

# ICAR-National Bureau of Plant Genetic Resources (NBPGR)

September 11, 2019

*Source: NBPGR website*

## Background

The need for establishment of an organization to undertake activities of plant introduction and germplasm augmentation for use in crop improvement was felt as early as 1935 by the '**Crops and Soil Wing**' of the then 'Board of Agriculture and Animal Husbandry'. The need was reiterated in a meeting of the Indian Society of Genetics and Plant Breeding in 1941, which inter alia discussed the subject of economic crops.

NBPGR is **conserving seed germplasm for long-term conservation (at -20°C) in its National Genebank (NGB). NGB has the responsibility of conservation of plant genetic resources for posterity and sustainable use** including landraces and traditional varieties which are potential sources of agriculturally important genes

## What are are germplasm?

Germplasm are living genetic resources such as seeds or tissues that are maintained for the purpose of animal and plant breeding, preservation, and other research uses.

## Key Highlights about NBPGR

- The establishment of the Bureau coincided with the advent of the Green Revolution and was in response to the realization of perceived effects of the Green Revolution on agrobiodiversity.
- Further, it was in accordance with the international developments in the form of the establishment of the **International Board for Plant Genetic Resources (IBPGR)**,

## **Rome, in 1974 (now renamed as International Plant Genetic Resources Institute).**

- The NBPGR 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.
- The National Bureau of Plant Genetic Resources (NBPGR) has its **headquarters at New Delhi**
- The Bureau draws guidelines from the Crop Science Division of ICAR, Institute Management Committee, Research Advisory Committee, Institute Research Council and Germplasm Advisory Committees.
- The Bureau has five Divisions, three units and an experimental farm at its Headquarters in New Delhi and 10 Regional Stations located in different phytogeographical zones of the country. Besides, an All India Coordinated Research Network Project on Under-utilized crops are located in the Bureau.

### **Regional Stations**

1. **Shimla (Himachal Pradesh):** Established in 1960 at Phagli, Shimla. The mandate of the station is the collection, evaluation, characterization and maintenance of temperate crops.
2. **Jodhpur (Rajasthan):** Established in 1965, in the CAZRI Campus. Undertakes exploration, evaluation and seed increase for agri-horticultural crops of arid, semi-arid zones.
3. **Thrissur (Kerala):** Established in 1977. Responsible for collection and evaluation of germplasm of southern peninsular region with particular emphasis on spices and plantation crops.
4. **Akola (Maharashtra):** Established in 1977. Responsible for exploring Maharashtra, Karnataka, Goa, Daman and Diu

for germplasm collections. It also undertakes evaluation and maintenance of crops suited to Central India and Deccan Plateau.

5. **Shillong (Meghalaya):** Established in 1978. Involved in collection and evaluation of agri-horticultural germplasm of north-eastern region including Sikkim and parts of northern Bengal.
6. **Bhowali (Uttarakhand):** Established in 1985. Responsible for exploration, characterization, evaluation and multiplication of agri-horticultural crops, of sub-tropical and sub-temperate regions.
7. **Cuttack (Orissa):** Established in 1985 in CRRI Campus. The mandate is exploration of agri-horticultural crops of eastern peninsular region with main emphasis on rice germplasm.
8. **Hyderabad (Andhra Pradesh):** Established in 1985. Engaged in speedy repatriation of pest and pathogen-free material as well as quarantine clearance of germplasm. Undertakes exploration, evaluation and seed increase for agri-horticultural crops of Andhra Pradesh and adjoining areas.
9. **Ranchi (Jharkhand):** Established in 1988. A centre for evaluation and maintenance of germplasm of tropical fruits and other field crops of Bihar, eastern Uttar Pradesh and West Bengal.
10. **Srinagar (Jammu & Kashmir):** Established in 1988. Responsible for exploration, collection and maintenance of agri-horticultural germplasm of temperate crops of Jammu and Kashmir region.