SLM06 Zaï planting pits

Rainfall run off can be turned to productive results through water harvesting. This can be done through Zai planting pits, that are used to capture water runoff that flow over the surface.

Zai pits are digged by hand with a hoe: 25 cm in diameter and 2o cm deep, and spaced 90 cm apart in each direction. Excavated soil is then placed down the slope of the hole.

Composted manure is precision placed in the zai before millet or sorgum is sown, hence when it rains, moisture and fertility are concentrated exactly where required.

Benefits of Zai pits

Compost and organic manure placed on zai pits allows making best use of them. Cereals, cowpeas and crop residues provide forage for animals.The pits are supplemented with stones lines that enables rich sediments to settle in the Zai.

Zai ensures increase in yields are produce and help reverse desertification through runoff capturing, holes and manure. Trees are also planted in the zai pits such as acacia that can be used for mulch.

Semi-mechanization of Zai

Pits are made using a horse drawn riper to opens lines, a modified rake is drove at right angles to mark out the zai, the holes are then dug and manured. This method reduces labour input.

Countries like Burkina Faso and Niger use zai planting pits method.