

International Journal of Statistics and Applied Mathematics

ISSN: 2456-1452

Maths 2024; SP-9(1): 321-325

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<https://www.mathsjournal.com>

Received: 05-12-2023

Accepted: 06-01-2024

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A performance of horticulture sector in Andhra Pradesh state: A critical review

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DOI: <https://dx.doi.org/10.22271/math.2024.v9.i1Se.1608>

Abstract

The Horticulture sector in India is playing an important role in doubling the farmers income and provision of nutritional security. In Andhra Pradesh the Gross Value of Output (GVO) of Horticulture at current prices for the year 2020-21 was Rs. 108 crores while the total agriculture GVO was Rs. 51.2 crores thus the contribution of horticulture sector exceeded Agriculture sector by two folds. The present study reviewed the progress of area and production of horticultural crops during the period 2017-18 to 2021-22. The average area under horticultural crops of Andhra Pradesh revealed that fruits, plantations, vegetables and spices etc. were, 47 percent, 22 percent, 15 percent and 16 percent respectively. Horticulture production in Andhra Pradesh was majorly contributed by fruits (64.53%) and vegetables (26.26%). The area under horticulture in Andhra Pradesh grew by 8.85 percent while the All-India average was 8.22 percent which is attributed to the successful implementation of the development programmes by the Department of Horticulture in the state. Though the productivity of vegetables was on the rise there is a shift of the vegetable growers in cultivation of the High value crops.

Keywords: Horticulture crops, gross value of output, vegetables, flowers

Introduction

The Horticulture sector in India is playing an important role in doubling the farmers income and provision of nutritional security. It is increasingly recognised as a sunrise sector, owing to its potential to raise farm income, provide livelihood security and earn foreign exchange through export ^[1]. According to the Department of Agriculture and Farmers welfare, the sector contributes about 33 percent to the agriculture Gross Value Added (GVA), a significant and notable contribution to the Indian economy. It mainly encompasses crops like Fruits, Vegetables, Plantations crops, spices, flowers, Aromatic and medicinal crops. Of these, some of them have medicinal and nutritional value, some have huge export potential making a significant impact at the global level. India had witnessed the shift in area from food grain towards horticulture crops during the last five years i.e., 2012-13 to 2017-18 ^[2]. The Government has also increased the focus in terms of providing assistance for the betterment of area, improving the productivity through research and development; and making the country an export destination through the National Horticulture Mission. The Government of Andhra Pradesh is also committed to farmer centric programmes and identified Horticulture sector as one of the growth engines to realize double digit inclusive growth ^[3]. The contribution of Horticulture sector in Andhra Pradesh was appreciable with first position in the fruit production and second position in flower production at all India level in 2017-18. The Gross Value of Output (GVO) of Horticulture at current prices for the year 2020-21 was Rs. 108 crores while the total agriculture GVO was Rs. 51.2 crores ^[4], implying that the contribution of horticulture sector exceeded agriculture sector by two folds in Andhra Pradesh. In view of the importance of this sector, the study was carried out to ascertain the present scenario of horticulture sector in Andhra Pradesh state. The coverage of various current aspects of the horticulture sector will be useful to the policy makers and administrators in implementation of efficient programmes in the state.

2. Methodology: The study was carried out using the secondary data collected from various Government sources. Data on Area and production was collected from Horticulture statistics at a Glance, 2018 a Ministry of Agriculture & Farmers welfare publication, Season and Crop report of Andhra Pradesh 2021-22. The data on the area and production during the period 2017-18 to 2021-22 was analysed using descriptive statistics and the necessary inferences are drawn.

3. Results and Discussions

3.1 Horticulture in Andhra Pradesh

In the year 2021-22, the production of horticulture crops in the country was about 347.1 million tonnes from an area of 28

M ha of which the Andhra Pradesh state contributes 7.49 percent and 5.82 percent in production and area respectively. The area under horticulture crops in Andhra Pradesh is estimated to be 16.85 lakh hectares with a production of 267.93 LMTs, according to the 2022-23 second advanced estimates. The average area occupied by the horticulture crops in Andhra Pradesh during the period 2017-18 to 2021-22 as observed from the Fig.1, revealed that the majority area was occupied by the fruits with 47 percent followed by plantations (22%), vegetables (15%), spices and others (16%). At all India level vegetables had a major contribution with 40 percent area followed by fruits (25%), spices (16%), plantations (15%), and flowers & others (4%).

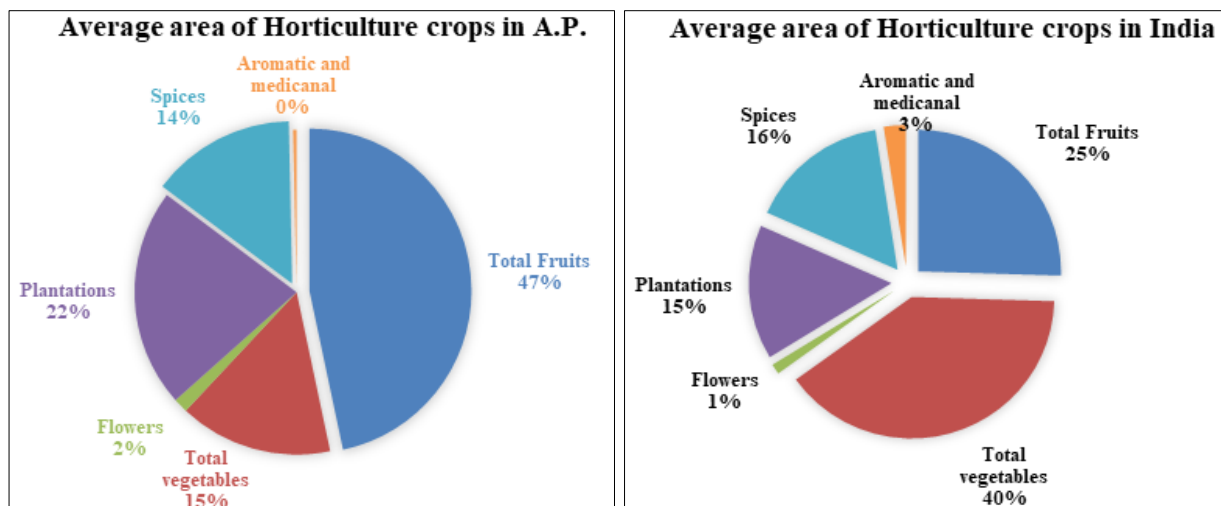


Fig 1: Average area of Horticulture crops in A.P and India

3.2 Area of the Horticulture crops in Andhra Pradesh (2017-18 to 2021-22)

The area under horticulture crops in Andhra Pradesh is showing a positive trend during the period 2017-18 to 2021-22 as observed from the Fig. 2 and Table 1. During the period under study the area in Andhra Pradesh has increased by 8.85 percent as against 8.22 percent at the country level which is

attributed to the successful implementation of the development programmes by the Department of Horticulture in the state. The scenario of horticulture sector revealed that area under fruits, plantations and spices experienced a positive growth, while the vegetable, Aromatic & medicinal and flowers area showed a negative trend.

Table 1: Area, Production and Productivity of Horticultural crops in Andhra Pradesh, Area (*000 ha), Production (*000 MT)

Particulars		Fruits	Vegetables	Flowers	Plantations	Spices	Aromatic and medicinal	Honey	Total
2017-18	Area	650.52	243.04	25.74	315.61	246.76	6.60		1488.26
	Production	15215.85	6911.79	428.95	1090.74	1099.43	9.94	1.87	24758.57
	Productivity	23.39	28.44	16.67	3.46	4.46	1.51		
2018-19	Area	704.90	267.49	28.34	337.02	199.05	6.97		1543.77
	Production	16995.65	7559.55	530.35	1205.93	742.61	13.94	1.90	27049.94
	Productivity	24.11	28.26	18.71	3.58	3.73	2.00		
2019-20	Area	740.14	242.41	26.63	341.37	200.13	4.58		1555.27
	Production	18206.37	7456.18	545.54	1209.20	896.18	11.96	1.85	28327.28
	Productivity	24.60	30.76	20.48	3.54	4.48	2.61		
2020-21	Area	737.21	227.05	17.51	350.20	217.06	4.20		1553.22
	Production	17708.31	6585.14	298.92	1271.26	885.68	14.35	1.89	26765.55
	Productivity	24.02	29.00	17.07	3.63	4.08	3.42		
2021-22	Area	795.11	210.00	14.58	349.45	260.16	3.37		1632.68
	Production	17665.20	6366.35	130.81	1311.20	511.81	11.37	1.92	25998.66
	Productivity	22.22	30.32	8.97	3.75	1.97	3.37		

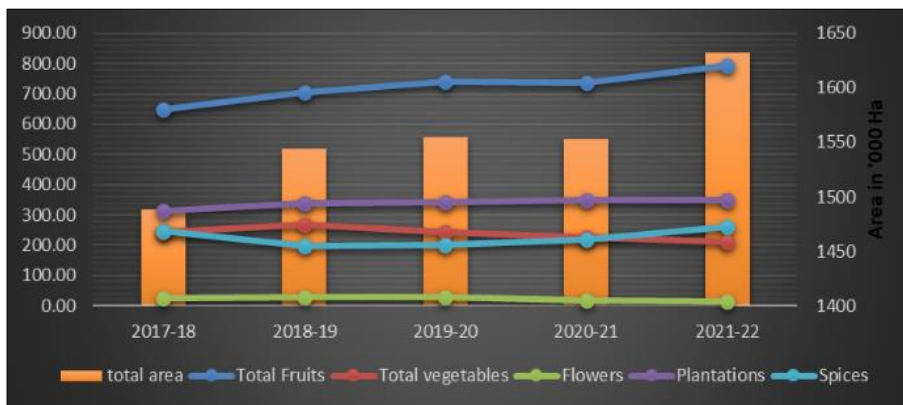


Fig 2: Area (000 Ha) of horticulture crops in A.P

A steady increase in the area of fruits, spices and plantations is observed in the state over the study period. Fruits are the essential items in everyday meal as they contain all the required nutrients for a balanced diet. The area under the fruits is increasing over the study period as the crop is having medicinal & aesthetic value and also highly preferred over the staple crops. It was observed that fruits have the highest share in area of horticulture crops with Gross value of Output of 57 lakhs in Andhra Pradesh state in the year 2021.

Spices are generally considered as high value crops in the Indian market. They have potential of generating high income. Though the average area under spices and vegetables in Andhra Pradesh recorded 14 percent and 15 percent respectively, the Gross value output of spices in the year 2021 is about 21.5 lakhs which dominated the vegetable GVO of 18.5 lakhs. The relative importance and usage of spices has been increased during the pandemic time and post covid, owing to its health benefits and antimicrobial resistance. The growing demand of the spice crop in the world market would be a possible reason for the increase in the area of spices in the state.

Vegetables occupy an important place in the food basket of Indian consumers, as it is the rich and cheap source of vitamins and minerals. Though there is an ample scope for vegetable production in the state, the area under vegetables decreased over the period. The vegetable crops are supposed to have sustained value in the market throughout the year, except for the high level of post-harvest losses, sometimes accounting for 25 percent of total production [5]. The income and employment opportunities can also be enhanced through the vegetable production. Hence, the possible constraints associated with the decrease in the area have to be ascertained at gross root level. The area under the flowers showed a

decreasing trend. Flowers play a key role in the bee keeping industry and also in landscaping. Being an export potential crop and good revenue generator, the decrease in area is a serious concern.

3.3 Production of the Horticulture crops in Andhra Pradesh (2017-18 to 2021-22)

A significant progress in the area expansion resulted in the higher production levels in the state. Most of the vegetables, being short duration crops, fit very well in the intensive cropping system and are capable of giving very high yields and very high economic returns to the growers. The production scenario of horticulture crops as observed from the Fig.3 revealed that the total production of horticulture crops had increased till 2019-20, thereafter downfall in the production is observed. The production of fruits and plantations crops increased during the period, while the vegetable, flower and spices production has showed a negative trend. The growth in area of fruits and plantations crops, may be contributing to their favourable production. Though the productivity was at a steady rate, the vegetable production experienced a decreasing trend after 2018-19 in relation to the decreased area. The decrease in the flower production may be associated with the drastic decrease in the area and productivity of the flowers, making the state to stand at fifth position in flower production in the year 2021-22 from second position in the year 2017-18. The productivity of flowers has decreased by 46 percent during the study period effecting their production. However, it is important to study whether area or productivity or their interaction effect was more influential on production of the horticulture crops of the state during the study period.

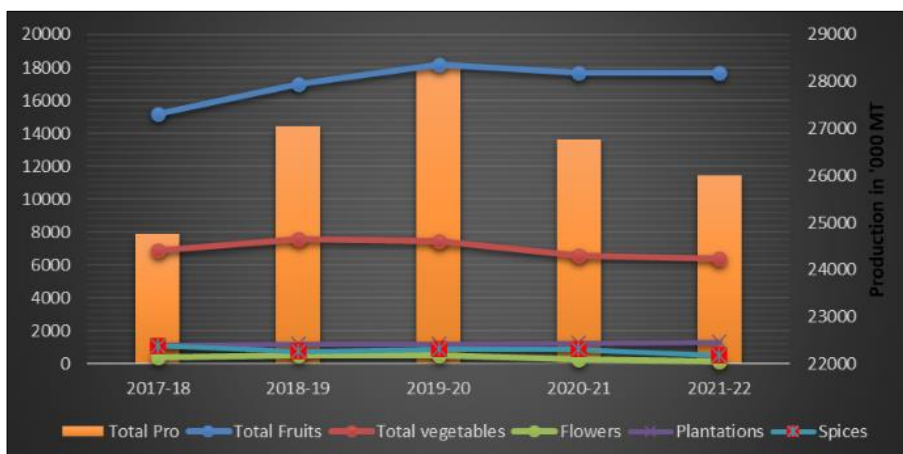


Fig 3: Production (000 MT) of horticulture crops in A.P.

3.4 Percent share of Area and Production of Horticulture crops

The percentage share of area and production of horticultural crops is presented in the Table 2. It revealed that the area under the fruits remained to be at the top spot with 43 - 48

percent share in the horticulture area as observed from the Figure 4. The percent contribution of area under plantations was maintained at 21 percent, while the vegetables and flowers witnessed a decreased trend in the area with an exception during 2018-19.

Table 2: Percent share of area and production of various Horticultural crops in A.P.

Year	% share	Fruits	Vegetables	Flowers	Plantations	Spices	Aromatic and medicinal	Honey
2017-18	Area	43.71	16.33	1.73	21.21	16.58	0.44	0.00
	Production	61.46	27.92	1.73	4.41	4.44	0.04	0.01
2018-19	Area	45.66	17.33	1.84	21.83	12.89	0.45	0.00
	Production	62.83	27.95	1.96	4.46	2.75	0.05	0.01
2019-20	Area	47.59	15.59	1.71	21.95	12.87	0.29	0.00
	Production	64.27	26.32	1.93	4.27	3.16	0.04	0.01
2020-21	Area	47.46	14.62	1.13	22.55	13.97	0.27	0.00
	Production	66.16	24.60	1.12	4.75	3.31	0.05	0.01
2021-22	Area	48.70	12.86	0.89	21.40	15.93	0.21	0.00
	Production	67.95	24.49	0.50	5.04	1.97	0.04	0.01

Source: Authors calculation

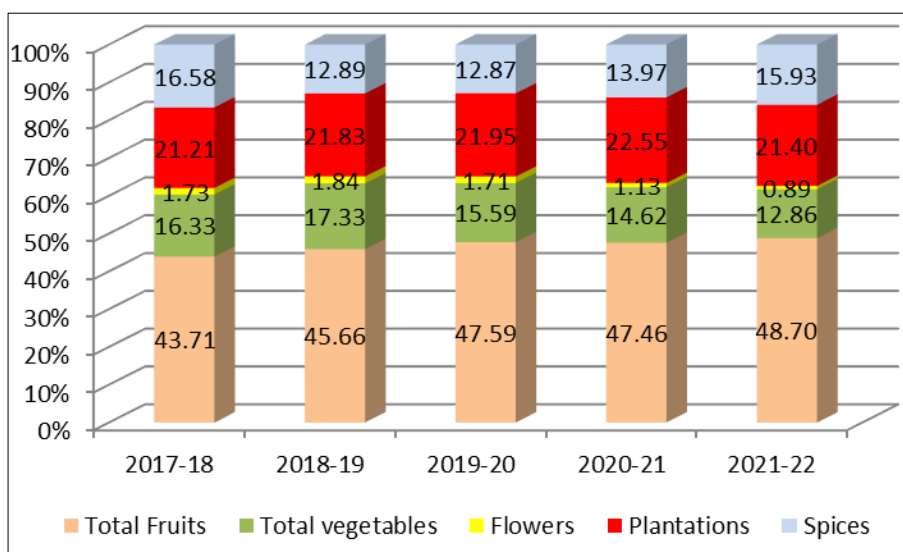


Fig 4: Area (%) share of various horticulture crops in Andhra Pradesh

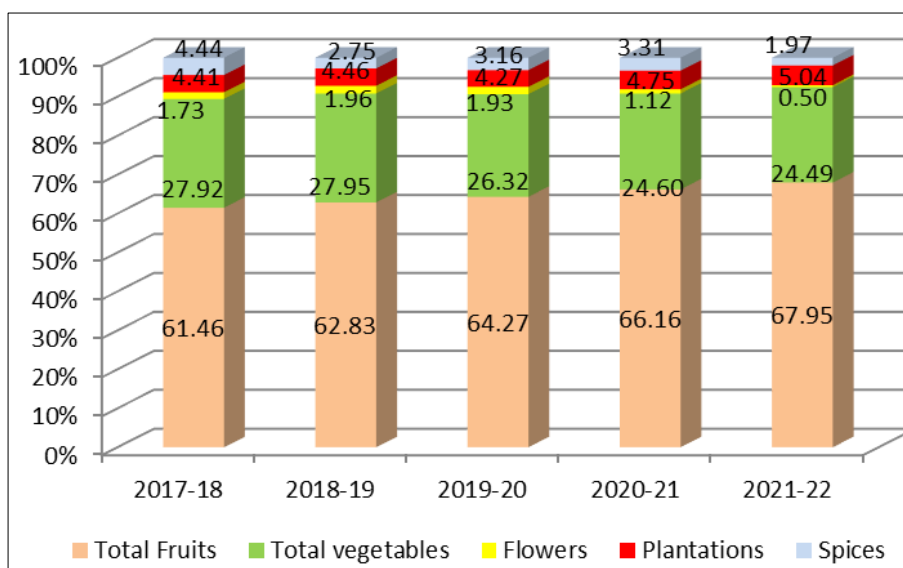


Fig 5: Production (%) share of various horticulture crops in Andhra Pradesh

Fruits and vegetables accounted for about 90 percent of total horticulture production in Andhra Pradesh. The contribution of fruits remains highest (61 - 68%) in horticulture crop production over the last five years as observed from the Figure 5. Vegetables production stood at the second position,

but the percent share had decreased from 28 to 24 percent over the years. The plantations, spices and flower crops accounted for 10.5 to 7.5 percent share in total production. The percent contribution of flower production has decreased drastically by 72 percent during the study period.

4. Summary and Conclusion

In Andhra Pradesh, the cultivable area under the fruits, plantations and spices was found to have positive trend while the area under vegetables and flowers showed a negative trend during the period of review 2017-18 to 2021-22. Though the productivity of vegetables increased, the diversification of the crop within the horticulture sector may be acknowledged to the preference of growing the high value crops mainly spices, by the farmers. The area, production and productivity of flowers inspite of export potential experienced a steep fall. The production levels of the spice crop have to be matched with the increased area to make the state an export hub. The scope of the horticulture sector in the economic development of the state has to be identified and necessitates strategic planning and provision of support by the government for sustainable growth in the long run.

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