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Analysis of Rising Demand for Exotic Vegetables in International Market Cultivated in Tamil Nadu

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***Abstract*: In India, more than 85% of exotic vegetables are still being imported, even though vegetables are a crucial part of the Indian diet. Exotic vegetables are becoming increasingly popular among Indian consumers, with broccoli being the most commonly included in their diets. The demand for exotic vegetables appears to rise with higher levels of education, though it does not show a direct correlation with income. This study suggests that there is significant potential for the growth of exotic vegetable consumption in India, driven by factors such as a growing urban population, evolving lifestyles, changing food preferences, and the rise in foreign tourism. The research was based on a sample of 54 respondents, selected using the Simple Random Sampling method, and the analysis was conducted using simple percentage calculations, weighted averages, and ranking techniques.**

***Keywords*: Exotic vegetables, Consumer behaviour, India.**

1. Introduction

The demand for exotic vegetables has been increasing globally due to shifting consumer preferences towards organic, nutritious, and diverse food options. India, with its diverse ago -climatic conditions, has emerged as a key exporter of exotic vegetables such as broccoli, asparagus, bell peppers, zucchini, and cherry tomatoes. This report analyzes the factors driving this demand, key markets, opportunities, and challenges for Indian exporters. The major market for these commodities are high end retail chains like Q-mart, Natures' basket, online segment, 5 star and 4 star hotels, quick service restaurants like McDonalds, Subway, Continental / Fine-dine restaurants – Chinese, Italian, Mexican, Mediterranean, South Asian cuisines and catering services in institutional – corporate offices, hospitals, air catering, social functions and festival – weddings/ marriages. The retail segment covers nearly 48% of the demand estimated and remaining 52% is in HORECA segment. The key growth drivers for exotics are the rapidly growing organized food service sector, its premium nature, higher consumer demand through increased awareness, and innovation in supply chain, including penetration of modern retail & ecommerce, delivery platforms, and digital payments. The increasing demand for exotics is majorly because of their use in international cuisines while there is a segment of consumers who are health conscious and are including these vegetables in their diet plans as raw salads, diet salads, smoothies etc.

2. Review of Literature

1. Dr. Khem Singh Gill (2021) emphasized the significant potential for exotic vegetable farming in India, driven by the growing urban population, changing lifestyles, evolving food habits, and an increase in foreign tourism. India, with its diverse climate, provides ideal growing conditions, particularly in regions like the Nilgiris Hills and the Himalayan region, which offer excellent climates for summer production. This presents an excellent opportunity for small and marginal farmers to generate income. Exotic vegetables, which are rich in nutrients and possess medicinal properties, are still largely imported, with more than 85% of them coming from abroad.
2. Velumani P. & Balaji R. (2021) analyzed consumer preferences and found that individuals with higher education levels and income are more likely to include exotic vegetables in their diets. Among the respondents, broccoli (63%), colored capsicum (55%), and lettuce (40%) were the most preferred. A significant portion of respondents (80.80%) favored offline purchases, with supermarkets being the primary place of purchase for 33.70% of them. Additionally, 73.60% were regular buyers of exotic vegetables, and 32.80% had been consuming these vegetables for over a year. Most respondents (34.40%) consumed them twice a week, with 42.40% preferring to buy them in the morning, while 47.20% preferred purchasing on weekdays.
3. Lalichetti Sagar (2020) discussed the cultivation of exotic vegetables, which involves growing non-native species based on their adaptability to the local environment and market demand. Yield fluctuations are often caused by the plant's sensitivity to its growing conditions. Managing this sensitivity through controlled environments, such as poly tunnels, can stabilize production. However, such cultivation requires skilled management and investment. Despite these challenges, cultivating high-value exotic vegetables in controlled settings, which often experience higher market demand, can lead to greater profitability if proper techniques are followed.

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3. Objectives

- To explore the strategies adopted by farmers to secure a position in the international market for exotic vegetables.
- To compare the exotic vegetables grown in Tamil Nadu with those cultivated in other regions of India.
- To assess the role of exotic vegetables in everyday diets and their impact on overall health and well-being.

4. Research Methodology

- *Area of the study*: Tamil Nadu
- *Sampling techniques*: Area Sampling Method
- *Sample size*: 54
- *Data collection*: Primary data and Secondary data
- *Tools used for analysis*: Simple percentage, Weighted percentage, Ranking

5. Analysis

A. Simple Percentage Analysis

Table 1
Money spent on cultivation of exotic vegetables

S.No	Particulars	No.of Respondent	Percentage
1	40000-60000	34	72%
2	60000-80000	16	26%
3	80000-more	4	2%

Table 2
Collect information before cultivating vegetables

S.No	Particulars	No.of Respondent	Percentage
1	Yes	48	88.8%
2	No	3	5.6%
3	Maybe	3	5.6%

Table 3
Farmers think exotic are useful

S.No	Particulars	No.of Respondent	Percentage
1	It is healthy	3	6%
2	It is easy to cultivate	2	3%
3	High demand for products	8	15%
4	All of these	41	76%

Table 4
Collect information before cultivating vegetables

S.No	Particulars	No.of Respondent	Percentage
1	Yes	48	88.8%
2	No	3	5.6%
3	Maybe	3	5.6%

Table 5
High consumption value in international market

S.No	Particulars	No.of Respondent	Percentage
1	Yes	31	57%
2	No	5	9%
3	Maybe	8	34%

Table 6
Which type of irrigation do you think is best for cultivation of exotic vegetables

S.No	Particulars	No.of Respondent	Percentage
1	Drip irrigation	31	57%
2	Sprinkler	12	23%
3	Surface-surge	5	9%
4	Surface-flood	6	11%
	Total	53	100%

B. Ranking

Table 7
Which exotic vegetables is highly exported from Tamil Nadu?

Exotic vegetables	R1	R2	R3	R4	Total	Score	Rank
Broccoli	152	30	8	2	192	3.55	1
Lettuce	4	24	22	34	84	1.55	4
Capsicum	8	27	54	16	105	1.94	3
Salad Cucumber	52	81	24	2	159	2.94	2

Source: Primary Data

Interpretation:

From the above table it is revealed that the highest exported exotic vegetable is broccoli which is given Rank 1 scored 3.55, Rank 2 is obtained by salad cucumber scored 2.94, capsicum obtained Rank 3 scoring 1.94, and lettuce has obtained Rank 4 scoring 1.55.

6. Findings

- Over 72% of farmers invest between Rs. 60,000 and Rs. 80,000 in the cultivation of exotic vegetables.
- A majority of farmers believe that exotic vegetables offer a wide range of benefits.
- Most respondents acknowledge the high consumption value of exotic vegetables.
- The majority of farmers gather information before starting the cultivation of exotic vegetables.
- Drip irrigation is widely regarded by farmers as the most effective method for growing exotic vegetables.
- Broccoli is the most commonly exported exotic vegetable from Tamil Nadu.
- A significant number of respondents indicated that the prices of exotic vegetables fluctuate frequently.
- The cost of preservation is identified as a major challenge by most farmers.
- Many farmers observe that prices for exotic vegetables differ when sourced from other states.

7. Suggestions

- Production of exotic vegetables driven by demand is ideal for farmers, as it guarantees a market through contracts with consumers.
- The exotic vegetable market in India is growing at an annual rate of 15-20%, with the demand increasing as India continues to import over 85% of its exotic vegetables.
- Innovative women farmers are successfully cultivating 25 varieties of vegetables on 2.2 hectares of land, with an expenditure of Rs. 6,250 per day per hectare and generating earnings of Rs. 8,750 per day per hectare.

8. Conclusion

There is significant potential for the growth of exotic vegetable cultivation in India, driven by the increasing urban population, changing lifestyles, evolving food habits, and the rising number of foreign tourists. The demand for exotic vegetables, particularly in metropolitan cities, continues to rise. Despite this growth, India still relies heavily on imports, with over 85% of its exotic vegetables being sourced from abroad.

References

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