Discover Newsletter for colleagues in Africa

September 2021

Preventing hunger

Why do people have bad harvests? Because of drought, or because their soils have become infertile?

Roland Bunch is an agriculturalist who has spent decades in Africa. He claims that increasing droughts are not primarily caused by climate change, but by the deterioration of soil quality.

Do you believe this?

> To support this claim he says, "As the percentage of organic matter in the soil has decreased from about 4% to less than 1%, the percentage of the rainwater that can penetrate most soils has dropped from about 60% to between 10 and 20%."

Gliricidia sepium

If this is true, then it is no wonder that farmers are struggling!

Here he describes how the problem was successfully tackled in Malawi:

> For the southern Malawi lowlands, we have chosen to use gliricidia trees (*Gliricidia sepium*) and pigeon peas (*Cajanus cajan*) as our main gm/cc species. The gliricidia trees grow extremely fast. In just three years, trees propagated from cuttings can grow over 10 metres tall. They produce a light shade that protects the crops from the excessive lowland heat, and, with proper pruning, will continue to do so for decades as climate change heats things up. Their leaves are among the world's very best tree leaves at fertilizing the soil, the trees can be very easily pruned with a machete while one is standing on the ground, their wood makes good firewood, their flowers are edible, they produce fodder during the dry season, and the bark contains a very good rodenticide.
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> Pigeon peas can easily be intercropped with maize, fertilizing the soil well, and even allowing enough light through for peanuts, cowpeas, soybeans or common beans to grow well beneath them. They are already fairly widely grown and consumed in southern Malawi, so many people already know how to cook them and like their taste. Pigeon peas also provide fodder for animals.

Cajanus cajan Pigeon pea

Have you improved your soils and your productivity in a different way? Let me know how!

With my best wishes for a plentiful harvest this and every year,

Keith Lindsey