

Horticultural crops occupy an important place in Indian agriculture. These account for 30 per cent of India's agricultural gross domestic product (GDP), with only 10 per cent of agricultural land under them. Besides providing balanced diet, horticultural crops generate employment as these are labour-intensive. These crops occupy hardly 7 per cent of the cropped area, but contribute over 18 per cent to the gross agricultural output of the country.

Horticultural crops have been receiving due attention only since the 1980s. It is estimated that all horticultural crops put together cover only 12.5 million hectares, with an annual production of 125 million tonnes.

Present status

The National Horticulture Mission has decided to bring an additional 3.3 million hectares under horticultural crops and rejuvenate another 1.6 million hectares of senile horticultural plantations during the 11th plan to boost the production and availability of fruit, vegetables, flowers, spices, etc. The Planning Commission is optimistic; it has fixed a target of 7 per cent annual growth for the horticulture sector during the 11th plan period. For the agricultural sector as a whole, this was only 4 per cent.

Demand for horticultural crops has increased from 400 million tonnes in 1995 to the present level of 1200 million tonnes. Consumption of horticultural produce in average diet has also increased to 35 per cent from 10 per cent in the last 30 years. However, productivity is yet to rise to meet the ever-growing demand.

According to one estimate, by 2012, the requirement of planting material for fruit plants will be 1.4 billion tonnes, for plantation crops 170 million tonnes and for vegetable

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HORTICULTURE: POTENTIAL UNTAPPED

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seeds 1.5 million tonnes.

The exports of processed fruit and vegetables reached Rs 25,120 million in 2006-07 from Rs 2685 million in 1993-94.

Vegetables

India is the second largest producer of vegetables in the world. The country accounts for 15 per cent of the global production of vegetables. The current production is 111.7 million tonnes. The total area under vegetables cultivation is around 6.755

million hectares, which is about 3 per cent of the total area under cultivation in the world. Among vegetables in 2005-06, in India, potato occupied the top position with an annual production of 29 million tonnes, accounting for about 26.70 per cent of the total vegetables production, followed by tomato 8.6 per cent, onion 3.4 per cent and peas 2.10 per cent.

The per capita production of vegetables per annum was a meagre 30 kg in 1981-85. This rose to 100 kg in 2006-07 mainly because of farmers' initiatives. India requires about 127.2

million tonnes of vegetables other than potato and tubers to meet the nutritional requirement of an estimated 1200 million people by 2020-21.

Fruits

The average annual production of fruits in India was 21.22 million tonnes during 1980-83, which increased to 47.79 million tonnes during 2004 to 2006, registering an increase by 125.20 per cent over this period. In 2005-06, banana occupied the top position with an annual production of 17.70 million tonnes, accounting for 32 per cent of total fruit production, followed by mango 21.3 per cent, citrus 10.80 per cent, papaya 3.90 per cent, guava 3.10 per cent, apple 3 per cent, grape 2.80 per cent and pineapple 2.3 per cent.

India has established world record in grape productivity with an average of 22 tonnes per hectare and maximum of 45 to 50 tonnes per hectare. However, the average fruit productivity in India is 8 to 10 tonnes per hectare.

Horticulture: some problems

The gap between the present productivity level and proven technological potential is very large for almost all the crops. The country is, of course, the world's largest pro-

ducer of tea, cotton and sugar.

Horticulture crops are also victims of pests and pathogens. Also, climate change is an adverse factor. It has been estimated that with a 2°C temperature increase, insects might experience one to five additional lifecycles per season.

The horticulture sector suffers from shortage of healthy seeding materials. The sector requires redrafting of the Seeds Bill, 2004. It needs good-quality, disease-free seeding material. At present, only 30 to 40 per cent of the seed material used in the sector is of good quality. Most of the nurseries are unorganised and government agencies are unable to provide adequate quantity of quality planting materials to the farmers. As per Seed Association of India, the present seed shortage itself is 6.968 tonnes, total requirement being 15,820 tonnes. The quantity of seeds from the organised sector is only 4517 tonnes.

Measures needed

There is an urgent need for proper utilisation of cultivable wastelands. India has 250 million acres of such land. This land has to be brought under orchard crops.

It is necessary to actively involve the private sector in horticulture development—adopting new technologies, opening up new markets, linking production to processing and distribution, improving productivity and quality. The cooperatives too should be encouraged to cultivate horticulture crops.

For the holistic development of the horticulture sector, a centrally sponsored scheme called the National Horticulture Mission (NHM) was launched in 2005-06. The scheme aims at enhancing

World Production of Fruits and Vegetables by Major Producing Countries in 2006

(million tonnes)

Fruits		Vegetables	
Country	Output	Country	Output
China	93.4	China	448.4
India	42.4	India	82.2
Brazil	36.5	USA	37.1
USA	27.3	Turkey	25.7
Italy	17.8	Egypt	16.5
Spain	16.5	Russian Fed.	15.9
Indonesia	15.5	Iran	15.8
Mexico	15.1	Italy	14.7
Iran	13.8	Spain	12.5
Philippines	13.6	Mexico	11.0
World	524.1	World	902.6

horticulture production, improving nutritional security and income support to farm households and others through area-based regionally differentiated strategies. Of course, there is another scheme, The Technology Mission for Integrated Development of Horticulture in the North Eastern States (TMNE). At present, 344 districts have been included under the NHM.

Under NHM, organic farming and integrated pest management programmes have been taken up over 76,000 hectares and 400,000 hectares, respectively. Under the post-harvest management component, 898 pack houses, 46 cold storages, 14 refrigerated vans, seven wholesale markets and 45 rural markets have been set up. The impact of the Mission can be seen in the increasing area and production of fruits and vegetables.

In India's rural context, horticulture has special importance in terms of food security, employment generation and balanced diet. Hence this sector should get all possible incentives. ■

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Production Share of Major Vegetables in India in 2005

