

National Gene Bank

Why in News

Recently, the National Medicinal Plants Board (NMPB) under the Ministry of AYUSH and the National Bureau of Plant Genetic Resources (NBPGR) under the Ministry of Agriculture & Farmers' Welfare have signed a Memorandum of Understanding (MoU).

■ The purpose of this MoU is to conserve the Medicinal and Aromatic Plants Genetic Resources (MAPGRs) in the **National Gene Bank (NGB).**

Key Points

- **Establishment:** The National Gene Bank was notified in 1996-97.
- Hosted By: National Bureau of Plant Genetic Resources (NBPGR), New Delhi.
- **Purpose:** To conserve the Plant Genetic Resources (PGR) for future generations in the form of seeds, genomic resources, pollen etc.
- Functioning:
 - The NGB has four kinds of facilities, namely, Seed Genebank (- 18°C), Cryogenebank (-170°C to -196°C), In vitro Genebank (25°C), and Field Genebank, to cater to long-term as well as medium-term conservation.
 - It stores different crop groups such as cereals, millets, medicinal and aromatic plants and narcotics, etc.

Other Facilities:

- The Svalbard Global Seed Vault in Norway houses the world's largest collection of seeds.
- India's seed vault is at Chang La (Ladakh) in the Himalayas.
- National Animal Gene Bank, established at the National Bureau of Animal Genetic Resources (NBAGR - Karnal, Haryana), has the objective of conserving the indigenous livestock biodiversity.
 - NBAGR is one of the **Indian Council of Agricultural Research (ICAR)** institutes.

National Medicinal Plants Board

- In order to promote the medicinal plants sector, the Government of India set up the National Medicinal Plants Board (NMPB) on 24th November 2000.
- Currently the board is working under the Ministry of <u>AYUSH</u> (Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy).
- The primary mandate of NMPB is to develop an appropriate mechanism for coordination between various ministries/ departments/ organizations and implementation of support policies/programs for overall (conservation, cultivation, trade and export) growth of medicinal plants sector both at the Central /State and International level.

National Bureau of Plant Genetic Resources

- The 'National Bureau of Plant Introduction' was renamed as 'National Bureau of Plant Genetic Resources' (NBPGR) in January 1977.
- It is one of the Indian Council of Agricultural Research (ICAR) Institutes.
 - ICAR is an autonomous organisation under the Ministry of Agriculture & Farmers'
 Welfare.
- It is a nodal organisation in India for management of Plant Genetic Resources (PGR).
- It has played a pivotal role in the improvement of various crop plants and diversification and development of agriculture in India through germplasm introduction from various institutes/organizations located in foreign countries and germplasm collection from within the country and abroad and conservation thereof.
 - Germplasm is a live information source for all the genes present in the respective plant, which can be conserved for long periods and regenerated whenever it is required in the future.
- The NBPGR has linkage with **National Active Germplasm Sites (NAGS)** for the management of active germplasm of field and horticultural crops.
 - NAGS are located at NBPGR regional stations, other crop-based ICAR institutes or State Agricultural Universities.
- It is headquartered in New Delhi and has 10 regional stations.

Source: PIB

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