



International Journal of Research in Agronomy

E-ISSN: 2618-0618
P-ISSN: 2618-060X
© Agronomy
NAAS Rating (2026): 5.20
www.agronomyjournals.com
2026; SP-9(9): 147-152
Received: 11-07-2026
Accepted: 15-08-2026

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Strategic analysis of horticulture-based processing enterprises in Jammu and Kashmir: Evidence from SWOT and Garrett ranking techniques

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DOI: <https://www.doi.org/10.33545/2618060X.2026.v9.i9Sb.6519>

Abstract

The horticulture processing sector is significant in value addition and in employment generation, reduction of post-harvest losses and in improving farmers income. Jammu and Kashmir have a good horticultural resource base including fruit, vegetable, spices and dry fruits, which has enormous potential to develop horticulture processing industry. The current research was conducted to evaluate the strategic status of horticulture-based processing industries in Jammu and Kashmir by SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis and to determine the major factors which limit the performance of horticulture-based processing industries by using Garrett's Ranking Technique. The primary data was gathered from the processing units in the Union Territory which are engaged in horticulture businesses. The SWOT analysis identified some strengths: availability of raw materials, agro-climatic conditions, processing clusters and demand for processed products. But high production costs, inadequate utilization of installed capacity, infrastructural weakness, lack of modern technology, and financial constraints were identified as some of the major weaknesses. The opportunities included: Growth of value-added products; Growth of domestic and export markets; Government support programmes; Technological advancements; Development of new processing clusters. The key challenges were price volatility of raw materials, lack of storage and transport facilities, competition, evolving customer tastes and climate risks. Garrett ranking analysis showed that weak marketing channels was the worst constraint followed by dependence on intermediaries and limited availability of institutional credit and working capital, while inadequate cold storage and post-harvest facilities were the least severe constraints. The study underscores the importance of strengthening market linkages, increasing cold-chain infrastructure and improving access to finance, and technological modernization to foster horticulture-based processing businesses in Jammu and Kashmir in terms of growth and sustainability.

Keywords: Horticulture processing, horticulture-based enterprises, Jammu and Kashmir

1. Introduction

The food processing sector is considered a key part of the food systems transformation, as it helps to value add the crop, create jobs, improve income and minimize post-harvest losses. The processed food sector has become one of the largest growing sectors globally, as consumers' tastes and the urbanisation and demand for convenience food have shifted. In developing economies, agro-processing industries are significant links between both agriculture and markets, and for rural industrialization. The food processing industry has been identified as one of the most important sectors in agricultural transformation that includes value addition, job creation, income improvement and mitigation of post-harvest losses (Economic Survey, 2021–22). India is among the top producer countries of fruits and vegetables in the world, contributing significant proportion to the world horticultural production. Food processing industries have gained considerable momentum in the country due to the policy support, heightened investments and growing domestic and international markets. The food processing industry plays an important role in Gross Value Added (GVA), employment and export earnings. The government has also given significant boosts to the sector with schemes like Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PMFME) Scheme, Operation Greens, and integrated

cold-chain development programmes. With the policy support, growing investment and growing domestic and export markets, the food processing industry has seen tremendous growth in India. The sector plays a significant role in making contribution to manufacturing Gross Value Added (GVA) of the economy, in employment generation and export earnings.

The agro-climatic conditions of Jammu Kashmir are ideal for growing various horticultural crops such as apples, walnuts, almonds, cherries, saffron, vegetables, spices and medicinal plants. Jammu and Kashmir has special agro-climatic conditions favourable for growing a variety of horticulture crops. Horticulture contributes significantly to the economy of the UT and serves as a source of livelihood for a significant part of the rural population (Department of Horticulture, J&K, 2024). Horticulture plays a significant role in the economy of the UT and a significant proportion of the rural population depends on the crop for livelihood support. There is a lot of raw material available which will be very helpful in setting up and/or augmenting horticulture-based processing industries. Despite such benefits, there are a number of challenges in the processing sector in Jammu and Kashmir, including lack of infrastructure, lack of access to finance, inefficiencies in the market and high operating costs. It is crucial to know the key strengths and weaknesses of the sector, as well as opportunities and threats, in order to create a policy intervention that will successfully address the key drivers. A key strength of the sector, a key weakness, a potential opportunity, a potential threat are all important to know in order to design effective policy interventions to address the key drivers. Moreover, the identification and prioritization of constraints encountered by processing units can help in developing solutions.

In light of these background, the following purposes are set:

1. To conduct SWOT analysis of Horticulture Based Processing Units in Jammu and Kashmir.
2. To use Garrett's Ranking Technique to identify and prioritise the key constraints of processing units.

2. Review of Literature

Singh (2012) ^[14] conducted a SWOT analysis of Indian agro-processing industry and found that the benefits from year-round raw material availability and a vast domestic market is available in India but the weaknesses such as high working capital needs, inadequate automation, and poor R&D linkages also do exist. They noted opportunities in India's large crop base and technological integration, while highlighting threats from global competition and manpower loss. They concluded that despite positive growth dynamics, major constraints including weak marketing channels, poor distribution networks, stringent food laws, and the need for improved quality standards must be addressed for the sector to realise its full potential.

Lone and Sen. (2014) ^[7] examined the role of horticulture in the Jammu & Kashmir economy and found that the sector is dominant due to the state's low industrial base and favourable climatic and topographical conditions. The authors reported that 25–30 lakh people are directly or indirectly dependent on horticulture, which contributes to employment, income generation, rural poverty reduction, and export earnings. The study highlighted increasing demand for horticultural fruits and saffron leading to a rise in fruit production from 0.4 million tons to 1.4 million tons by 2005–06. Despite an increase in area under saffron cultivation, productivity declined from 65.25 quintals in 1998 to 50.60 quintals in 2008. Apple productivity was also reported as low at 10 tons per hectare, compared to 26

tons per hectare in the USA, Austria and New Zealand. The authors further identified issues such as wastage due to perishability, long-distance markets, lack of sorting and grading facilities, high transportation costs, weak supply chains, poor marketing strategies, and inadequate infrastructure, leading to nearly 30% fruit wastage. They stressed the need for improvement in processing facilities and infrastructure to enhance economic returns.

Fiore *et al.* (2018) ^[3] applied SWOT analysis to agri-food supply chains comprising wine, cereals, fruits and vegetables, and olive oil chains. The study identified factors such as product quality, availability of raw materials, supply chain coordination, market competition, and organizational limitations as important determinants affecting the performance and competitiveness of agri-food enterprises.

Mihretie (2019) ^[9] reviewed the knowledge of respondents towards food processing and use of technologies in Bangkok and found that although they had general knowledge about the food processing but lacked knowledge about the hazards of processed food. The study found that over 75 per cent of respondents had basic information about processed food while 80.5 per cent of them knew about the negative aspects of processed food and very few knew about its hazardous effects. It was found that overall consumer awareness about processed food was moderate.

Shaheen *et al.* (2019) ^[13] examined the status of agro-processing industries in Jammu & Kashmir and found that the sector is dominated by small, labour-intensive units with low levels of capital investment. The study highlighted that most processing units face major constraints such as weak infrastructure, inadequate marketing networks, limited access to technology, and poor value-addition capacities. They also reported that despite J&K's strong horticultural base, agro-processing remains underdeveloped, leading to low efficiency and restricted growth. They concluded that improving infrastructure, market linkages and technological support is essential to enhance the efficiency and performance of agro-processing enterprises in the region.

Madureira *et al.* (2024) ^[8] employed SWOT analysis to assess agri-food organizations and reported that infrastructural limitations, market uncertainties, and resource constraints were among the major challenges affecting the performance and sustainability of agri-food enterprises. The study highlighted SWOT analysis as an effective tool for identifying strategic interventions aimed at improving competitiveness and organizational resilience.

Malope *et al.* (2025) applied SWOT analysis to the horticultural sector in Botswana and identified high input costs, inadequate access to credit, limited processing facilities, weak market linkages, and post-harvest losses as major constraints hindering sectoral growth. The authors emphasized the importance of strengthening value chains, improving infrastructure, and enhancing institutional support to realize the full potential of horticultural enterprises.

3. Materials and Methods

3.1 Study Area

The study was conducted in Jammu and Kashmir, a region characterized by significant horticultural diversity and an expanding agro-processing sector. Major horticulture-processing clusters are concentrated in districts such as Srinagar, Pulwama, Baramulla, Jammu, Kathua, and Samba.

3.2 Data Collection

The study was based on primary data collected from horticulture-based processing units through a structured survey schedule. Information relating to operational performance, efficiency indicators, institutional support, infrastructure availability, and constraints faced by processing enterprises was collected.

3.3 SWOT Analysis

SWOT analysis was employed as a strategic tool to evaluate the internal strengths and weaknesses and external opportunities and threats associated with horticulture-based processing units. The SWOT framework was developed based on efficiency estimates, financial feasibility indicators, field observations, and responses obtained from processing-unit owners.

3.4 Garrett Ranking Technique

To prioritize the constraints faced by processing units, Garrett's Ranking Technique was employed.

The percent position was calculated as:

$$\text{Percent Position} = 100(R_{ij} - 0.50) / N_j$$

where:

- R_{ij} = Rank given for the i_{th} factor by the j_{th} respondent
- N_j = Total number of factors ranked by the j_{th} respondent

The percent positions were converted into Garrett scores using Garrett's conversion table. The mean Garrett score for each constraint was computed and constraints were ranked according to their average scores.

4. Results and Discussion

4.1 SWOT Analysis of Horticulture-Based Processing Units

4.1.1 Strengths

The study identified some of the strengths of horticulture-based processing enterprises in Jammu and Kashmir. The majority of the units had positive NPW, $BCR > 1$ and acceptable IRR, demonstrating good financial viability. There is a good availability of horticultural raw materials, which guarantees a constant supply of processing input materials during the production process. The economies of scale, better market access and operational stability come from Regional Processing Clusters in Pulwama, Srinagar and Baramulla. In addition, the average of the technical efficiency is about 81 per cent, which also shows that most units are operating close to the production frontier, thereby showing the effective use of technology.

The SWOT analysis identified some inbuilt strengths of horticultural processing units in Jammu and Kashmir. The financial feasibility study showed that most of the units were found to be economically feasible with the potential of achieving a reasonable profit, demonstrating the profitability and sustainability of processing activities in the region. The availability of horticultural raw materials, such as fruits, vegetables and nuts, was one of the most important strengths noted as a source of continuity and reliability of raw materials for processing. The favourable agro-climatic conditions of the region also help in production of good quality horticultural commodities, which gives a foundation for value addition and product diversification. The other major advantage is that processing clusters exist in regions like Pulwama, Srinagar and Baramulla. These clusters have the ability to ease access to raw material, markets, transportation infrastructure and support services, which allow for improved operational efficiency and competitiveness. Processing units also have a significant role in minimizing the losses in the post-harvest phase by transforming

the perishable agricultural products into value added products with high market value and long shelf life. In addition, the increasing demand of the processed food products by the consumers also gives a lot of opportunities for market expansion. The sector plays a significant role in generating employment and in improving the rural livelihoods and incomes of the region. All these together increase the resilience, competitiveness and long-term growth potential of horticultural processing enterprises in Jammu and Kashmir. The results are in line with Kiaya (2014) ^[6] who found that processing and value addition are significant ways to minimize post-harvest losses, enhance utilization of perishable agricultural commodities and generate employment and income generating potential in the agricultural value chains.

4.1.2 Weaknesses

Economic efficiency was still relatively low (around 44 percent) although the technical performance was good, showing significant potential for cost reduction and better resource allocation. Allocative efficiency was also moderate, meaning that the factors are not being used in the optimum proportions to minimize cost. Labour, machinery and fixed capital costs were high, making production unprofitable. Inefficiencies also included poor equipment utilization of the installed equipment and infrastructure. There were also regional variations, with the processing speed varying more in the cases of processing units in Jammu than those from Kashmir. Based on the SWOT analysis, it was found that there are certain weaknesses which hamper the growth and performance of horticultural processing units in J&K. The main drawback mentioned was the high production cost, which is due to high raw material costs, labour charges, transportation costs and other operational costs. All these factors lead to higher cost pressure on the processing companies and make it less competitive in the market. Another major problem is the underutilisation of installed capacity, as many units are underutilized because of availability of the raw materials, seasonal variation in production, insufficient market demand in some periods. The study also identified that many gaps in the infrastructure facilities such as poor storage, processing and transportation facility, which are affecting the processing units to function properly. The lack of modern machinery and advanced processing technology further restricts productivity and product quality. Constraints were reported in previous studies of agricultural and agro-processing enterprises, and were shown to have a negative impact on enterprise performance and growth: market infrastructure, market linkages, access to credit and technology. These can lead to increased production costs, poor use of resources, and decreased competitiveness of processing units (Kannan and Pohit, 2021) ^[5]. Also, respondents indicated that they faced problems in obtaining institutional credit and investment funds, limiting the growth and modernization of current industries. There were also variations in the performance of the processing units across the different districts, with some districts having better infrastructure development and market access than others. These deficiencies collectively affect the overall efficiency of the horticultural processing industry in the region, raise production costs and restrict the extent of the horticultural processing industry's growth.

4.1.3 Opportunities

There are substantial potential gains in allocative efficiency to be gained from improved input management and resource optimization. There is significant potential for growth in value

added products such as processed fruits, vegetables, spices, beverages and organic products. Schemes like PMFME, capital subsidies, cold chain development and entrepreneurship promotion programmes can help in the promotion of the sectoral growth. Development of more processing clusters, especially in the Jammu area, will enhance efficiency of the supply-chains and lower production costs. The market potential of processed horticultural products is also good, both in domestic and international markets. SWOT analysis revealed a number of horticultural processing unit growth and expansion opportunities in Jammu and Kashmir. The area has significant potential for value addition by processing its horticultural products, including fruits, vegetables, nuts and other crops into diversified products, which have a higher market value. As consumers become more aware of healthy, organic and ready-to-consume foods, processors are seeking new opportunities. Moreover, there is a great potential for business development and export promotion of processed horticultural products in both domestic and international markets. Government support in the form of financial assistance, subsidies, development of infrastructure facilities and capacity building programmes, create conducive environment for setting up and upgrading processing units. Competitiveness in the sector can be improved through schemes like PM Formalisation of Micro Food Processing Enterprises (PMFME) programme and investments in cold-chain infrastructure. Further development of processing clusters, especially in areas that are under-represented, can enhance market access, lower transaction costs and boost supply chain linkages. Furthermore, improved processing technology, packaging, branding and digital marketing offer opportunities to businesses to further improve product quality, extend their market presence and improve profitability. The overall significance of these factors suggests a significant opportunity for sustainable growth and long-term development of horticultural processing businesses in the region. The SWOT analysis opportunities identified are in line with the results obtained by innovations in value creation, product quality improvement and digitalization, which greatly enhance the competitiveness and growth possibilities of the food processing industry (Nosratabadi, *et al.*, 2020) ^[11].

4.1.4 Threats

The sector is exposed to a number of external factors which could have a negative impact on the long-term sustainability of

the sector. Raw material prices are a direct impact on production costs and profitability. If the allocative inefficiency persists, the business may have to face high operational costs. Post-harvest losses and marketing costs remain high due to lack of adequate storage, transportation and cold chain infrastructure. Industry competition, from other states, for product prices and market share. Beyond that, if high levels of investment in fixed capital are not matched by growth in capacity use, economic inefficiencies may further be exacerbated. The SWOT analysis revealed that there are some external threats which could pose challenges to the growth and sustainability of horticultural processing units in Jammu and Kashmir. The price volatility of raw materials is one of the key risks, impacting production costs, profitability, and business stability. The availability and price of horticultural produce, influenced by seasonality and weather events and subject to market fluctuations, can at times cause issues for processors in maintaining ongoing operations and profitability. The lack of sufficient infrastructure for storage, transportation and cold-chain facilities is another major risk. The lack of these areas can cause greater post-harvest losses, increasing operational costs and product quality, which will impact processing enterprises competitiveness. The sector is also highly competitive with established processing industries in other states that have better infrastructure, advanced technologies and better market networks. This competition puts pressure on local businesses in their pricing, quality and reach. Moreover, consumer preferences, uncertainty in the market, and fluctuations in the demand for processed products are other challenges for processors. Climate related risks, such as weather events out of the season and production shocks, may negatively impact raw material supply and interfere with processing operations. These threats could limit the potential growth of horticultural processing units if proper efforts are not made to augment infrastructure, build market linkages and promote the resilience of the horticulture sector. The threats mentioned in this study are consistent with the results by Fiore *et al.* (2018) ^[3] who stated that agri-food supply chains are challenged by market uncertainties, lack of coordination and negative elements that impact supply-chain performance and competitiveness.

4.2 Constraints Faced by Processing Units: Garrett Ranking Analysis

The results of Garrett's Ranking Technique are presented below.

Table 1: Ranking of Major Constraints Faced by Horticulture-based Processing Units in Jammu and Kashmir Using Garret's Ranking Technique

Constraint	Mean Garrett Score	Rank
Weak marketing channels and dependence on intermediaries	70.12	I
Lack of adequate cold storage and post-harvest facilities	70.01	II
Limited access to institutional credit and working capital	65.28	III
Inadequate packaging, branding and standardization facilities	58.84	IV
Poor infrastructure and inadequate road connectivity	58.04	V
High cost and limited accessibility of modern processing machinery	56.31	VI
Seasonal and irregular availability of raw materials	44.13	VII
Political disturbances and conflict-related disruptions	43.93	VIII

The results from the present study corroborate those of several recent studies, which used the Garrett Ranking Technique to determine the production and marketing constraints in agricultural production. The weak marketing channels and reliance on the intermediaries as the most critical constraint is similar to the report of Kale *et al.* (2025) ^[4] that mentioned heavy dependence on intermediaries, poor bargaining power, and inadequate market access as marketing constraints of cotton

growers in Maharashtra. Likewise, the constraints of marketing faced by the farmers of organic vegetables by Chavan and Koshti (2023) ^[1] were lack of marketing facilities and weak market demand, which further shows the need to build market linkages and enhance market infrastructure for better marketing. The results corroborate what was found by Fiore *et al.* (2018) ^[3] which identified weak market linkages, fragmented enterprises, inadequate logistics networks and high production costs as some

of the major weaknesses of fruit and vegetable supply chains. In the current study, marketing constraints, inadequate infrastructure and branding related issues were observed and this is also the case in agri-food value chains. The second constraint in the present study is inadequate cold storage and post-harvest facilities, which is also confirmed by Sarma *et al.* (2025) ^[12] who found inadequate cold storage facilities and poor market infrastructure is one of the most critical constraints of vegetable marketing systems. The results indicate that restricted access to institutional credit and working capital are significant constraints, which is also reflected in earlier studies. Limited access to credit was one of the most crucial constraints on farm enterprise identified by Kale *et al.*, (2025) ^[4] and the credit facilities inadequacies and financial constraints were reported as significant constraints on the growth and investment in banana enterprises in Andhra Pradesh. Moreover, the significance of infrastructure related constraint that was found in the current study is in line with Sarma *et al.* (2025) ^[12] findings that inadequate infrastructure including market infrastructure, transportation facilities and poor road connectivity has a negative impact on the performance of agricultural value chain. The above similarities suggest that furthermore market inefficiencies, inadequate post-harvest infrastructure, financial constraints and infrastructural constraints remain a major concern in agricultural and horticultural operations and policy measures and institutional support are needed for sectoral sustainable growth.

Weak marketing channels and over-reliance on intermediaries were the most serious constraints encountered by processing units, having the highest Garrett score of 70.12. This discovery indicates poor direct market access, and low bargaining power of processors. Lack of sufficient cold storage and post-harvest infrastructure came out as the second most important constraint, suggesting the need to invest in cold chain facilities to minimize losses and enhance product quality. Financial constraints affecting modernization and expansion activities were limited availability of institutional credit and limited working capital, which was ranked third. Inadequacies in packaging, branding and product standardization ranked fourth, which is a sign of poor competitiveness in higher value segments of domestic and export markets. Poor road connectivity, transportation facilities and infrastructure related problems were also found to be having significant impact on processing operations. Many of the enterprises could not afford the technological upgradation because of the high cost of modern machinery. The seasonal variations in availability of raw materials and political disturbances had comparatively low Garrett scores, but they remain a challenge for uninterrupted processing activities. High costs and limited availability of modern processing machinery was reported with a mean score of 56.31 and was ranked sixth. The use of modern processing equipment is critical to productivity, quality and efficiency. The results also align with those of Madureira *et al.* (2024) ^[8] who highlighted three areas of potential constraints on the competitiveness and sustainability of agri-food organizations – technological restrictions, organizational difficulties, and market-related restrictions. In the current study, the same issues were found in relation to access to modern equipment and lack of efficiency in the marketplace. But the capital cost of advanced machines is very high, which often dissuades the small and medium processing units from investing in modern technologies. Availability of such equipment is limited, which makes technological upgradation difficult and the competitiveness of the processing enterprises in the more competitive markets. The seasonality of raw material

supplies and its irregularity came into the picture as the seventh constraint with the mean score of 44.13. In horticultural processing units, the raw material is solely dependent on the agricultural production that comes in the season, and therefore, fluctuations in production, weather and harvesting effects all play a role in the vulnerability of raw material. Poor quality raw materials availability has an impact on capacity utilization, production plans, and procurement costs when it is short. The raw materials are supplied seasonally, which is a great challenge for continuous processing during the year. Similarly, the result of the present study is corroborated by Sharma *et al.* (2020) who used Garrett's Ranking Technique to determine the significant problems faced by off season vegetable farmers in Punjab. The authors indicated that the major constraints of farmers were high farm inputs, low market prices, inadequate storage amenities, and marketing related challenges. The marketing constraints and infrastructure related constraints were more prominent in the present study as compared to other studies regarding the efficiency and profitability of agricultural enterprises.

5. Conclusion

The study shows that the horticulture-based processing units in Jammu and Kashmir have substantial strengths in the areas of strong technical efficiency, financial viability, availability of raw material and processing clusters. However, the not so high economic efficiency and moderate allocative efficiency suggest that there is a significant room for enhancing the utilization and cost control of the resources. From the SWOT analysis, opportunities have been identified for an extension of value-added processing, a possible increase in efficiency levels and tapping into government support schemes. Meanwhile, risks from raw material price fluctuations, infrastructure deficits and growing competition in the markets must be addressed. Weak marketing systems, poor cold storage facilities, and low levels of institutional finance were determined to be the top three constraints facing processing enterprises using Garrett ranking analysis. Consequently, government interventions need to be directed at supporting marketing networks, strengthening farmer-processor links, increasing cold chain facilities, providing easy credit facilities and technological modernisation. This will help to make the horticulture processing industry more competitive, profitable and sustainable in the state of Jammu and Kashmir.

6. Policy Implications

Study findings point to the need to increase the marketing system for the development of horticulture-based processing units in Jammu & Kashmir as a key policy focus. As weak marketing channels and over-dependence on intermediaries appeared to be the biggest challenge, efforts could be focused on strengthening direct producer–processor linkages, establishing organized marketing networks and digital marketing platforms. Promotion of Farmer Producer Organizations (FPOs), co-operatives and contract marketing can help to strengthen market access, increase bargaining power, and increase the share of the price received by processors and producers. These interventions could make a meaningful contribution to profitability and efficiency of the market. The study also underscores the need to increase cold storage and post production facilities in all major horticulture production and processing centres. One of the most severe challenges faced by the sector was the lack of cold chain facilities. Decentralised cold storage, development of refrigerated transport, and public-private partnerships in cold-chain development can help minimise post-harvest losses,

enhance the quality of the products and secure a steady flow of raw materials all year round. Enhanced storage facility would also help processors to better cope with the seasonal production variations. Limiting factors for the growth and modernization of processing enterprises are still the access to institutional credit. Consequently, there is a need for the financial institutions and government to develop simplified lending processes, provide low cost working capital facilities and develop specific financial packs for agro-processing industry. Access to cheap credit would help invest in new technology, increase production capacity and improve processing methods, leading to better competitiveness. Development of facilities for packaging, branding and standardization is also important to boost the value of processed horticultural products in the market. Common facilities centres, quality testing centres and certification systems can be strengthened to enhance product quality and consumer confidence. Moreover, branding and Geographical Indications (GI) of unique products of Jammu and Kashmir could enhance market position and bring new opportunities in both domestic and international markets. The study also highlights the need for enhancing the infrastructure and connectivity of the rural areas. Inadequate road networks and transportation facilities increase transaction costs and limit market accessibility. Roads, logistics systems, warehouses, and transportation infrastructure investments would enable the smooth transportation of raw materials and finished products, thus lowering operational costs and increasing supply chain efficiency. Modern processing machinery is also expensive, and too few are available, so policy should be paid attention to. Capital subsidies, Machinery Banks and Sharing of Processing Units can help in technological upgradation of processing units. The use of modern equipment would provide an increase in productivity and product quality, as well as operational efficiency and decrease wastage and processing costs. Another key condition for sustained growth for the processing sector is to guarantee the stability of raw material supply. Consistent supplies of quality raw materials during the year will be ensured by promoting contract farming, producer aggregation models and better linkages between farmers and processors. These would help minimise seasonality and maximise capacity utilisation of processing companies. Last, but not least, it is important that the institutional and policy environment is stable, which will guarantee the sustainability of horticulture-based processing units. Processors will need to be resilient to external shocks, which can be achieved by measures to ensure uninterrupted logistics; improving support institutions; and creating risk mitigation mechanisms. The horticulture processing sector in Jammu and Kashmir would have improved its competitiveness and growth potential in the context of constant policy environment and investment in infrastructure, finance and marketing. Overall, the research shows that integrated interventions in the areas of marketing, infrastructure, financial arrangements, technology and institutional support are required to tap the potential of horticulture-based processing industries in the region. This would not only boost enterprise performance and profitability but also help add jobs, value addition and stimulate rural economic development.

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