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# BANANA IN INDIA – AN OVERVIEW

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## INTRODUCTION

Globally, banana is one of the maximum distributed fruit crop grown in more than 130 countries and in almost 10 million hectares, with an annual production of 95 million tones. It is the fourth most important food crop after rice, wheat and maize. India is the largest producer of banana in the world, contributing 17.30 per cent to the global production of banana with a total production of 17.50 million tones from an area of 5 lakh hectares (Director of Economics and statistics, Ministry of Agriculture). In India, it is well adopted in the region varying from humid tropics and semi-arid tropics, and from the sea level up to an elevation of 2000m MSL. Among the horticultural crops, contribution of banana to agricultural GDP is highest (1.99%). Although there has been appreciable increase in production and productivity, there has been disparity in productivity among different regions. Many biotic and abiotic stresses are the constraints linked to productivity. It is largely grown by small and marginal farmers who own more than 90 per cent of holdings. It is a dessert fruit for millions and is used in different regions of the world as staple food. As a diet, banana is filling, easy to digest, nearly fat free, rich source of carbohydrate with calorific value of 67 calories/100g and is free from sodium, making it a salt-free diet and also has zero cholesterol. Hence, regular use of it also considered to be good for heart. Banana is rich source of carbohydrates and also contains several minerals such as calcium, magnesium, potassium, and phosphorous. Banana fruit is particularly rich in Vitamin-C and contains significant amount of other vitamins such as vitamin-A.

## INFRASTRUCTURE

Banana research in India was started as early as in 1882 to collect and describe the banana accessions. Banana accessions collected and planted in Calcutta (*Musa acuminata* or *burmaniccoides*) have become a donor source of resistance in breeding programmes all over the world. Systematic attempt to collect and describe the clones was initiated only in 1931 by Jacob and Coworkers. During that period emphasis on banana research in India was directed towards description of cultivars from different regions till 1960. Banana research station started at Adhuthurai in 1949 also emphasized upon assemblage and identification of parents for breeding. Subsequently, work was continued at Tamil Nadu Agricultural University under the All India Coordinated Research Project on Tropical Fruits. Sporadic attempts were also made for banana research in different growing regions under state departments. During last two decades, researches on the nutrition, high density planting, water management, insect pests and disease control were done under the All India Coordinated Research Project on Tropical Fruits (nine centers) and also at Indian Institute of Horticultural Research.

Apart from the above, work on genetic resources is being done at NBPGR, Delhi and on tissue culture at BARC, Bombay. During 1993, NRC on Banana was established with a mandate to enhance production and productivity through basic and strategic research.

## DISTRIBUTION PATTERN IN INDIA

At present, Tamil Nadu, Maharashtra, Karnataka, Andra Pradesh and Gujarat are the largest banana producing states in India. Banana is also cultivated in Assam, Bihar, Kerala, Madhya Pradesh, Orissa and West Bengal. Tamil Nadu has largest area (0.84 lakh ha) followed by Maharashtra (0.59 lakh ha) and Karnataka (0.53 lakh ha). Maharashtra also ranks first in production (3.92 million tones), followed closely by Tamil Nadu (3.54 million tones). Karnataka, Gujarat and Andhra Pradesh, are next with a production of 1.28, 1.15 and 1.11 million tones, respectively. However, highest productivity is recorded in Maharashtra (65.70 t/ha) followed by Tamil Nadu (41.90 t/ha) and Madhya Pradesh (40.50 t/ha). Cultivar and production system vary in these regions, which influence the productivity. Interestingly, variation in productivity ranges from 14.10 to 65.70 tones, which is attributed to cultivars, production system and management strategies (NHD, 2003). Maharashtra excel in productivity owing to monoculture of high-yielding Cavendish clones coupled with adoption of improved technologies, i.e. microirrigation, fertigation and use of tissue cultured plants besides targeted management. Strategically, adoption of