

Ask listeners how much they think their farming practices contribute to climate change.

Minimum tillage must be promoted to reduce loss of soil carbon to the atmosphere and also increase yields by small scale farmers.

Planting agroforestry trees will help reduce carbon from getting into the atmosphere – which promotes climate change. Ask the extension officer to talk about the benefits of agroforestry.

Small scale farmers can contribute significantly to climate mitigation through good practices by not burning farm residues, by practicing minimum tillage and using agroforestry techniques.

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

Mwape Sichilongo, WWF Conservation Manager. Email: mwapesichilongo@wwfzam.org. Phone: +260 966442540

Conservation Farming Unity, Mr Sinya Mbale , Phone:+260 965 238 008

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