Living Fence Advice

ECHO Inc.

The following question was asked at ECHOcommunity Conversations (ECHO's new forum):

> *"I'm looking for recommendations for a certain type of crop that might allow me to keep livestock out, but would not overrun crops near it. Anybody have some suggestions?"*

Network member Roy Danforth shared his recommendations and experience in Central Africa. Please share your own experiences, ask questions and connect with others through ECHOcommunity Conversations at https://conversations.echocommunity.org/ (https://conversations.echocommunity.org/).

Here in Central Africa, rains are frequent and termites are in abundance, so cutting down trees for stick fences is simply not practical - they last only a few months. At the CEFA experimental and training farm, we have researched several types of "living fences" and we have come up with this winner.

Along the border of your property or garden, dig a one meter wide and one meter deep trench as your first deterrent. Pile all the dirt from the trench on the inside of your garden or property, making a triangular hill that slants into the trench - this is the second barrier of sorts.

Next, on the slanted side of the hill facing the trench, plant sisal plants, sometimes known as century cactus - the type that has nasty thorns on the leaf edges and tips. There are different varieties, but the large size is recommended; plant them 1 to 2 m from each other in a single row or in two rows, but staggered. This is your third and main part of the living fence.

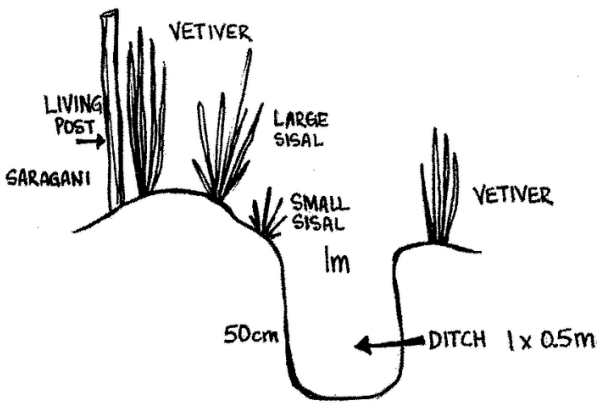

Figure 8. A combo fence of saragani mats, vetiver, sisal, and a ditch. *Source: Agroforestry in the Central African Home Garden; A manual for tree gardening in the humid tropics, Roy Danforth*

Fourthly, plant vetiver grass, a very deep-rooted erosion-control grass along the opposite edge of the hill, on the outside edge of the trench. Plant the sprigs right next to each other. All of this takes a good year to grow and fill in, keeping cows, pigs, goats, and even people from entering your property or garden.

One other option is to add thorny shrubs in between the sisal as a fifth barrier. If you absolutely need the fence now, you can add a sixth obstruction of one-meter-high glyricidia fence, simply by cutting glyricidia sticks and poking them in the ground. They sprout quickly in the rainy season and can be constructed at the top of the hill. If you don't know what sisal or vetiver or gliricidia are, just look them up on the web. Here in Central Africa, the local variety of living fence is the jatropha plant. Cuttings are planted close together and grow quickly.

[See Figure 8 for a diagram of the above explanation.]

You'd be surprised what is available locally - gliricidia was the only plant our program introduced. The others were found in the area.

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