

## Steps to make a Forest garden in the dry savannah:

- Site preparation
  - ▣ Choose a site for the Forest garden
  - ▣ Prepare the site of the Forest garden
  - ▣ Save all beneficial trees and shrubs (Nitrogen fixing, fruits and nuts, medicine etc.)
  - ▣ Save enough trees and shrubs anyway to have some shade and living roots to keep the soil in place even if they are not beneficial in another way; they will be replaced successively by any trees you want in the coming years.
  - ▣ Leave as much as possible of the removed plants in a layer on the soil in order to protect against erosion and eventually to decompose and feed the soil with organic matter
  - ▣ Make micro-catchments and small stone walls
  - ▣ Practise runoff water harvesting for the Forest garden
  - ▣ Gather all kinds of organic matter for nurturing the Forest garden
  - ▣ Start compost production for using it later on
  - ▣ Construct screens around the site against domestic and wild animals
- Domestication of wild indigenous crops
  - ▣ Search for the best specimens of wild edible trees and herbs
  - ▣ Sow seeds and plant cuttings of the best plants in the Forest garden
  - ▣ Use method of direct seeding
  - ▣ Select from wild fruit trees and shrubs like:
    - *Strychnos spinosa*
    - *Grewia tenax*
    - *Garcinia livingstonei*
    - *Carissa macrocarpa*
    - *Uapaca kirkiana*
    - *Vangueria infausta*
  - ▣ Also select from important and healthy wild herbs like:
    - *Tylosema fassoglense*
  - ▣ Try to make and grow cuttings of these plants; you will then have clones of the favourite plants
- Trees, shrubs and herbs: three vegetation layers in the Forest garden
  - ▣ Choose beneficial trees and shrubs for protection of crops (shade, protection against erosion and N-fixation) and useful products
  - ▣ These trees will be planted in the Forest garden at distances and numbers depending on their natural growth habit
  - ▣ What kind of trees and shrubs should be sown or planted from cuttings:
    - Domesticated wild trees and shrubs like the species named above
  - ▣ Other beneficial species like:
    - *Moringa oleifera*
    - *Moringa stenopetala*
    - *Faidherbia albida*
    - *Adansonia digitata*
- ▣ Herbs to be sown and planted beneath and in between the trees and shrubs:
- ▣ Cereal crops: sow two thirds of African cereal crops like:
  - Sorghum and
  - Pearl millet
  - Alongside with one third of Maize; Sorghum and Pearl millet are much more drought resistant
- ▣ Pulses like:
  - Bambara groundnut
  - Pigeon pea
- ▣ Vegetables like:

- Onions
  - African kale
  - Tomato
  - African eggplant
  - Hot pepper
- Forest garden for Fodder crops
    - Carry out all the actions for site preparing like suggested with the Forest garden for food production
    - Make a screen around the projected plot in order to keep cattle out of the Forest garden
    - Sow *Faidherbia albida* seeds in rows at 10 meter distances between the rows and 1 meter between the plants in the rows; sow at least three seeds in every hole; make at least rows of ten plots plus one (11) or a multiple of ten plus one (21, 31, 81 and so on) because you need the extra one to complete the borders and edges of the Forest garden later on
    - Sow *Moringa oleifera* seeds in rows between the *Faidherbia* with 2 meter distances between the rows and 1 meter between the plants in the rows and sow at least three seeds in every hole; or plant cuttings having the same distances
    - Save the best plant and cut the least vital plants of the seedlings if there are more than 1 plant sprouting on a plot when the best is about 30 cm tall and keep the removed plants for cattle feed
    - Cut the growing *Faidherbia* to a 1.5 meter stem and keep the green shoots for cattle feed ; dont cut back every 10<sup>th</sup> of the *Faidherbia*'s starting with the first in the row and ending with the last and let them grow free for casting shade
    - Cut the *Moringa* back on 1 meter stems in order to harvest green shoots for fodder (and food); do not cut all rows at the same time
    - Determine the best time to harvest the shoots of both plant species which would result in the best regrowth
    - When the Forest garden matures, cereals can be grown in between the woody plants
    - The woody parts of the cuttings for fodder (that have been) left by the cattle, can be dried and used as firewood