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An Appraisal on Horticulture Activities in Ahmednagar District (MS)

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Abstract

Horticulture plays a pivotal role in the agrarian economy of Ahmednagar district in Maharashtra, India. This paper explores the current state of horticultural production in the district, examining factors such as crop diversity, productivity, economic impact, and challenges faced by local farmers. Using a combination of qualitative and quantitative data, this research provides a comprehensive overview of horticultural practices in Ahmednagar, offering insights into opportunities for growth and sustainability.

Key Words : Horticultural production, crop diversity & horticultural practices

Introduction

Horticulture sector emerged as the most viable sector having potential for diversification of agricultural employment in rural areas, where variety of crops under different agro-climatic condition can be cultivated, thus enhancing good return on land generating employment and providing nutritious food (Singh 2008), (Bhattacharjee 2013). Horticulture was derived from two Latin words '*hortus'* meaning 'garden' and '*cultura'* meaning 'culture'. Thus it involves the science and techniques of production, processing and merchandizing of fruits, vegetables, flowers, spices, plantations, medicinal and aromatic plants.

Study area:

Ahmednagar is the largest district of Maharashtra State in respect of area. Ahmednagar recognized by the name of Malik Ahmed, who was the chief founder of the Nizamshahi dynasty of Ahmednagar in A.D. 1494. After the end of Peshawa rule in 1818 Ahmednagar district was established 1822. (Ahmednagar Shaharacha Itihas: 2015) Nagar" is one of the important district of Western Maharashtra, which is situated partly in the upper Godavari basin and partly in the Bhima basin. The district is very compact in shape and length of 200 km. and a breadth of 210 km. It is bounded on the

north by Nasik district, Aurangabad district to the north-east side, Beed district to the east, Osmanabad and Solapur district to the south, Pune district to the west and Thane district to the north-west. Its geographical location is between the Latitude 18.5° to 19.5° North latitude. & lies between 73.5° to 75.5° East longitude. The district covers an area of about 17,048 square kilometres. Ahmednagar district is a district in the Indian state of Maharashtra. It is located in the western part of the state and covers an area of 17,048 square kilometres. Ahmednagar district is divided into 14 talukas, with Ahmednagar city as the district headquarters. The district has a population of 4,543,083 as per the 2011 Census, with a population density of 267 people per square kilometre. It has very rich history, culture, and natural beauty. Historically, The district has a geographical area of 17114 sq. km., which is 5.54% of the total State area. The district is well connected with capital City Mumbai & major cities in Maharashtra by Road and Railway. As per the land use details (2011), the district has an area of 134 sq. km. occupied by forest. The gross cultivable area of district is 15097 sq.km, whereas net area sown is 11463 sq.km.

Methodology

The data incorporated in this paper is primarily based on field work derived from field observation, surveying, questionnaires and other scientific techniques both in the field and laboratories. Secondary sources are collected from Government establishments, NGO's, Village record, Census reports which are supported by figures, tables etc. Local people involvement coupled with expert opinion, suggestions and advices from ap propriate and qualified people belonging to various agencies are also included.

Results and discussion

HORTICULTURE:

Ahmednagar district has horticulture as a major allied activity. Area under horticulture is increasing in the district. Due to diversified agro-ecological situation and available irrigation facilities various vegetable crops are grown throughout the year. The total area under cultivation of vegetables, flowers and Aromatic and medicinal plant was about 17449 ha. The vegetable crops which are having large area under cultivation in the district are onions, tomato, brinjal and cabbage. Under spices crop,

chilli crop is having more area followed by garlic, coriander and ginger. Under floriculture marigold, chrysanthemum, roses and aster are important flower crops under cultivation. The total area under horticultural plantation in the district was 67763 ha out of which 55945 ha area was with irrigation facilities and remaining was rainfed. The major rain fed horticultural crops planted in the district include ber, custard apple and jamun. The productivity of major horticultural crop is improving due to propagating precision farming practices in the district.

Table 1

Horticultural Crop productivity in the Ahmednagar District

Sr No	Name of Crop	Area in ha	Existing Productivity t/ha	Productivity Potential t/ha	Gap in productivity t/ha	Technologies available
01	Mango	14113	7.5	9.0	1.5	High density plantation, improved varieties, micro irrigation, IPM, INM
02	Lime	12910	12	20	8	improved varieties, hasta bahar Regulation, micro irrigation, IPM, INM
03	Pomegranate	8348	8.5	15	6.5	improved varieties, bahar management, micro irrigation, IPM, INM
04	Guava	5220	20	30	10	meadow orchard, bahar management, micro irrigation, IPM, INM
05	Onion	69978	17	22	5	raised bed planting, micro irrigation, IPM, INM, weed management

Table NO. 2: crop statistic report of Ahmednagar District (2021-22 to2022-23)

Crops	2021-22			2022-23		
	Area (in hectares)	Production (in MT)	Yield (in kgs/ha)	Area (in hectares)	Production (in MT)	Yield (in kgs/ha)
Poamgranate	4723	15796	3344	4734	15842	3346
Ginger	9953	66273	6659	9963	66379	6663
Banana	7273	94721	13024	7284	94870	13024
Papaya	855	6829	7987	862	6886	7988
Tapioca	5416	35594	6572	5424	35658	6574
Mango	1663	17163	10321	1676	17300	10322
Dragan fruit	200	2546	1938	400	4541	600
Lemon	10466	14830	1417	10471	14846	1418
Custard Apple	2760	16756	6071	2768	16804	6071

Source: Agriculture and Horticulture office of Ahmednagar, Government of Maharashtra

Economic Impact:

Horticulture contributes significantly to the district's economy. It provides employment to a large segment of the rural population and contributes to the livelihoods of small and marginal farmers. The economic benefits extend beyond local markets, with produce being exported to other states and even internationally.

Challenges in Horticulture Production:

Water Scarcity:

One of the major challenges faced by horticulturists in Ahmednagar is water scarcity. The semi-arid climate and erratic monsoon patterns lead to insufficient water availability, impacting crop yields and quality.

Soil Degradation:

Soil health is critical for horticultural productivity. Issues such as soil erosion, salinity, and nutrient depletion affect crop growth and yields.

Pest and Disease Management:

Pest infestations and plant diseases pose significant threats to horticultural crops. Effective pest and disease management strategies are crucial for maintaining productivity and quality.

Market Access:

Farmers often face challenges in accessing markets due to inadequate infrastructure and price volatility. Improving market access and ensuring fair prices are essential for the sustainability of horticultural practices.

Opportunities for Growth:

Technological Innovations:

Adopting advanced technologies such as drip irrigation, greenhouse cultivation, and pest-resistant varieties can enhance productivity and sustainability.

Government Initiatives:

Government schemes and subsidies for horticulture can provide financial support and resources to farmers. Increased awareness and access to these programs can boost horticultural development.

Value Addition:

Developing value-added products such as processed fruits and vegetables, jams, and juices can open new market opportunities and increase income for farmers.

Conclusion:

Horticulture therefore is an important component of agriculture that has played a very significant role in the economy of the country. Horticulture in Maharashtra is heading for a drastic transformation as most of the horticultural crops have the advantage over the traditional crops in generating rural employment, enhancing rural income and have high potentiality to tap national and international markets. Thus, the state government has a vision of transforming Maharashtra into a fruits and flowers state of the country by setting “Horti-hubs” in different districts of the state so as to harness horticultural crops and take them to a larger scale hence, making them more viable and productive. As well as horticulture in Ahmednagar district holds significant potential for economic growth and rural development. While challenges such as water scarcity and soil degradation persist, there are ample opportunities for improvement through technological advancements, government support, and market diversification. Addressing these challenges and leveraging opportunities can contribute to a more sustainable and prosperous horticultural sector in Ahmednagar.

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