Significance of Millet Farming

Why in news?

The United Nations General Assembly recently adopted a resolution declaring **2023 the International Year of Millets**, as proposed by India to the Food and Agriculture Organization (FAO).

What are millets?

> India is the largest global producerof millets, with a 41% market share. A compound annual growth rate of 4.5% is projected for the global millet market in the coming decade.

- Millets - Sorghum, pearl millet, finger millet and several small millets (kodo, little, foxtail, proso and barnyard).
- All millets, maize, and barley together are called **coarse cereals**.
- Millets were one of the oldest foods known to humans. But they were discarded in favour of wheat and rice with urbanization and industrialization.

How significant are millets?

- Provide food, nutrition, fodder and livelihood security.
- Help mitigate the effects of climate change with low carbon footprint of 3,218-Kg equivalent of CO_2 per hectare. [Wheat - 3,968 kg; Rice - 3,401kg]

What are the favourable factors?

- Drought resistant
- Suitable for harsh, hot and dry environments.
- Can grow in arid regions, requiring only 350-400 mm of annual rainfall.
- Some varieties of pearl millet survive at temperatures up to 46°C.
- Require minimal inputs for growth.
- Being hardy crops, they can withstand extreme temperatures, floods and droughts.

What are the concerns with millets faming?

- Market and economic barriers.
- Low demand, especially in urban markets.
- Unjust pricing and value wringing by intermediaries.
- Low remuneration leading to farmer distress.
- Lack of input subsidies and price incentives.
- Subsidised supply of fine cereals through the PDS and change in consumer preferences leading led to a shift from the production of millets (jowar in particular) to soybean, maize, cotton, sugarcane and sunflower.

What are the government's initiatives so far?

- **Millet Mission in 2018** as part of the National Food Security Mission - Promotion of technological interventions, improvement in seed quality and MSP for bajra and jowar.
- Millet Network of India and the M.S. Swaminathan Research Foundation - Collective formation efforts to boost the domestic growth of millets.
- Setting up farmer organizations to help small and marginal farmers overcome hindrances in millet production and marketing.
- Odisha Millet Mission:
    i. 7.2 million women emerged as 'agri-preneurs'
    ii. about 70,000 farmers in the state took up millet farming

What are the other measures needed?

Market dynamics

- Incentivizing the adoption of inter-cropping involving millets.
- Providing crop insurance and support for storage facilities.
- Broadening the millet marketing policies.
- Generation of demand for millets-based products.
    1. 2018 '#LetsMilletCampaign' in Bengaluru promoted the use of millets in dishes such as risotto and pizza by restaurateurs.
    2. Food delivery startups such as FreshMenu rolled out millet-intensive menus

Cultural connection

- Harnessing the knowledge of the value of little millets among traditional communities.
- Re-introduction of cultural associations and festivals thathelp promote the growth of millets. E.g.,
    1. North-East Network in Nagaland organized in 2020
    2. Mandukiya in Vishakhapatnam celebrated annually in June/July
    3. Women's collectives in Telanganapromoting millets through a culture-centric approach

Ecosystems and sustainability

- The value of millets is evident in their relevance to the sustainable development goals of food security, nutrition and poverty eradication.
- In line with goals of the UN Decade of Ecosystem Restoration (2021-30), local practices can support rural economies.
    1. Drought-tolerant cropslike millets with low dependence on chemical inputs.
    2. Inter-cropping of millets with other crops. [Fibrous roots of millet plants help in improving soil quality, keep water run-off in check and aid soil conservation.]

Biofuel and climate resilience

In India, 2025 is set as the deadline for achieving 20% ethanol blending with petrol.
Most bio-ethanol in India is produced using sugar molasses and maize.

- Creating bio-ethanol using sorghum (jowar) and pearl millet (bajra), thus bringing down carbon emissions by about half.
- Millets can deliver greater returns than maize, while using 40% less energy in processing, and

are cost advantageous as a feedstock for bio-ethanol production.
- All the above priorities need to bebacked by government policies that promote millets production, incentivize farmers and strengthen market linkages.

Source: Livemint