Global Hunger Index (GHI)

What is the issue?

- India is ranked 102 in the Global Hunger Index (GHI) out of 117 qualified countries.
- There is an urgent need to improve the GHI ranking by improving India's Agro-biodiversity.

What is the current situation?

- Hunger is defined by caloric deprivation; protein hunger; hidden hunger by deficiency of micronutrients.
- Nearly 4 out of 10 children in India do not meet their potential because of chronic under nutrition or stunting.
- This leads to diminished learning capacity, increased chronic diseases, and low birth-weight infants from malnourished parents.
- The global nutrition report pegs 614 million women and more than half the women in India aged 15-49 as being anaemic.

Why agro-biodiversity is crucial?

- **Agro-biodiversity** (diversity of crops and varieties) is crucial in food security, nutrition, health, and agricultural landscapes.
- It helps nutrition-sensitive farming and bio-fortified foods.
- Out of 250,000 globally identified plant species, about 7,000 have historically been used in human diets.
- Only 30 crops form the basis of the world's agriculture and just 3 species of maize, rice and wheat supply more than half the world's daily calories.
- **Genetic diversity** of crops, livestock and their wild relatives, are fundamental to improve crop varieties and livestock breeds.
- Without the rich genetic pool, we would not have thousands of crop varieties and animal breeds.
- India is a centre of origin of rice, brinjal, citrus, banana and cucumber species.
- In India, over 811 cultivated plants and 902 of their wild relatives have been

documented.
- India’s promising genetic resources include rice from Tamil Nadu, Assam and Kerala; wheat and mushroom from Himachal Pradesh; and rich farm animal native breeds.

What are some global initiatives against hunger?

- **UN SDG** - The UN Sustainable Development Goal 2 (SDG2) advocates for Zero Hunger.
- **Aichi Biodiversity Target** - It focuses on countries conserving genetic diversity of plants, farm livestock and wild relatives.
- It emphasises that countries develop strategies and action plans to halt biodiversity loss and reduce direct pressure on biodiversity.

What is ‘Nutrition Garden’?

- The Ministry of Human Resources Development (MHRD) brought out school ‘Nutrition Garden’ guidelines.
- It encourages eco-club students to identify fruits and vegetables best suited to topography, soil and climate.
- These gardens can give students lifelong social, numerical and presentation skills, care for living organisms and team work, besides being used in the noon-meal scheme.
- Students also learn to cultivate fruits and vegetables in their homes and this could address micronutrient deficiencies.

What are the CEBPOL’s recommendations?

- The Centre for Biodiversity Policy and Law (CEBPOL) came out with recommendations to increase India’s agro-biodiversity in 2019.
- These include a comprehensive **policy on ‘ecological agriculture’** to enhance native pest and pollinator population providing ecosystem services for the agricultural landscape.
- Promoting the **bio-village concept** of the M.S. Swaminathan Research Foundation (MSSRF) for ecologically sensitive farming.
- **Conserving the crop wild relatives** of cereals, millets, fruits and nuts, vegetables, etc. for crop genetic diversity healthier food.
- **Providing incentives for farmers** who are cultivating native landrace varieties and for those who conserve indigenous breeds of livestock and poultry varieties.
- Encouraging **community seed banks** in each agro-climatic zone so that regional biotic properties are saved and used by new generation farmers.
- Preparing an **agro-biodiversity index**, documenting traditional practices

through **People's Biodiversity Registers**, identifying **Biodiversity Heritage Sites** under the Biological Diversity Act, 2002.
- Strengthening **Biodiversity Management Committees** to conserve agro-biodiversity and traditional knowledge.
- Developing a national level **invasive alien species policy** and prioritising problematic species based on risk assessment studies.

What could be done?

- Loss of crop genetic resources is mainly a result of adopting new crop varieties without conserving traditional varieties.
- Similarly, there are concerns on high output breeds for production of meat, milk and egg.
- The consumption pattern and culinary diversity must be enlarged to **increase India's food basket**.
- The indigenous crop, livestock and poultry breeds should be conserved.
- For this, it is recommended to **mainstream biodiversity** into agricultural policies, schemes, programmes and projects to achieve India's food and nutrition security and minimise genetic erosion.

Source: The Hindu