



DEVELOPING RADIO PARTNERS

Focus: Fertilizer Trees

Trees used in agroforestry projects can work as fertilizer-fixers. They improve soil fertility. A good example is the *Gliricidia Sepium* which is a fast growing leguminous tree. It is the commonest and best known multi-purpose tree. *Gliricidia* is used for timber, firewood, hedge, medicinal purposes, charcoal, building fences, shade, poles, and soil fertilization and it is also used as green manure.

Gliricidia adapt well to a wide range of soil types.

Gliricidia tolerates fire and the seedlings quickly re-sprout with the onset of the rains.

The *gliricidia* adds nutrients to the soils such as nitrogen, phosphorus, potassium, calcium and magnesium – nutrients needed to make crops healthy.

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: Agro-Chemicals

One of the greatest challenges of increasing agricultural productivity is low soil fertility.

In Zambia, soil fertility is measured by the presence of nitrogen, phosphorus and potassium in good quantities.

The application of chemical fertilizers improves these quantities for a healthy crop to grow.

The need to improve soil fertility and crop production has become an important issue because the majority of people in Zambia depend on agriculture for survival.

The use of chemical fertilizers has been promoted for a long time, but has negative effects

on the soil over the long term. Chemical fertilizers are known to increase soil acidity and change the soil behavior.

Fertilizer trees are an inexpensive option for small scale farmers who can't afford to buy chemical fertilizers.

Some of the most common fertilizer trees are; *Sesbania seban*, *Tephrosia*, *Acacia Albida* and the *Gliricidia*.

The negative effects of chemical fertilizers include the depletion of nutrients in the soil – ultimately leading to soils that cannot be used to raise crops.

Solutions: Activities for Journalists

The use of fertilizer trees offers farmers wider opportunities of reducing their dependence on chemical fertilizers and there are also other benefits.

The Ministry of Agriculture in collaboration with other research institutes has developed a wide range of fertilizer trees suitable for small scale farmers.

These trees fix nitrogen in the soil and can significantly boost crop yield without the use of chemical fertilizers

Besides enhancing soil some of the other environmental benefits of these trees are: improving soil quality, reducing soil erosion and reducing pollution as well as providing shelter for small livestock.

The fertilizer trees also offer benefits nationally such as on promoting sustainable agricultural production, reducing dependence on fossil fuels for producing fertilizers and increased carbon sequestration.

These trees can also be used as hedges to protect areas from animals and the stems can be used as fuel.

The challenge most farmers have is looking at fertilizer trees as a long term benefit. Investing in these trees will give farmers benefits starting within two to three years depending on the cropping system.

Farmers need to be encouraged to think of agriculture as an investment.

Use your community radio station to discuss with farmers less expensive ways of growing crops for income and food.

Most farmers have been shifting fields in order to find fertile land. However with a growing population that demands more land there will be few options for farmers.

They need to start investing in creating future fertile lands by growing fertilizer trees on their farms.

Climate change impact on agriculture is likely to increase. These impacts will be hardest on small scale farmers with limited investment capacity. Planting fertilizer trees on the farm can help reduce the impact of climate change.

Are any farmers in your area using fertilizer trees? If so, interview them. Why did they plant trees? What are the benefits?

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

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

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