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Session 2: Current and Emerging Global Threats to Crops in CETC Partner Countries/Regions:

EAST AND SOUTHERN AFRICA

Current and Emerging Threats to Crops: A Practical Course

Day 1: Current Situation/Status.

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ZAI PITS-DEFINITION AND ORIGIN

Zai pits refers to small basins in which seeds of annual and perennial crops are planted.

The technique originated in Mali in the Dogon area and was adopted and improved in Northern Burkina Faso by farmers after the drought of the 1980

Zai pits are a traditional land rehabilitation technology invented by farmers in Burkina Faso to rehabilitate degraded lands and restore soil fertility to benefit farmers living in drylands.

The pits hold any water small water drops of rainwater that falls on the ground

They are aligned with crop residues or mulch at the bottom and the topsoil mixed with manure and then returned to the pits

PREPARATION OF ZAI PITS

Pits are usually 90cm*90cm wide or 60cm*60cm and 30cm-45cm deep

STEP BY STEP PREPARATION OF ZAI PITS

(I) Dig a hole 90cm by 90cm and 30cm deep during the dry season .The hole can hold up to 9 plants or a 60cm by 60cm wide and 30cm deep hole which holds upto 5 plants

(II) After digging the pit, fill it halfway with organic matter of dry leaves, maize straws,etc which is to assist in conserving moisture content and increase manure content as the organic matter decomposes with time.

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BENEFITS OF ZAI PITS

(i)Increase amount of water stored in the soil by trapping water droplets and increased water retention.

(ii) Protects seeds and organic matter against being washed away

(iii) concentrates nutrient and water availability at the beginning of the rainy season

(iv) Increases yields.

(v) Reactivates biological activities in the soil and eventually leads to an improvement in soil structure.The application of the Zaï technique can reportedly increase production by about 500% if properly executed.

ZONE OF ACTIVITIES

We established 25 Zaipits in Kenya,Kilifi county across the 5 sub counties giving priorities Magarini and Ganze sub counties which are the most drought affected regions (They receive very little rains).

Impact

THANK YOU!

END

ANY QUESTIONS ?

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