

**Role of Commodity Market in Economic Development: A Study
of Major Markets of Bagmati Province**

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Abstract

Market usually plays a vigorous role fulfilled peoples demand and also strengthen the capacity of trade management system, always support the national economy of the country. Supply system and demands maintain the requirement and functional operations in a market. This study aims to analysis the role of commodity markets in the positive economic development in context of Nepal. The major markets such as Narayanghat, Nuwakot, and Banepa from the Bagamati Province were chosen representative purposively samples. The study was further executed through the primary and secondary research mode as well as consultative meetings and Key Informant Interview were conducted.

The study revealed that Paddy, wheat and maize cereals are the topmost commodities in the area. Paddy is high in demands due to consumption. The local producers sufficient for some 2-3 months during season, for the rest of the months, supply from neighbor's district, Terai region and India playing a leading role to fill the demand, agent booking is another mode of supply, India and Terai region are the major sources of supply management. Some 60 % local production are available for 2-3 months in the local market making income and contributing the national economy. Study concluded, as local production played a vital role in the economy of the nations due to comprehensive farm gate price and ongoing supply. Local production strengthening is advised.

Keywords: commodity market, cereal production, economic development, supply system

Introduction

Nepal has an agrarian-based economy that contributes almost one-third to the country's GDP, and two-thirds of its population is engaged in agriculture (Sharma, 2000). According to government statistics some 60 % peoples are fully depends on agriculture farming as a major source of livelihood. The most cultivated staple crops in Nepal include rice (*Oryza sativa L.*), wheat (*Triticum aestivum L.*), and maize (*Zea mays L.*) (Tripathi et al., 2018). Agriculture is mostly rainfed; thus, farmers produce a major portion of their crop during the monsoon season from June to September (Manandhar et al., 2011).

According to Gaire (2011), the government are promoting economic growth, price stability, and management of market-based issues for sustained global growth and prosperity. It was found that the recent run-up in energy and commodity prices underscores their macroeconomic significance, putting the inflation risks posed by rising energy and commodity prices (Gaire, 2011).

The central bankers and fiscal policy authorities need to pay close attention to potential inflation risks of commodity market. The goal of the fiscal and monetary policies of the country is to achieve a path of strong and stable growth, accompanied by low and stable inflation. To receive this credential in the current situations it will require a consistent set of policy responses that should include structural measures designed to improve market efficiency, and a coordination between the monetary and fiscal policies (Gaire, 2011). Thus, commodity market is a challenging sector which is difficult to include through policy because the aspects and various actors may not be all covered through sectoral policies.

Various study has shown that the commodity markets are integral to the global economy. Understanding what drives developments of these markets is critical to the design of policy frameworks that facilitate the economic objectives of sustainable growth, inflation stability, poverty reduction, food security, and the mitigation of climate change. Commodity markets are integral to the global economy (CBS, 2012).

Developments in these markets have major effects on the global economy. In turn, changes in the global economy materially affect commodity markets. A deeper understanding of the determinants of the supply of and demand for commodities can help clarify the nature of commodity price movements and what drives them. Understanding those determinants would also help assess how commodity market developments, such as oil price shocks, affect commodity-exporting and commodity-importing countries (John & Nagle, 2022).

Nepal's urban economic base is still rudimentary. The primary sector employs 30% of the economically active population aged 10 years and over, the rest working in the nonagricultural sector. In contrast, slightly over 70 % of the economically active rural population is engaged in primary production. The wholesale and retail trades and manufacturing are the two most important industrial divisions in both urban and rural areas. The primary production sector employs more than 50 % of the working population in 17 of 58 designated urban areas. "Trading accounts for 16.2 % of the workforce, while manufacturing accounts for 15.4 %. The relatively low share of manufacturing indicates that urban areas largely export raw materials and import finished products" (ADB, 2010, p. 5).

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The Government of Nepal introduced “Special Economic Zones (SEZ) and Export Processing Zones (EPZ) in 2003, aiming at making exports competitive by cutting production costs. Four special economic zones have been identified as export processing zones, including Bhairahawa, Birganj, Panchkhal (Kavrepalanchok district), and Ratmate Jiling (Nuwakot District). Necessary work at Bhairahawa is ongoing (Ministry of Finance 2007). Altogether, 11 industrial districts or estates are now located at major urban areas” (ADB, 2010, p. 49)

Planned development first encompassed Nepal’s urban areas in the early 1970s through the initiation of growth-pole strategy. By the Fourth Plan (1970–1975), after national economic planning met with limited success, planning efforts were redirected to four development regions (NPC 1970), with the addition of a fifth, the far-western region, in 1981 (ADB, 2010, p. 60). According to the strategy, each of the macroeconomic development regions consisted of a regional headquarters. These centers were identified as polyfunctional settlements and equipped with infrastructure and facilities to cater to diverse regional needs (such as marketing, agricultural transformation, and services for industrial activities and other socioeconomic challenges) and to reduce disparities between urban and rural areas and among the three ecological regions. From the very beginning of Nepal’s planned development, the Kathmandu Valley and Tarai Plain were identified as favorable regions, being geographically advantageous for investment from sector-based programs. While this may have been correct in terms of efficiency, the approach failed in terms of equity, as it cannot meet the required program resources for a wider spatial spread of population (ADB, 2010, p. 61).

Among the cereal production Rice, Maize, and Wheat are the major stable commodity products with its highest pockets area belongs from Chitwan, Nuwakot, Kavrepalanchok district, Bhaktapur and some part of Sindhuli and Makwanpur district recorded largest production in Bagmati Province (ADD, 2021).

Various review study shows that only 47 % local production is sufficient from own production and rest 53 % is covering by the India through import system (MoLMAC, 2021).

Nepal economy is associated with rural agriculture supply system. Paddy and major cereal not only supplied in the various area that also sustain the local food sufficiency. Farm gate price is major source of farmers that fulfilled the houses demands, this amount further support the national economy through cooperative and other financial institutions, thus local agriculture production is vital to balance the supply system (AKC, 2020).

A study of FNCCI shows that Nepal commodity supply sustaining due to continue supply of various commodities from India and China. Commodities such as rice, Pulses, oilseeds, and major food staples almost covering 50 % to Nepal as a requirement. Nepal sufficiency trend towards livestock production mainly milk is sufficient, but many demands is supplied through neighbor countries (FNCCI, 2021).

The above literature thus concluded as the cereal commodity in context of Nepal mainly rice, maize and Wheat played a significant role in the Nepalese market system but do this help in economic strengthening is a gap oh this study. Hence, to keep this statement an objective further setup to describe the role of commodity in the economic development in context of Nepal.

Methods

This study is designed through a mixed method approach on which both Qualitative and Quantitative analysis is designed (Shrestha, Mahat, & Neupane, 2024). A trader's questionnaire is prepared tested and finalized to executive. Some three district has been chosen for this study which are a representative sample of Bagamati province from the three ecological zone (Terai-Hills and Mountain). Narayanghat market from the Chitwan district representing Terai zone; Battar Market from Nuwakot district representing mountains and Banepa market from the Kavrepalnchok district representing hills were purposively chosen for this study. To make this study more correct methodologically, some 45 traders' interview, 15 from each district, and some 6 FGD-2 from each district were set for this study. Some Key Informant Interviews-KII done from the Ministry of Agriculture and Livestock Development-MoALD, Agriculture Knowledge center-AKC-Chitwan, Nuwakot and Kavre; from different Local Governances Offices, lead farmers, local economist has taken.

The Study was conducted in between January to March 2022, the questionnaires further entered SPSS vol 20, and some parts of analysis were done in MS excel. Tables will be generated from the crosstab modes and some table will be explain as it will be collected from the secondary analysis.

Results and Discussion

In this section, the result of this study further explains through the tables and various validation through FGD and KII the detail is mentioned herewith, some data from the secondary sources will also add to make a comprehensive knowledge for the readers through discussion mode; -

Table-1, Traders buying trend in the study area

Legend	Purchased-1		Purchased -2		Purchased-3	
	N	%	N	%	N	%
Local markets/ mills/ farm gate- Direct purchase	31	68.9	3	6.7	1	2.2
Neighbor district	3	6.7	16	35.6	16	35.6
Terai based market	0	0	4	8.9	11	24.4
India	4	8.9	0	0	10	22.2
Booking agent do deliver me in the shop	7	15.6	22	48.9	7	15.6
Total	45	100	45	100	45	100

(Source: - Field survey, 2022)

The trend shows that the primary source (*Table-1*) of seasonal purchase (March-August) is from local markets of the respective districts, some from the local mills and some from the farm gate area direct from the farmers or cooperatives, the majority of survey from the sample site (*Annex-1*) refers that some 68.9 % are doing the same as purchasing local production as a first preference, whereas for the rest of the months traders feels easy to but commodity from the agents who are delivering at the door steps, such bookings is depending on a price including transportation cost and this trend runs when there is some demands raised and some essential goods required so the booking agent provide such support and delivered at the door steps. The majority of retailers-kirana pasal (Grocery shops) are high (*Annex-1*). Most traders refer as 35.6 % people do buy from the neighbor district means purchase from the nearby district-based markets. For surveyed markets the neighbors are Hetauda, Kathmnadu, Bhairhawa and some other district-based markets. The analysis further is showing a trend that Terai based markets such as Birgunj, Janakpur, Bhairhawa, Butwan and Biratnagar markets are near to India borders whose prime source are terai area and from India. Direct from India has a limited access of traders due to various trade policy and custom rules, but for most of the malls or some of the wholesaler’s people raised that they have a direct access and during favorite time they direct import from India.

Federation of Nepal Chamber have published a similar data on annual book that farmers are diverted on modern livelihood mode and earning through business and local entrepreneurship, local production is challenging now days through agriculture production (MCCI, 2022).

KII an FGD Comments from AKC, Farmers, Ministries and FNCCI:

Apart from the local season the whole cereal demands filled through Terai and Indian market because the Terai production also supports selected markets to run the market for additional 2-3 months but nearly for 6-month supply market is fully depends on Indian supply management.

Table-2, Commodity Sufficiency Summary-Perspectives of Traders from various sources:

Legend	Local		Neighbor		Terai		India		Agent	
	N	%	N	%	N	%	N	%	N	%
For 1 months	2	4.4	34	75.6	18	40	1	2.2	44	97.8
2-3 months	29	64.4	4	8.9	14	31.1	41	91.1	1	2.2
3-6 months	13	28.9	7	15.6	13	28.9	2	4.4	0	0
6 to 9 months	1	2.2	0	0	0	0	1	2.2	0	0
Total	45	100	45	100	45	100	45	100	45	100

(Source: - Field survey, 2022)

Traders surveyed shows (Table-2) that the market have stock of some 2-3 months (64.4 %) which is obtained from the local production. It means the farmers of the local area do sale Paddy-rice, Maize and wheat which last for 2-3 months and keep themselves for the survival

from the own stock. Market trend shows that the Neighbor market such as Hetauda, Kathmandu, Bhairahawa do supply to the surveyed market who source is from the local area or from the else. The trend of market found that the traders buy for 1 month stock from the neighbor and after sale they again manage stock from the various sources. From Terai region also the majority have shown to buy and stock for 2-3 and 3-6 months because after finishing of local production markets do depends on the terai supply during September to December months as a cyclic order. From India it was found some 91.1 % supply system do from the India because the local production is not sufficient and at least the market supply is fully relied on Indian commodity of Cereal for some 6 months. The role of agent is also a vital as 97.8 % people strongly chosen one month supply this indicating that traders have plenty of opportunity to order food commodity during on/ off season in the market.

KII and Chamber of Commerce and Industries of the respective district stated that the:

“Local production is only sufficient for few months in Bagamati Province, for some additional months the supply system carried from the Terai region which may source of own on India and for rest of the months India is the most useful medium to fill the demands of the cereal crop which is chosen for the study”.

Table-3, Opinion on District food sufficiency from the local production in a season

Legend	Sufficiency rice		Sufficiency Maize		Sufficiency Wheat	
	N	%	N	%	N	%
For 1 months	0	0	0	0	20	44.4
2-3 months	29	64.4	35	77.8	24	53.3
3-6 months	14	31.1	10	22.2	1	2.2
6 to 9 months	2	4.4	0	0	0	0
Total	45	100	45	100	45	100

(Source: - Field study, 2022)

In case of Food sufficiency commodity wise, Table-3 revealed that the local production is sufficient for some 2-3 months in the local areas while farmers do sale during season, this rice, maize, wheat, legumes, and oil seeds further collected through mills, traders who later packed and sale in the markets. The traders have wonderful opportunity to generate employment and revenue for the country, the Traders, and nations both get an economic benefit from this value chain system. Thus, the study moderately shows that the economy from the farm production through market is supporting the economics of the country. For maize, and wheat also, the local sufficiency for market support remains for 1-2 months, because maize is used mostly in cattle feeding and for self-consumption. Similarly, the Wheat is another consumable crop in the houses, it has limited area and low rate of market sale.

Table-4, Statistical summary of production in Bagamati Province

Distri ct	Pad dy are a (Ha)	Paddy Produc tion (MT)	Yield (MT/ Ha)	Mai ze are a (Ha)	Maize Produc tion (MT)	Yield (MT/ Ha)	Wh eat area (Ha)	Wheat Produc tion (MT)	Yie ld (M T/ Ha)
Chitwan	26005	104075	4	5986	24083	4.02	5088	19360	3.81
Nuwakot	16129	70535	4.37	16218	62235	3.84	4165	13745	3.3
Kavre	10755	42101	3.91	24823	80137	3.23	8860	26591	3
Total	52889	216711		47027	166455		18113	59696	

(Source: - Ministry of Agriculture and Livestock Development statistical data of 2021)

According to statistical report of Ministry of Agriculture and Livestock Development, Bagamati Province has published the statistical summary of area and production for the fiscal year 2021. From table-4 we can conclude that the Paddy production is higher in the region and rice is the most popular food used in a majority.

Farmers and local representatives have stated that nearly 60 % cereals from the farm gate goes to the markets and some 40 % production used for the HHs consumption.

From these perspectives, it can be concluded that the overall production of table-4 can add and multiple with the average sale price of some three crops remains 40 Rs/ kg (Rice-30, Maize-30 and Wheat-60 NRS) which can be count with the 60 % total saleable production. From the calculation we can derive that some 10628 million NPR stands which is the farm gate price for the farmers in the study area based on the various sources. Thus, it can be concluded that the amount in the national economy really paid a significant role in the Nepalese economy.

Table-5, Purchasing trend of People during different time

Legend	Purchase normal		Purchase Emeregency		Purchase Festival	
	N	%	N	%	N	%
For some days	35	77.8	0	0	0	0
For a week or two	1	2.2	1	2.2	36	80
for a month or two	9	20	20	44.4	9	20
Stock for 3 or more than that			24	53.3	0	0
Total	45	100	45	100	45	100

(Source: - Field Study, 2022)

NPRC Journal of Multidisciplinary Research

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The Study illustrating that the trend of market purchase for most of the people remains for some days in normal time, whereas during crisis or emergencies period respondents said that during COVID-10 pandemic people do stock for 3 months and over than that time. In case of Festival time also the majority do stock for a week due to smooth operation of markets in the nearby area.

The FGD had a similar response that locals are purchasing cereals from the local market for some weeks or months and those people took for some more days who are remotely locating otherwise urban people do purchase for the short period due to the availability of food item and functional market.

Conclusion

The study concluded as the local production is only sufficient in the study area for some 2-3 months from the own production for selected rice, maize, and wheat crop. Market supply runs due to local-neighbor-terai and Indian supply chain system, agent mode of supply is much appreciable. Market played a significant role in the commodity transection in the study area. To meet the sustainable demands of the people India and Terai district support is ongoing in the supply system. The overall productions statistics concluded as Paddy is the most useable crops and had a great significance in the consumption levels. Farm gate income and other income probability signifies that the role of commodity is vital in the National economy in a positive way. Buyers purchase patterns is normal in most of the time whereas during crisis it increased during limited market functioning.

References

- ADB. (2010). *Unleashing Economic Growth regional based urban development strategy for Nepal*. Asian Development Bank.
- ADD. (2021). *Annual report of 2078*. Hetauda: Agriculture Development DIrectorates.
- AKC. (2020). *Annual report of 2077*. Chitwan: Agriculture Knowledge Center.
- CBS. (2012). *Nepal Living Standard Survey III*. Kathmandu: Central Bureau of Statistics, NPC(Government of Nepal).
- FNCCI. (2021). *Yearly bulletin*. Kathmandu: Federation of Nepal Chamber of Commerece and Industries.
- Gaire, H. (2011). Inflation and cpmmodity markets. In H. N. Gaire, *Max Nepal Year book-2011* (pp. 1-31).
- John, B., & Nagle, P. (2022). *Commodity markets, evolution, challenges, and Policies*. The World Bank Group. Retrieved from www.worldbank.org
- Manandhar, S., Vogt, D. S., Perret, S. R., & Kazama, F. (2011). Adapting cropping systems to climate change in Nepal: A cross-regional study of farmers' perception and practices. *Reg. Environ. Change*, 11, 335-348.

NPRC Journal of Multidisciplinary Research

Vol. 1, No. 1, June 2024. Pages: 28-36

ISSN:3059-9148 (Online)

MCCI. (2022). *Yearly book 2078*. Hetauda: Makwanpur Cahmber of Commerce and Industries-MCCI.

MoLMAC. (2021). *Yearly bulletin of production and land use*. Hetauda: Ministry of Land Management Agriculture and Cooperatives.

Sharma, S. (2000). *Land Tenure and Poverty in Nepal* (Vol. 7). Dhaka, Bangladesh: World Bank.

Shrestha, S., Mahat, D., & Neupane, D. (2024). Quantitative Research Design and Sample Trends: A Systematic Examination of Emerging Paradigms and Best Practices. *Cognizance Journal of Multidisciplinary Studies*, 4(2), 20-27.
doi:10.47760/cognizance.2024.v04i02.002

Tripathi, B. P., Bhandari, H. N., & Ladha, J. K. (2018). Rice strategy for Nepal. *Acta Sci. Agric*, 171-180.