

•

**A FRAMEWORK FOR POOLING OF CURRENT
KNOWLEDGE AND RESOURCES FOR A DISEASE-FREE
COCONUT INDUSTRY**

By

M. K. Nair¹⁾

The APCC together account for about 85% of the world coconut production. One of the major production constraints at present is diseases: Cadang-cadang in the Philippines, Phytophthora rots, stem bleeding and leaf spot diseases as well as Natuna wilt in Indonesia, root (wilt) disease and stem bleeding in India, bud rot, stem bleeding and leaf blight diseases in Sri Lanka. In the Philippines Cadang-cadang has estimated to have caused loss of upto 30 million palms in the Central Philippines. In India root (wilt) disease alone is estimated to cause an annual loss of 968 million nuts.

A brief review of the coconut germplasm available with the APCC member countries shows that Philippine Coconut Authority has 82 accessions with them, mostly collected from various places in the country. Indonesia also has wide spectrum of germplasm variability most important among these being Nias Yellow Dwarf (NYD), Tanga Tall (TT), Bali Tall (BT) and Palu (PT). Perhaps India has established the largest exotic germplasm bank with 86 accessions including 24 accessions introduced from six countries in the Pacific Ocean Regions in 1981. CPCRI at Kasaragod has also assembled 41 indigenous types. At Nileshwar Centre of Kerala Agricultural University has established a germplasm collection of 31 exotic and 36 indigenous types, mostly repetition of CPCRI collections. Limited germplasm collections are also available in Sri Lanka and other APCC countries. The proposal is to establish a Regional Coconut Gene Bank in one of the member countries, for effective exchange utilization of available germplasm by the coconut growing.

1) Director, Central Plantation Crops Research Institute, Kasaragod 670 124, Kerala, India.

The objectives are: to collect and conserve all the available coconut germplasm at one centre - in South Asia/South East Asia; classification/cataloguing of the accessions; characterisation of each accessions, with reference to yield attribute/quality and tolerance to disease; effective exchange/transfer of the accessions desired by the member countries for direct introduction/envolving varieties suitable for the country.

Each of the coconut growing countries are making isolated individual efforts in coconut germplasm collections. There is a need to identify priority areas for collecting.

For collecting of coconut germplasm Embryo Transfer Technology developed, may be made available to all the countries.

Most of the countries need trained and technically competent people to handle collection, conservation and utilization of coconut germplasm. This calls for organising training programmes on regional basis. These training programmes should be oriented towards standardising, collection, characterising and prediliminary evaluation procedures and should also include zygotic embryo culture technique.

The efforts for characterising and cataloguing are very meagre. There is need to update the descriptor list prepared by IBPGR in 1978 and also standardising procedures for collection of data.

In order to conserve the coconut genetic resources on long term basis it is felt that there is need for establishing a Regional Gene Bank in Indian Ocean Region. Similar Regional Banks in Pacific and Atlantic may also be thought of as a global strategy for conservation.

For effective use of collected material, a global data base need to be established for coconut germplasm.