Cassava Brown Streak Disease

Prelims: *Current events of national and international Importance | Health*

Why in News?

A recent study warns more than a third of Africa is at risk of cassava deadly virus spread.

- It is a devastating viral disease affecting cassava in East and Southern Africa, causing up to 100% loss of edible root yield due to vascular necrosis.

  Cassava, one of Africa's most important staple crops, valued for its tolerance to drought and poor soils.

- **Caused by -** Cassava brown streak virus (CBSV) and Ugandan cassava brown streak virus (UCBSV).
- The disease causes necrosis in the roots of infected plants, often leading to total crop loss.
- Because the damage is sometimes only visible at harvest, farmers may not realise the scale of infection until it is too late.
- **Symptoms** - Leaf chlorosis and brown, rotting streaks in roots.
- **Spreading** – It is primarily spread by whitefly *Bemisia tabaci*, a pest that exists as a complex of genetically distinct groups.
- Particular whitefly populations in sub-Saharan Africa, known as Sub-Saharan Africa 1 and 2, are highly efficient at transmitting the virus.
- They are present in huge population densities, particularly in East and Central Africa, driven by climate change and agricultural intensification.
- Farming practices also contribute to the spread.
- Many smallholder farmers reuse cuttings from previous harvests as planting material, which can perpetuate infection if crops are already contaminated.
- Adding to the problem, many high-yield cassava varieties developed to resist Cassava Mosaic Disease (CMD) were historically vulnerable to

CBSD.

- **Management - Resistant Varieties** - Planting CBSD-resistant or tolerant, high-yielding, clean planting materials.
- **Control Measures -** Rogueing (removing) infected plants and controlling whitefly populations with systemic insecticides or pruning.

Despite being in East Africa, Ethiopia remains one of the few countries in the region where CBSD has not been reported.

Reference

Down to Earth | Cassava virus

