



Production and marketing of wheat- A constraints analysis in Kangra Valley of Himachal Pradesh

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Abstract

An attempt has been made in this research script to examine the major constraints in relation to production and marketing of wheat faced by the wheat growers and their marketing functionaries in Kangra valley of Himachal Pradesh in the present context. For this multiple stage sampling design were adopted for the selection of blocks, villages, cultivators and their marketing functionaries. To achieve the objective, a sample of 80 cultivators was collected from the randomly selected 10 villages, five each from the randomly selected two blocks. Additionally, a sample of five marketing functionaries each consisting of traders, wholesalers, processors and retailers were collected in order to find out their marketing problems. To analyse the problems and constraints in wheat production and marketing, Henry Garrett's ranking technique was followed. The findings revealed that both cultivators and intermediaries faced a range of challenges that affect the efficiency of wheat supply chain. While, cultivators were mainly constrained by production risks, dependency on middlemen, and limited bargaining power; intermediaries encountered transportation challenges, price volatility and infrastructural hurdles. The analysis thus indicated that both production and marketing hurdles significantly affect productivity and profitability and efficiency of wheat supply chain. Addressing these constraints through improved seed distribution, labour management, better market linkage, and development of infra-structure and processing facilities could enhance the overall performance of wheat sector.

Highlights

- a. Production constraints of wheat
- b. Marketing constraints of wheat

Keywords: Production, marketing, constraint, wheat, Kangra district

Introduction

Wheat is crucial in Kangra Valley as a staple Rabi (winter) crop. It forms the backbone of the region's rice-wheat/maize-wheat farming systems, ensuring local food security and livelihoods, though challenged by climate variability. It's a key cereal grown in the valley, vital for the agrarian economy alongside maize, rice, and other vegetables, supporting subsistence farming on small landholdings. Wheat is more than just a crop in Kangra; it's a cornerstone of the regional food system, economy, and cultural landscape, facing increasing pressure from environmental changes.

Wheat production, productivity and profitability are affected by various social and economic factors in addition to climatic vulnerability. Whereas, at micro level, numerous studies have suggested that both the social factors such as family size, age of the head of the family, educational level of the head of the family, distance from metalled road, distance from town/ market and the economic factors like the size of operational holdings, number of fragment of holdings, extent of tenancy, tractor and bullock density, presence of traders, commission agents, middlemen, farm income and off-farm income etc. affecting agricultural productivity and profitability to a great extent. In addition to these factors, there are some constraints such as the non-availability of quality input at appropriate time, high costs of seeds, fertilizers, insecticides and pesticides, unpredictable weather, non-availability of labour during peak period, non-availability of fertilizers, insecticides, pesticides at appropriate time, exploitation by the

middlemen, inadequate irrigation, lack of storage facilities, bargaining power, transportation challenges, lack of processing units and can many more which inhibits the production, productivity, and profitability of agricultural crops. Therefore, it is imperative to examine the problems and constraints faced by the wheat growers and their marketing functionaries in the present context which hinders the production and marketing of wheat. Such an analysis would have direct policy implications. With this background in view, an attempt has been made in this research script to identify the major production and marketing constraints of wheat in Kangra valley. Addressing these constraints will directly impact farmer income and standard of living in this agriculture-dependent region.

Methodology

Selection of the Study Area

The study was purposely conducted in Kangra district of Himachal Pradesh as this district occupies the first place in terms of area and production of wheat as per the Statistical Abstract of Himachal Pradesh, 2022-23. The area and production of wheat in Kangra valley was 86,493 ha and 1,92,804 MT which was around 27 per cent of the total area and production of wheat in the state. This made it a suitable region for finding out the major production and marketing constraints of this very important staple food grain crop. Therefore, to boost its further production, it is absolutely imperative to tackle those problems which are faced by the cultivators in the production and marketing of wheat. This district also has an established network of agricultural

markets and intermediaries, which enabled the mapping of multiple marketing channels.

Sampling Plan and Sample

For the study, 80 farmers were selected randomly through multi-stage random sampling process across the 10 randomly selected villages, five each of the two randomly selected major wheat growing blocks of Kangra district.

Sources of Data and Analytical Framework

a. Source of Data

Both primary and secondary data were used in this study. The primary data on various production and marketing constraints were collected by survey method on a well designed and pre-tested schedule for the agricultural year 2024-25 by personally interviewing the cultivators. Some secondary information pertaining to the selection of the study area and sample selection for the study were collected from the governmental offices of the respective selected blocks.

b. Analytical Framework

In order to achieve the objective of the study, data were analyzed by using suitable mathematical and statistical tools such as averages, percentages which were used as per the requirement of data so as to interpret the finding of the study.

Constraints Encountered by the Various Market Functionaries and Farmers

Henry Garret (1969) ranking was used to identify constraints faced by market functionaries in wheat supply chain. In this method, respondents were asked to assign the rank to all factors as per their preference and outcomes of such ranking were converted into score value with the help of formula;

$$Per\ cent\ Position = \frac{100(R_{ij} - 0.5)}{N_j}$$

Where,

- R_{ij} = Rank given to i^{th} position by the j^{th} individual
- N_j = Numbers of problems ranked by j^{th} individual

Results and Discussion

1. Results

1.1. Production Constraints faced by farmers

An attempt was made to identify and analyze the various problems encountered by farmers and market intermediaries in wheat production and marketing. The responses were organized and ranked according to Garrett scores highlighted the most critical challenges affecting the efficiency and profitability of wheat supply chains. The findings are summarized in Table 3.1

It is evident from the analysis that among farmers, the low availability of quality seed emerged as the most significant constraint (Rank I), indicating that insufficient access to certify and high-yielding seed varieties limits crop productivity. Labour shortage during peak periods was ranked second (Rank II), reflecting the difficulties in timely sowing, harvesting, and other labor-intensive operations. Unpredictable weather conditions were identified as the third major challenge (Rank III), which affects both yield

and quality. Issues related to market intermediaries such as middlemen not taking consent while selling (Rank IV), middlemen exploitation (Rank V), and less bargaining power (Rank VI) were also reported, highlighting structural and market-related inefficiencies. Limited access to markets was ranked as the least pressing problem among the surveyed farmers (Rank VIII), though it still constrains the overall marketing effectiveness.

1.2. Marketing constraints faced by the marketing functionaries

For market intermediaries, Transportation challenges were ranked second (Rank I), as inadequate infrastructure and logistics increase costs and delay deliveries. Price volatility was ranked as the most critical issue (Rank II), which creates uncertainty in procurement, storage, and sales, impacting their operational planning. The lack of processing units was identified as the third significant problem (Rank III), limiting opportunities for value addition and higher margins. Delayed payments from buyers were considered the least severe constraint (Rank IV), though it affects cash flow and working capital management.

Table 3.1: Ranking of problems faced by farmers and market intermediaries in the production and marketing of wheat

Problems faced by farmers	Average score	Ranking
Low availability of quality seed	58.49	I
Labour shortage during peak time	56.53	II
Unpredictable weather conditions	54.23	III
Middlemen not taking consent while selling	53.61	IV
Middlemen exploitation	50.51	V
Less bargaining power	45.78	VI
Lack of market access	44.49	VIII
Problems faced by market intermediaries		
Transportation challenges	57.50	I
Price volatility	54.70	II
Lack of processing units	44.45	III
Delayed payments from buyers	37.05	IV

The analysis indicates that both production and marketing challenges significantly affect wheat productivity, profitability, and the efficiency of the supply chain. Addressing these constraints through improved seed distribution, labour management, better market linkages, and development of infrastructure and processing facilities could enhance the overall performance of the wheat sector

2. Discussions

2.1. Constraints faced by farmers and market functionaries

2.1a Ranking of problems faced by farmers and their market intermediaries in the production and marketing of wheat

The primary challenge identified by farmers in study area was the low availability of quality seed, which obtained the highest average score (58.49) and ranked first. This revealed that despite technological advancements, access to certified or improved seed varieties continues to be a significant concern for farmers, which is restricting productivity and returns. This finding was consistent with Kumar *et al.* (2007)^[18] noted as major constraint for wheat farmer. The second issue was the shortage of labour during peak agricultural operations (56.53). With increasing rural urban

migration and rising wage rates, farmers frequently struggle to arrange sufficient labour at critical stages such as sowing, weeding, and at time of harvesting.

The third major constraint was unpredictable weather conditions (54.23). Sudden rainfall, dry spells, or untimely hailstorms damage crops, leaving farmers vulnerable to losses. This finding was consistent with Mandial (2025), reported that unpredictable weather conditions was a concern encountered by farmers. Other constraints were middlemen not taking farmers' consent while selling their produce (53.61) and exploitation by intermediaries (50.51) also identified as significant problems. Further, less bargaining power (45.78) and lack of direct market access (44.49), though ranked relatively lower, remains challenge for improving farm income, since most farmers depend on traditional channels rather than exploring regulated or alternative markets.

Market intermediaries, who play an important role in moving produce from farmers to consumers. Their most significant problem was transportation challenges (57.50), which not only increases transaction costs but also leads to delays and post-harvest losses, especially in perishable commodities. The second major issue was price volatility (54.70), which created uncertainty in marketing margins and profitability. Lack of processing units (44.45) was identified as another major concern, as limited infrastructure for value addition restricts their ability to diversify and to increase their profits and delayed payments from buyers (37.05) also appeared as a problem, affecting the liquidity and smooth functioning of their operations.

Overall, the findings suggest that both farmers and intermediaries face a set of challenges that affect the efficiency of the agricultural supply chain. While farmers are mainly constrained by production risks, dependency on middlemen, and limited bargaining power, intermediaries encounter transportation challenges, price volatility, and infrastructural hurdles. Addressing these issues requires strengthening institutional support, enhancing infrastructure, and promoting direct linkages between farmers and markets to ensure a more equitable and efficient system in the market.

Conclusion

Study on production and marketing constraints of wheat in Kanga valley of Himachal Pradesh reveals significant insights into the efficiency and profitability of wheat. Opinion of the wheat growers and their marketing functionaries were enlisted regarding their problem and constraints. In this context, low availability of quality seed emerged as the most significant constraint (Rank-I), indicating that insufficient access to certified seeds limits crop productivity in the study area. Labour shortage during peak periods and unpredictable weather conditions were also identified as major constraints. Price volatility, transportation challenges and inadequate infrastructure were major hurdles encountered by the marketing functionaries. Therefore, to augment the productivity and profitability of wheat, measures like expanding crop insurance, promoting contract farming, strengthening farmer's cooperatives, providing farmers with real time data on price trends and market arrivals through governmental agencies and investing in rural roads and storage facilities can be instrumental for ensuring better returns and stability.

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