

INDIAN HORTICULTURE MARKET OVERVIEW





Indian Horticulture Market Overview

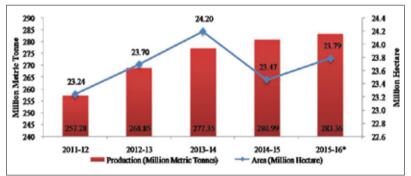
orticulture crops have a significant contribution in the gross domestic production of the agricultural sector. Due to the increasing demand and important contribution in agricultural sector, horticultural crops are becoming an area of priority. For the commercialization of horticultural crops and diversification of agriculture, various programmes are being implemented within the states by state governments like expansion of area, rejuvenation of old mango, guava and aonla orchards, production of quality planting materials and post harvest management etc.

Looking at the spatial distribution of horticultural crops in India, Karnataka along with Maharashtra, Uttar Pradesh, Gujarat and West Bengal occupy fore front positions. Out of 23.79 million hectares of total area under horticultural crops, Karnataka occupied 2.08 million hectares that was around 9% of the total area under horticultural crops. Uttar Pradesh was second with 1.87 million hectares (8% of the total area) while

third and fourth place with around 7.7% and 7.2%, respectively, under these crops. Gujarat was fifth in area with approximately 6.5% share of all India area cropped.

The production of horticultural crops was found highest in Uttar Pradesh with 36.05 million tonnes, accounting for 13% share in the all India horticulture crops production. West Bengal with 27.25 million metric tonnes was placed second in terms of production and had 9% share in production. Madhya Pradesh and Gujarat with above 22 million metric tonnes of production were placed third and fourth in all India. To accelerate the growth, the government of India

INDIAN HORTICULTURE CROPS AREA AND PRODUCTION



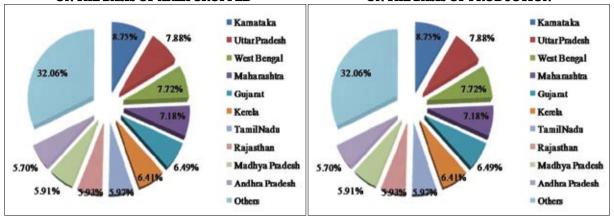
West Bengal and Maharashtra occupied Source: ICFA Analysis

Note: E = Estimated, P = Projected





INDIAN HORTICULTURE CROPS BY STATES ON THE BASIS OF AREA CROPPED ON THE BASIS OF PRODUCTION



Source: NHB, Note: * @ 3rd advance estimates

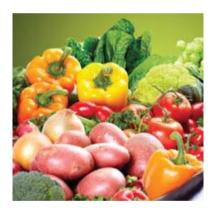
introduced "Mission for Integrated Development of Horticulture". All states, including, Uttarakhand and UTs, have been covered under the Mission.

AREA AND PRODUCTION

Indian horticulture crops witnessed an increasing trend over the past five years, on the basis of production, growing at a CAGR of 1.95% during 2011-2016. However, in terms of area cropped, there was a decline in 2014-15, which may be attributed to the Consecutive droughts and freak weather in 2014 and 2015.

The year 2015-16 marked the fourth straight year that India's horticulture production will outstrip

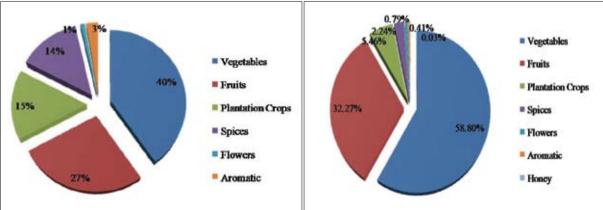
food grain output, underlining a structural change underway in Indian agriculture. In 2015-16, horticulture production exceeded food grain output by more than 31 million tonnes. In 2012-13, the difference was 11.3 million tonnes.



The fact that horticulture crops are grown in about 10% of India's gross cropped area, compared to over 50% of the area used to grow food grain, also signals the success of small and marginal farmers in growing more fruits and vegetables, driven by higher demand.

Although, the horticulture sector is one of the fastest growing segments of agriculture in India, it also faces numerous emerging challenges. The most prominent ones are pressures emanating from climate change, post-harvest losses, bio-security concerns, absence of market linkages and resultant price fluctuations, changing quality consciousness and global competition.

INDIAN HORTICULTURE CROPS BY SEGMENTS ON THE BASIS OF AREA CROPPED ON THE BASIS OF PRODUCTION



Source: NHB, Note: * @ 3rd advance estimates



These concerns need to be addressed in order to sustain the growth momentum in horticulture. The focus of growth strategy, therefore, needs to be on raising productivity by supporting high density plantations, protected cultivation, micro irrigation, quality planting material, rejuvenation of senile orchards and a thrust on post-harvest management to ensure that the farmers do not lose their produce in the transit from the farm gate to the consumer's plate.

CROPS BY STATES

The top four states producing horticulture crops with maximum cropped area are West Bengal, Karnataka, Uttar Pradesh and Gujarat. Among theses, Karnataka has the largest cropped area as Karnataka is predominantly an Agriculture State. 24% of the total GDP comes from agriculture and 65% of the work force is dependent on agriculture with 70% of the population still in rural areas, depending on agriculture for their livelihood. In fact, total gross annual income from horticulture was Rs.7,152 crore, which was 40% of the gross annual income from combined agriculture sector.

On the basis of production, Uttar Pradesh is expected to have produced the largest amount of horticulture



crops in 2015-16 with 36.05 million metric tonnes production. This may be attributable to the diverse climate of Uttar Pradesh, which is suitable for producing all kinds of horticultural crops. In fact, for more than 90% of small holding farmers, horticultural crops are the main source of higher income, employment and nutrition per unit area.

Also, in the year 2015-16 in Bundelkhand and Vidhya region, beneficiary farmers are being given Rs.3,000 per hectare for three years per month as an incentive for establishing orchards in 0.2 hectare to 1 hectare with fencing to be done by the beneficiary to establish new orchard in field of beneficiary farmers and also to address the mortality in established orchard. Besides this, under Bundelkh

and Special Package various programs are also being implemented.

HORTICULTURE CROPS SEGMENTS

India's horticulture production is expected to be around 287.32 million metric tonnes, which will continue to outstrip food grain production by a good margin in 2016-17 also, even as vegetables might see just a marginal decline.

Over the years, vegetables and fruits have occupied the position of foremost importance and thus, constituted more than 90% of the total production of horticulture crops and approximately 70% share of the area cropped in 2015-16.

Under horticulture, fruit production in 2016-17 is expected to be 91.72 million metric tonnes, against 91.44 million metric tonnes last year. Vegetables production in the aforementioned year, according to the first advanced estimates, is expected to touch 168.59 million metric tonnes, against 166.61 million metric tonnes in 2015-16.

INDIAN HORTICULTURE MARKET TRADE

It is widely believed that India is going to become a net importer of agricultural products. However, there are areas where India could show good export performances. Horticulture sector is one such sector.

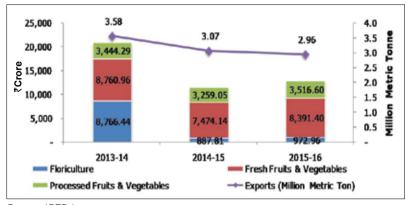
INDIAN HORTICULTURE MARKET EXPORTS

Besides meeting the increasing demand of the domestic population, which continues to grow, India exports some portion of its horticulture produce. During 2015-16, total exports of horticulture produce by India were 2.96 million metric tonnes, which amounted to about Rs. 128.81 billion. Even though the quantum of





INDIAN HORTICULTURE CROPS EXPORTS



Source: APEDA

export decreased in comparison to the preceding year i.e. 2014-15, when it was 3.07 million metric tonnes, the value of export of horticulture produce increased by 10.84% from Rs116.21 billion in 2014-15. The untimely rains that caused the damage, may have affected the volume of exports during 2015-16.

The consecutive drought and freak weather along with the impact of the currency depreciation of Black Sea and South American countries, and the falling crude prices in 2014 compelled Indian agricultural exports, including horticulture crops to become a trickle.

The decline in the volume of the exports of horticulture crops also signifies the increasing per capita availability of crops, along with increase in the domestic demand of

the crops.

Horticulture crops can be segmented into three categories, namely, Floriculture, Fresh Fruits & Vegetables and Processed Fruits & Vegetables. Of all, in 2015-16, Fresh Fruits & Vegetables accounted for largest share, constituting 65.15%, followed by Processed Fruits & Vegetables with 27.3% share. Although, in 2013-14, floriculture exports share was 41.8%, which drastically declined to 7.64% during 2014-15 and further to 7.55% during 2015-16. The major reasons for the same may be attributed to the several production level challenges faced by the industry, such as, small size of land holding unavailability of basic inputs and skilled manpower for harvesting and post harvesting techniques.

Also, with increasing involvement of supermarkets in flower trade, organizing logistic is also becoming a critical factor for the flower exporters.

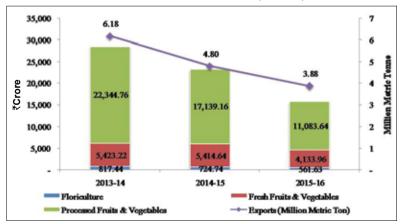
INDIAN HORTICULTURE MARKET IMPORTS

The imports of the horticulture crops have declined in terms of both value and volume over the years. The import volume decreased to 3.88 million metric tonnes in 2015-16 from 6.18 million metric tonnes in 2013-14, while imports in terms of value, declined to Rs15,779 crore from Rs. 28,585 crore. The imports were largely affected by the high import duties and increasing self sufficiency of horticulture products in the country.

There was a decline in the imports of processed fruits and vegetables at a negative CAGR of 20.84% during 2013-16. This may be attributed to the rise in the number of food processing units in India, during the period. However, there was a significant decline in the imports of fresh fruits & vegetables and floriculture of 8.65% and 11.76%, respectively, during the aforementioned period.

The productivity of horticultural crops has increased by about 34% over the span of past 10 years. The special attention given to the sector, especially after the introduction of the Horticulture Mission for North East and Himalayan States (HMNEH) and the National Horticulture Mission (NHM) in the 11th Plan, has borne good results. Given the increasing pressure on land, growth strategies have been focusing on raising productivity through high density plantations, protected cultivation, micro irrigation, quality planting material, rejuvenation of senile orchards and an emphasis on post harvest management and marketing of produce for better price realization.

INDIAN HORTICULTURE CROPS IMPORTS (2013-16)



Source: APEDA

