

An Economic Study of Production and Marketing of Wheat Crop in Block Amnour District Saran (Chhapra), Bihar

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INTRODUCTION

India is agriculture based country. Agriculture is the most important sector of Indian economy. In India agriculture sector account for about 15 percent of the Gross Domestic Product 2021-2022.

Agriculture provides employment to more than 41.49% of its population and account for sizeable share of the country's foreign exchange earnings.

Wheat is the most important and widely cultivated cereal crop. It is the second most staple food after rice in our country. In many countries wheat occupy a position of prime importance as one of the major food grain for human consumption. It is importance as food grain is particularly marked in temperate region of the world.

We occupy second position in the world in wheat production with a production of 106.84mt. (Economy Survey of India, 2021- 2022). First position in wheat production in the world is still hold by China and second position 35 India. Uttar Pradesh occupied first position in term of area (35 MH 2021-22) as well as 32.42 mt. (2021-22) production both. Punjab assumed apex position in term of productivity which is about (6416 kg/ha). The average productivity of wheat in India is about (3500 kg/ha).

It was the wheat, which played an important role during green revolution (1966-1967). The Indian Council of Agricultural Research (ICAR-1929) has been in the fore front in guiding and co-ordination wheat developments with the adoption of H.Y.V. (High Yielding Variety). Programme, the food grain production in India increased from more 50.8 million tonne during 1950-51 to 288 million tonne in 2021-22.

The nutrient composition of wheat (per 100 gm) *i.e.*

S. No.	Nutrient	in gm
1.	Protein	12 g,
2	Carbohydrates	70.8 gm
3.	Fat	1.5 gm
4.	Crude fiber	1.1 gm
5.	Mineral water	1.75 gm
6.	Calcium	1.5 gm
7.	Phosphorus	4.30 mg
8.	Energy	346 k.cal

Wheat flour is the first addition though the value added is low. Wheat flour serve as the raw material for processed foods such as biscuit, cakes and several other products.

Marketing is a part of productive process and marketing costs form a part of overall costs of the production. The producer, the middleman and the consumer looks upon the marketing process from his own individual point of view. The producer is primarily concerned with selling his products at such remunerative prices a would enable him to continue to produce or stay in his business. The ideal marketing system is one that ensures the long run welfare of society.

In India the history of regulation of markets dates to 1897 when Berar act was passed for cotton and grain markets. The Indian cotton committee appointed by the government of India recommended regulation of cotton on the line of barer markets. In presence to this recommendation, the government of Bombay was

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the first to in act. Bombay cotton market act, 1927. The Royal Commission on Agriculture, in its report submitted in 1926, besides on overall survey of Indian agriculture recommended the establishment of regulated markets on the pattern as modified by the

Bombay cotton market Act 1927. In 1935 the government of India established the office of the agriculture Marketing Adviser (Directorate of Marketing and Inspection) under the ministry of food and agriculture to look into the problems of the marketing of agricultural produce.

An efficient and reliable marketing system by itself can stimulate increase in agricultural production while lack of it can lesion, subdue and shrink the impact of any number of production programmers', administration effort and volume of investment. It is such an important role of agricultural marketing that seem to have promoted the Government of India to place particular emphasis of agriculture marketing in the post independence period in general and after the third five year plan in particular.

During the first and second five year plans, agricultural marketing did not receive much important but during third five year plan, a number of marketing development programmers' were initiated as co-operative marketing, market news service and warehousing. The fourth five year plan laid greater emphasis on development if infrastructural facilities in wholesale markets. The fifth and sixth five year plan further accelerated, the market development programmers' as well as grading and standardization Programme. During the seventh and eight five year plan the progress of agricultural marketing Programme continued with some Para. The implementation of these programmers' had a significant bearing on agricultural marketing practices and perspective in the country. The importance of marketing has also been emphasized during 11th five year plan, since food security was the main concerned.

The farmer is the back-bone of Indian economy. Historically he did not get a fair deal when he visited the markets to sell his produce. The exploitation of the toiling farmer and the growing rural indebtedness in India had attracted the attention of the government and various commissions and committees had urged the improvement of the marketing system particularly the need for public warehousing to regulate agricultural marketing and reduce burden of rural indebtedness.

Food grain marketing is very important in India. It provides cash and barter income for Indian farmers a lively hood for thousands of grain traders and processors and their employees and food for India's consumers. It in estimates that India's rural consumer

spend more than urban consumers house hold budget on food grains.

Food grain marketing is of such importance in India that at various levels of government have become heavily involved in the operation and regulation. The Indian government and/or its agencies own and considerable food grain storage and processing facilities. They regulate trucking and market transactions and provide market yards, market information and grading services. In addition, various level of government in India influence prices by price fixing, rationing, food zones and direct procurements and distribution.

There are at least two necessary conditions for a food grain marketing system to exist. One is a demand for food grains by some element in the population and the other is a supply of food grains from food grains producer or through imports. because over all supply and demand conditions for food grains so basic to an appreciation of the scope, importance and problems of food grain marketing in India.

Farmer sale and buy food grain because the transactions make them better off. Indian grain prices when not administered by the government are determined by the pressure of supply and demand at least at the retail level. They cannot vary for from the equilibrium price at retail for the nation as a whole without shortage or surpluses developing. Prices at lower levels in the marketing system under competitive conditions will reflect retail prices less marketing costs (Government of India) has announced the minimum support prize of wheat Rs 2125 per quintile for season 2021-22.

Objectives:

The main objective of the study were-

1. To study the cropping pattern of wheat on the sample farms of different size groups.
2. To work out the cost and returns analysis of wheat on the sample farms.
3. The find out the marketable surplus and marketed surplus of wheat at the sample farm of wheat growers.
4. To analysis marketing cost and marketing margin (producer share in consumer's rupe's) of different channels operating in the study area.

To examine the constraint and suggest remedial measures of production and marketing of wheat is the study area.

RESEARCH METHODOLOGY

The present chapter deals with the research methodology adopted in the selection of block,

villages, farmers and markets for the study entitled, "An economic study of production and marketing of wheat crop in block Amnour District Saran (Chhapra) in Bihar ". The methodological aspect has been discussed under the following heads:

- Sampling technique
- Collection of data method of enquiry
- Period of enquiry
- Analytical tools
- Cost concept other relative concept
- Limitation

Sampling technique

A multistage stratified random sampling technique was adopted to select the block, village, cultivators, market and market functionaries.

Selection of the block

Having the largest area under wheat in the saran (Chhapra) district block Amnour was selected purposively for the present study. products of the locality are well acquainted with the production and marketing of the crop.

Selection of villages

A list of all the villages, falling under block Amnour was prepared and from the 118 listed 5 villages were selected randomly.

Selection of the farmers

A list of all the wheat growing cultivated area. These farmers were grouped under three size of holding viz., 0-1 ha, 1-2 ha and 2 & above. A random sampling of 50 farmers was then each category was kept in probability preparation of their number falling under each category. The name of villages and number of selected farmers are given in Table 3.1.

Number of villages and selected farmers

Village	Size group in ha			Total
	Margin al 0-1	Small 1-2	Medium 2 & above	
Amnour Harnarayan	5	4	1	10
Goshi Amnour	6	3	1	10
Jamalpur	8	2	0	10
Paharpur	5	3	2	10
Goshi Amnour	5	3	2	10
Total	29	15	6	50

Selection of markets

Only those markets, where the farmers of selected villages used to sale their produce, were considered for the present enquiry. The producers were found to sale their produce regulated market Saran (Chhapra) was selected purposively.

Selection of the producers

For working out marketable surplus and marketed surplus marketing and marketing margins in the selected market. 10 producers for each market was selected randomly irrespective of their size groups, from 50 selected farmers, thus, in all 10 producers were selected randomly.

Selection of market functionaries

All the important market functionaries of the two selected markets were interviewed in respect to the marketing of the crops. The marketing functionaries which were interviewed are given as below-

1. Commission agents (Arhatiya)
2. Brokers (Dalals)
3. Weight-men (Toulas)
4. Palledars

Collection of data and method of enquiry

The data on production and marketing aspects were collected from schedules in advance. The enquiry was conducted by survey method.

Primary data

The primary data were collected by direct personal interview with the respondents.

Several visits were making to collect the data from the farmers and functionaries. In order to collect correct information, the help of village leaders, block staff and marketing staff was sought for.

Secondary data

The secondary information was compiled from the published journals bulletins and records of the districts block and marketing office head quarter

Period of enquiry

The study relates to agricultural year 2021-22 beginning from 1 July, 2021 to 25 May, 2022.

Analytical tools

Average

The simplest and important measure of average which has been used in the statistical analysis of the collected data is the simple average. The formula used to **estimate this average is:**

Tabular analysis

The collected data were classified and tabulated to compare the marketing cost, price, marketable surplus and marketed surplus and arrivals etc.

Cost concepts and other relative concept

Fixed cost

Fixed cost included cost incurred on family labour, rental value of land, land revenue and overhead charge including interest on fixed capital and depreciations repairs.

Variable cost

Variable cost included hired, human labour, bullock labour machinery power, costs of seeds, fertilizers, irrigation charges, plant protection measures, interest on current investment etc.

- 1. Cost- A** = All cash and kind expenses actually incurred which comprise wages of hired labour Value of bullock labour (hired and owned). Seed and manures farm produced and purchased irrigation charges, land revenue, interest on working capital and depreciation charges on fixed farm capital arm building, irrigation installation and farms implements) rent paid for leased in land.
- 2. Cost- B** = Cost- A + rental value of owned land + interest on owned fixed capital.
- 3. Cost- C** = Cost- B + imputed value of family human labour This is the total farm cost.

Family Labour Income

Family labour income = Gross income – Cost- A

Farm Business Income

Farm business income = Gross income – Cost- B

Input-Output Ratio

It is the ratio between input and output and is computed by dividing output by input.

Market Channel

Marketing channel is a path traced in the direct or indirect of title to a product, as it moves from a producers to ultimate consumer or industrial users. Market channel is structure of intra-company agents and dealers, wholesalers and retailer through which the commodity product or service is marketed.

Marketable Surplus

It is the residual product available with the farmer after meeting his family and farm needs.

$$MS = \frac{\text{Total production quantity retained by farmer}}{\text{Total production}} \times 100$$

Marketed Surplus

This refer to the actual quantity of the produce which enters in the markets.

Marketing Cost

This includes all the marketing charges from local assembling to retailing, in the marketing process the cost of performing the various marketing functions and of operating various agencies.

Market Margins

Market margins refers to the total expenses and profits of the marketing functionaries.

Price Spread

It refers to the difference between price paid by the consumer and price by the farmer or producer.

Cost allocation

1. Homan Labour

Human Labour has been imputed at the market wage rate prevailing in the locality.

2. Bullock Labour

The per day charges as prevailing in the area study were taken into accounts.

3. Seeds

The cost of seed utilize on the farm was evaluated at the prevailing, current market price whether it was owned or purchased.

4. Interest on working capital

The interest on working capital was charged at the rate of the 7 percent per year for half of the period. The crop remain stand in the field.

5. Interest on fixed capital

The interest on fixed capital was charged at the rate of 12.5 percent per year.

Limitations

There are many limitations in collecting the data, as given below.

1. Most of the cultivators were illiterate and did not maintain any farm records thus it was difficult to collect and except and adequate information.
2. Some cultivars were suspicious and did not give the correct information as they had an fear of imposition of taxes or other government steps and

SUMMARY AND CONCLUSION

The present study on "An Economic Study of Production and Marketing of Wheat Crop in Block Amnour District Saran (Chhapra) Bihar" was taken the year 2021- 22.

The main objective of the study were:

1. To study the cropping pattern of wheat on the sample farms of different size groups.
2. To work out the cost and returns analysis of wheat on the sample farms.
3. The find out the marketable surplus and marketed surplus of wheat at the sample farm of wheat growers.
4. To analysis marketing cost and marketing margin (producer share in consumer's rupee's) of different channels operating in the study Area.
5. To examine the constraint and suggest remedial measures of production and marketing of wheat is the study area.

The research methodology adopted for the present consisted of a multistage stratified sampling technique. In district Saran (Chhapra) and block Amnour was selected purposively. From the selected block Amnour a list of all village was obtained and five village were selected randomly. Then for each of the selected village a list of the farmers growing wheat crop along with their cultivated area was prepared. The farmers were further sub grouped in to three size groups viz., 0-1, 1-2 and above hectares size groups. From this list, 50 farmers were selected in probability proportion to their number falling under each village and size group.

In order to study marketing channels, marketing cost and marketing margins and price spread, one types of regular market saran (Chhapra) were selected purposively, considering the arrival of the produce, cooperation of the functionaries and facilities available with the investigator so far as the study of producer's share, marketing cost and marketing margins is concerned, marketing channels were studied. They included 1. Producer-consumer 2. Producer-Village trader- wholesaler-retailer-consumer. 3. Producer- wholesaler-Retailer-Consumer thus the present study examine two aspect i.e.

1. Production of wheat dealing with cost and returns analysis of the crop.
2. Marketing aspect including marketable surplus marketed surplus distributed channels, marketing cost and margins, producer's share in consumer price.

The sample farmers were growing wheat as a pure crop. The average size of sample farms came to 1.82 hectares which was 0.82 hectares on below 1 hectares size group. 1.59 hectares on 1-2 hectares size group and 3.05 hectares on 2 hectares and above size groups. The main source of irrigation was private Govt. tubewell Govt. channel sets which irrigated

75.46 percent and 22.86 percent, respectively to total irrigated area on sample farms.

The main crop grown by the farmers were wheat, sugarcane, paddy, potato. maize, gram and bajra, sugarcane accounted for the highest share 37.89 percent followed by wheat 26.01 percent, potato 4.61 percent and maize 4.25 percent to total cropped area under study.

The average intensity of cropping on an average came to 173.29 percent. It was higher on largest size group of farms i.e. 177.73 as compared to marginal and medium size group of farm 170.81 and 169.81, respectively.

An economic analysis of wheat revealed that the crop gave an average net income of Rs. 78307.6 per

hectares by making an investment of Rs. 46092.40 as input cost. The per hectare input cost was lower being Rs. 44783.90 per hectares on marginal farms as compared to Rs. 46129.24 per hectare on small farms and Rs. 47364.95 on medium farms. As regards net income almost a similar trend was noticed. The net income was found to be lower being Rs. 76216.1 per hectare on marginal farms as compared to Rs. 77870.76 on small and Rs. 82176.19 hectares on medium farms. A high level of net income on large farms was due to higher investment on cash inputs which gave comparatively higher yield and thereby higher net income.

The breakup of input cost showed that human accounted for the 2.68 percent manures and fertilizers (8.37 percent), machine power 6.47 percent to total cost of cultivation. As regards, size groups wise, the percentage share of manures and fertilizers, seeds, irrigation have the increasing trend with the increasing in the size of the farms.

The average yield on the sample farms came to 41.45 quintals per hectare. The varied 39.50 quintals per hectares on marginal farms to 41.05 quintals per hectares on small farms and 43.80 quintals per hectare on large farms. The average cost of Production per quintal was worked out to Rs 1082.36 which varied from Rs 1133.67 per quintal on marginal farms to Rs. 1090.95 per quintal on small farms and Rs 1022.46 per quintal on medium farms. The average input-output ratio was out to 1:2.69 which varied from 1:2.70 on marginal farms to 1:2.68 on small and farms 1:2.70 on large farms.

As regards marketing the average marketable surplus and marketed surplus of wheat on the sample farms on an average was worked out to 41.69 percent and 34.43 and to total production of wheat. The rest percentage of the production was retained for family consumption and for seed. Wages and other purposes The percentage of marketable surplus and marketable surplus was found to be higher being 50.56 percent and 36.94 percent on large farms as compared to 39.48 percent and 33.68 on small farms and 35.04 percent and 32.67 percent on marginal farms.

The analysis of price spread on the marketing of wheat showed that the producers share in consumers price came to 100 percent in channel-I as 89.21 compared to channel-II, where it was 89.21 percent. As regards total marketing cost channel-I, number of marketing cost as compared to Rs. 98.20 per quintal in channel-II. Thus, a higher producers share in consumer price in channel-I was due to comparatively lower marketing cost, margin of profit and higher rate price.

The important constraints to production of wheat and its marketing were also examined. Among these, absence of suitable varieties, inadequate application of fertilizers, improved cultural practices, optimum plant density and non adoption of plant protection measures on production sides, while small marketable surplus existence of super floes middlemen, higher marketing margins.

These constraints may be removed by development of high yielding there is need to develop means of transportation, there is need to open new market functionaries should be fixed so that the producers may get their due share in price paid by consumers.

CONCLUSION

It may thus, be concluded from the above discussion that the sample farmers were devoting sufficient area (Average 26.01 percent) under wheat in comparison to other crops. It may be due to comparatively higher return with lower investment of input resources, availability of marketing facilities and best fit in the cropping pattern on their forms.

Marketing cost were higher therefore, it is urgently needed that the ways and means should be found to reduce these costs for increasing the efficiency of marketing so that producers share in consumers share in consumers price may be raised to a larger extent.

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