

# Shifting Consumer Buying Behavior Post COVID-19 Pandemic: Special Focus to Bihar, India

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## ABSTRACT

The COVID-19 pandemic has significantly affected and modified the consumer behavior and spending patterns throughout India, particularly affecting economically disadvantaged states like Bihar. This study evaluates the post-pandemic consumer landscape by analyzing data from the Household Consumption Expenditure Survey (HCES) 2022–23, National Sample Survey Office (NSSO) reports, and pertinent literature to determine changes in consumption patterns, technology usage, and expenditure disparities. The findings indicate that the pandemic expedited a shift towards e-commerce and digital transactions, propelled by mobility limits, health apprehensions, and the demand for contactless services. Consumers have increasingly emphasized convenience, safety, and affordability, leading to increased dependence on online platforms for critical commodities. The study underscores significant disparities in Monthly Per Capita Consumption Expenditure (MPCE), with Bihar's figures falling below the national average, and the urban-rural divide remaining evident. In rural Bihar, dependence on agriculture and informal work worsened consumption insecurity during the pandemic. The top 5% of the population in both rural and urban India demonstrated markedly greater MPCE than the lowest 5% population highlighting the income disparity. Moreover, psychological factors produced by the pandemic, including perceived danger, anxiety of shortages, and panic buying, influenced changing purchasing behaviors. The study highlights the impact of socioeconomic position, digital literacy, and infrastructure constraints on customer resilience and flexibility. This study concludes that the pandemic instigated enduring preferential transformations in consumer behavior and underscores the necessity for policy frameworks focused on digital inclusion, rural infrastructure, and equitable access to goods and services to facilitate post-pandemic recovery and sustainable development in regions such as Bihar.

**Keywords:** COVID-19, Consumer behavior, HCES, MPCE

## 1. INTRODUCTION

Since December 2019, the global community has been encountering COVID-19, which spread across various nations worldwide (Hesham et. al., 2021). The coronavirus had transformed the globe into a new one characterized by masks, sanitizers, social distance protocols, and lockdowns, hence altering every sphere of life. A detrimental transformation of the pandemic adversely affected the people at individual level, education, the economy, and society at large (Alessa et. al., 2021). The multidimensional crises

offered by COVID-19 has affected public health infrastructure and generated a ripple effect throughout the entire human civilization and economic system (Bist et. al., 2021). This crisis triggered the most profound economic recession in a century for both India and the global economy.

India is recognized as the fastest-growing economy worldwide, with startups and business ventures serving as a vital component of its growth. In the year 2020, India was positioned on 63<sup>rd</sup> rank among 190 nations in the World Bank's Ease of Doing Business Index. It ascended 17 positions from its prior ranking in 2019 (NABARD Report: State Level Papers – PLP 2023-24 – Export Credit, Bihar Regional Office). India's efforts to battle the COVID-19 pandemic have been praised globally. However, the lockdown incurred huge economic burden and had cascading impacts on all segments of society. The pandemic induced lockdown in India imposed a significant economic shock. The pandemic compelled the businesses to switch to alternative methods of operation (Puriwat & Tripopsakul et al., 2021). The influence of COVID-19 on business and consumer behavior is a critical issue for the financial sector globally, necessitating not only immediate adjustments but also the medium- and long-term business strategies. The economic loss is mostly caused by a decline in demand for goods and services (Kowalewski & Śpiewanowski, 2020). This suggests that the demand for products and services is constrained or that customers have markedly diminished their consumption under the influence of the pandemic (Gretzel et al., 2020). This dynamic is observable across multiple industries, including day to day consumption of essential items, education, travel and tourism, health facility and infrastructure development (Dunford et. al., 2020). This shift in consumer behavior is influenced by limits on social gatherings during holidays, resulting in decreased demand for various commodities (Wagner, 2020).

India is not an exception to the significant changes in consumer behavior induced by the COVID-19 pandemic globally (NABARD Report: Impact Assessment of COVID-19 on Indian Agriculture and Rural Economy). A new trend in consumer behavior in India following the pandemic is the switching of the consumers to online buying for a diverse array of products (Galhotra & Dewan 2020). Our primary hypothesis is that the crises of COVID-19 have transformed the customer behavior in retail banking in India. Retail consumers have been compelled to opt digital payment method at the expense of cash in order to completely adapt to and embrace new technology hence favoring the digital channels over traditional ones (Aggarwal & Kapoor 2020; Baicu et. al., 2020). Businesses are modifying their marketing strategies to align with this change in customer behavior, emphasizing e-commerce platforms and adopting digital advertising. Also under the biological repercussions of the pandemic there is an increasing focus on health and safety attributes in products, as customers exhibit a preference for items that enhance the individual well-being (Mallick et. al., 2024). Such changes in consumer behavior are transforming the retail market environment in India, prompting the businesses to enhance their online presence addressing the shifting requirements of customers. The significant result of this evolving consumer landscape is the rapid expansion of e-commerce (Mallick et. al., 2024; Ali & Ali 2020). In the recent times e-commerce has emerged as a prevalent and more secure alternative to traditional methods of the merchants due to regulatory measures and safety apprehensions. The global pandemic's impact on e-commerce underscores the necessity of understanding how the impacts of pandemic have altered customer preferences and purchasing behaviors (Mallick et. al., 2024).

This study examines consumer behavior in India post-pandemic, highlighting the patterns and factors influencing the consumption and purchasing decisions with special focus on state of Bihar. It also aims to examine the impact of the pandemic on e-commerce adoption in India by analyzing the introduction of online purchasing in the Bihar state of India with the help of the data collected through the Household

Consumption Expenditure Survey: 2022-23. This research employs a comprehensive methodology that integrates both qualitative and quantitative methodologies to elucidate the complexities of consumer behavior post-pandemic. Due to the economic, social, and psychological effects of COVID-19, individuals have modified their spending behaviors (Rogers & Cosgrove, 2020). Kirk and Rifkin (2020) emphasized on the change in consumers response and adjustment to environmentally imposed limitations as exhibited during the COVID-19 pandemic. Consumers have exhibited a tendency to alter expenditures when items are unavailable and exhibit increased sensitivity to health and hygiene during the period of the pandemic. Numerous researches on marketing regarding the effects of COVID-19 on customers have revealed surging expenditure on essential items like grocery, health and hygiene items (Rogers & Cosgrove, 2020). Such shifts in customer behavior have motivated the academicians and researchers to study the consumer behavior during the pandemic and post pandemic along with the underlying causes for such changes.

## **2. SCENARIO OF GLOBAL ECONOMY AMIDST COVID-19**

The year 2020 signified an unprecedented global disruption due to the emergence of the unique COVID-19 virus, challenging the essential beliefs of life regarding mobility, safety, and normalcy (Estupinan et al., 2020). The IMF and World Bank predicted that world output was anticipated to decrease by 3.5 to 4.3 percent in 2020, marking the sharpest economic contraction in a century (Figure 01) (World Economic Outlook, IMF 2020). The cumulative worldwide GDP loss for 2020 and 2021 was anticipated at almost USD 9 trillion, above the combined economies of Japan and Germany. Output losses were anticipated to be more severe in advanced economies (AEs), decreasing by 5.4 percent, in contrast to a 5.0 percent reduction in emerging market and developing economies (EMDEs), except for China (Figure 01) (World Economic Outlook, IMF 2021). Although global growth forecasts were adjusted upward mid-year due to the relaxation of lockdowns and the resurgence of economic activity in the July–September quarter, the overall rebound remained inconsistent and subdued, especially as infection rates escalated once more in advanced economies throughout the latter half of 2020. The pandemic-related border restrictions and supply chain disruptions severely hindered the global supply of goods and services (Global Economic Prospects, World Bank 2020). The Global Composite Purchasing Managers Index (PMI) signaled a decrease for five successive months till July 2020 (Figure 02) (Global Economic Prospects, World Bank 2021).

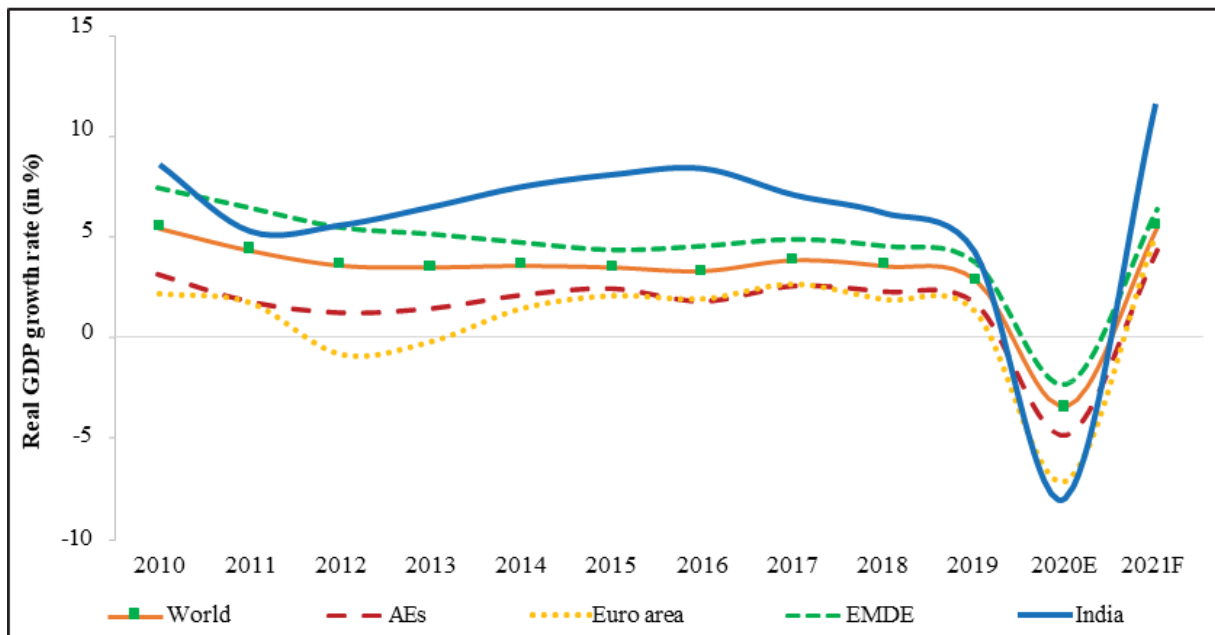


Figure 01: Trend in Global Growth

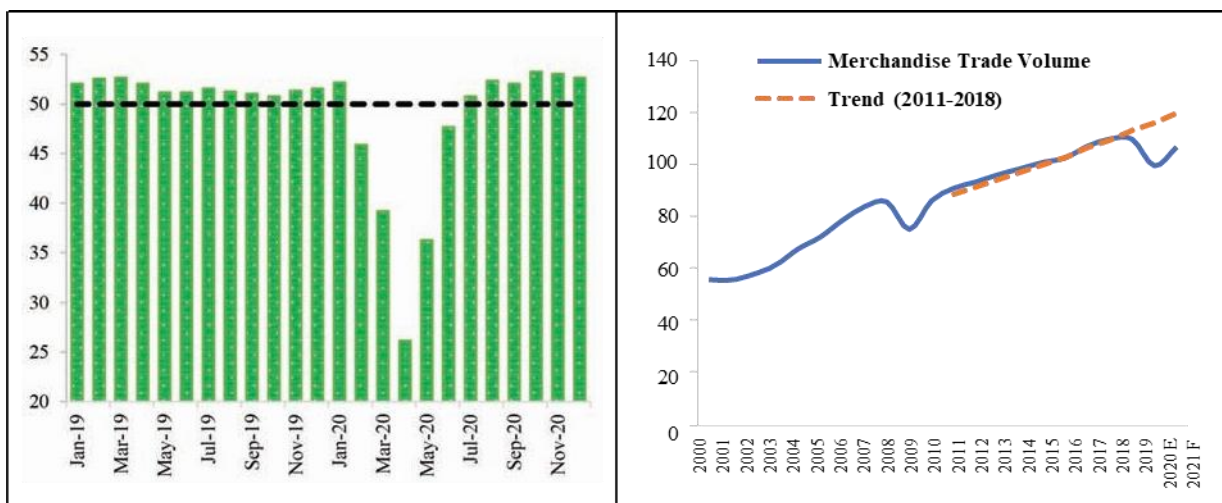
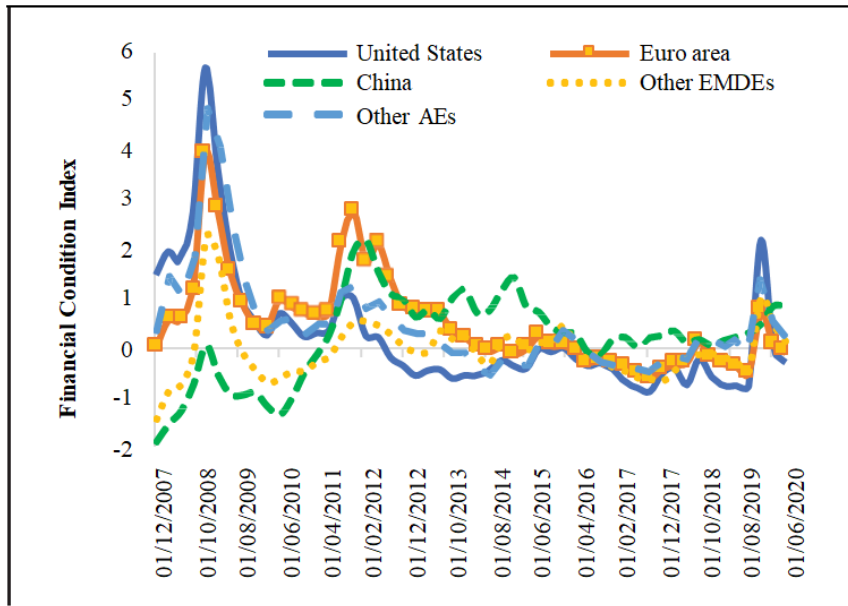


Fig 02: Global Purchasing Managers Index (Source: IHS)

Fig 03: World Merchandise Trade Growth (Source: WTO)

Global trade was projected to decrease by 9.2 percent in 2020, akin to the decline experienced during the 2009 global recession, albeit with a more extensive geographical impact (Figure 03). However, trade was important in securing access to essential food and medical supplies during the crisis (Gretzel et.al., 2020). Commodity prices, which had significantly declined in mid-2020, recovered as strict lockdowns were progressively eased and demand—particularly from China—increased.



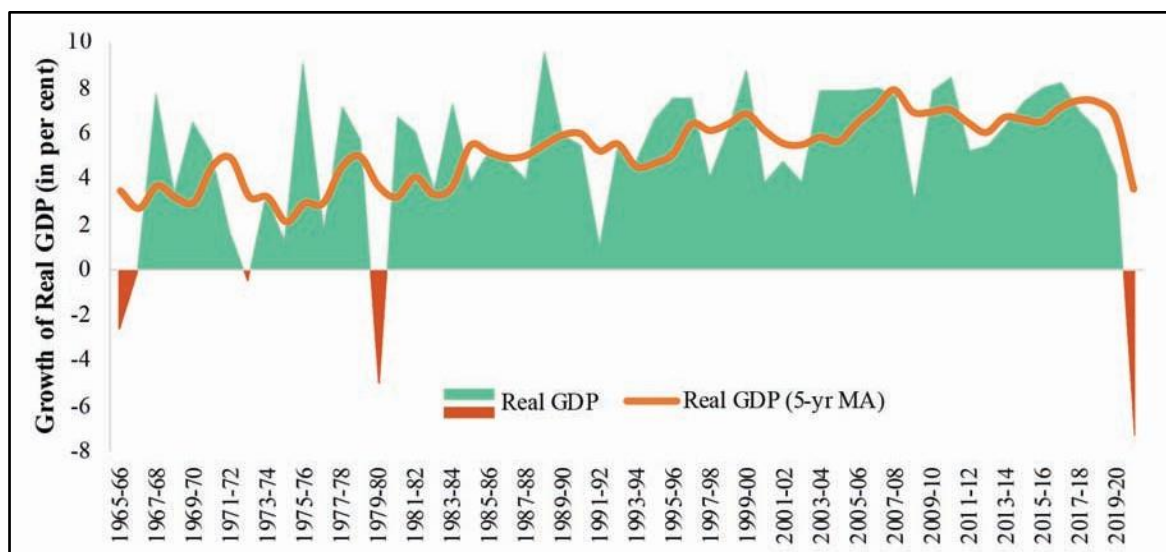
**Fig 04: Global Financial Conditions (Source: IMF)**

Simultaneously, global financial conditions remained accommodative, bolstered by unprecedented and rapid policy interventions by central banks (Figure 04) (Economic Survey 2020-21, GOI). Notwithstanding muted economic activity and ongoing uncertainty, global share markets swiftly rebounded from their March troughs. The recovery was disparate among countries and industries, shaped by factors including viral containment, policy support, and sectoral mix. Significantly, sectors reliant on physical interaction—such as airlines, hospitality, energy, and finance—experienced the most severe impacts, whereas less contact-intensive sectors like information technology and communications shown higher resilience (Rogers & Cosgrove 2020). The crisis exacerbated the vulnerabilities linked to a decade-long pattern of global debt accumulation. Substantial discretionary fiscal assistance, coupled with a precipitous drop in output and income, resulted in escalating government deficits and debt levels.

### 3. SCENARIO OF INDIAN ECONOMY AMIDST COVID-19

After a period of muted development in 2019, the Indian economy commenced resurgence in January 2020. However, this recovery was suddenly interrupted by the COVID-19 pandemic—a rare, unprecedented occurrence (Puriwat & Tripopsakul, 2021). Consequently, India's GDP experienced a significant contraction of 23.9% in Q1 of FY2020-21 and 7.5% in Q2, resulting in a total loss of 15.7% in the first half and a slight reduction of 0.1% in the second half of the fiscal year (Fig 05) (Economic Survey 2020-21, GOI). Among industries, agriculture was the only area of growth, although other contact-intensive services such as manufacturing, and construction faced significant decreases (Ali, & Ali, 2020). Government expenditure and net exports provide a measure of support to alleviate additional economic decline. The hospitality industry, a vital source of revenue and employment worldwide, was significantly impacted. Furthermore, the hospitality industry, which includes travel and tourism enterprises, hotels, restaurants, airlines, and transportation services, has been instrumental in promoting interpersonal interaction, cultural exchange, and commercial connectivity (Dunford et. al., 2020). The sector also providing a significant number of direct and indirect employment opportunities impacted individuals globally.

The Indian capital market underwent considerable volatility, especially during the initial shutdown period in March 2020. Approximately 80–85% of India's labour force is employed in the unorganized sector, predominantly in agriculture and related sectors where mining and quarrying exhibited the most significant increase in labour productivity (Gourinchas, 2020). The significant workforce in the MSME sector highlights the critical issue of inadequate social security systems. A multitude of micro and small companies (MSMEs) either terminated operations or experienced significant financial difficulty. India apparently lost over 119 million jobs during the COVID-19 crisis (Economic Survey 2020-21, GOI). Approximately 10 million young individuals enter the workforce each year, posing a significant challenge that requires immediate and strategic action from the government, industry, and corporate sector (NABARD Report).



**Fig 05: Trend in India's Real GDP Growth (Source: NSO)**

India's GDP has experienced an unparalleled decline due to the lockdown imposed by the pandemic and the resultant economic disruptions. The April–June 2020 quarter experienced an unprecedented recession of -23.90%, the most severe among major world economies. Nevertheless, the July–September quarter indicated sign of recovery with a -7.50% contraction, and the third quarter was anticipated to revert to positive growth (Economic Survey 2020-21, GOI). As anticipated, commerce and exports plummeted significantly in the initial two quarters, with negligible foreign trade activity, impacting not only India but the global economy as a whole.

#### 4. SCENARIO OF BIHAR

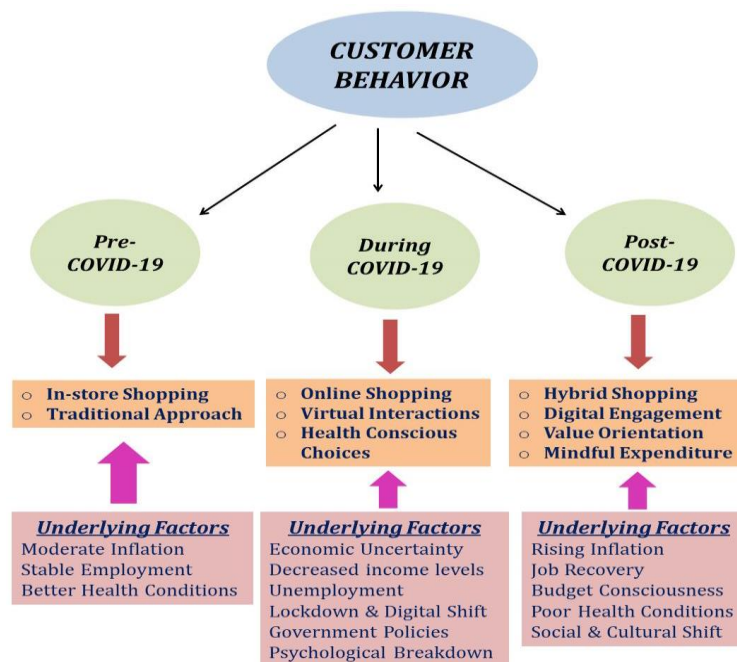
Bihar, a densely populated state in eastern India, presents a complex socio-economic profile shaped by linguistic, cultural, and ethnic diversity (Pandey, 2021). The state's agrarian economy is highly dependent on crops like rice, wheat, legumes, and sugarcane. Despite rising urbanization, a pronounced rural-urban divide persists, marked by infrastructural deficits and limited access to services (Singh et al., 2024). These disparities significantly influence consumer behavior, particularly in rural areas where low income and limited market access constrain spending. Educational and healthcare inadequacies continue to affect consumer awareness and decision-making (Shukla et al., 2022). Bihar confronts ongoing difficulties in education, characterized by literacy rates that fall below the national average and

significant rural-urban gaps in access. Employment is largely informal, with high migration rates driven by lack of local job opportunities (Kumari et al., 2023; Kumar, 2024). The COVID-19 pandemic exacerbated these vulnerabilities, altering consumption patterns as consumers prioritized essential goods, health items, and government-distributed food grains (Shukla et al., 2022). A notable reliance on ration cards for staple procurement highlights increased financial stress.

Simultaneously, the pandemic catalyzed digital adoption even in under-digitized areas. Consumers increasingly turned to e-commerce platforms for safe and convenient purchasing, signaling a shift in buying patterns despite the persistent digital divide (Kumari et al., 2023). Issues such as caste-based exclusion, frequent natural disasters, and poor sanitation further restrict inclusive economic participation (Kumar, 2023; Singh, 2023). Efforts like the “Bihar 2025” initiative aim to bridge these gaps, but consumer behavior remains shaped by structural constraints. Strengthening infrastructure, digital access, and income security is essential for enabling resilient and equitable consumption in post-pandemic Bihar (Anderson & Alakshendra, 2025).

### 5. CHANGES IN CUSTOMER CONDUCT viz. ADOPTION OF ECOMMERCE AND FACTORS AFFECTING BUYING BEHAVIOUR

The worldwide increase in adoption of e-commerce during the pandemic can be attributed to a multifaceted interaction of socioeconomic and psychological factors affecting consumer behavior. Amidst, the chaos of pandemic initially the consumers emphasized on contactless purchasing to reduce the possibility of virus transmission (Mallick et al., 2024). E-commerce sites like Amazon and Flipkart offered a vital solution by allowing people to explore and buy a diverse array of products from the comfort of their homes, hence reducing the stress linked to physical shopping. This perceived security affected consumer preferences upto great extent, leading to an increase in internet shopping. Under the influence of limited mobility and social distancing protocols, consumers pursued convenient alternatives ways over the conventional physical shopping (Rehman et al., 2020).



**Fig 06: Shifts in customer behavior during Covid-19 – A combined illustration with pre and post pandemic scenario.**

E-commerce platforms adapted by providing a continuous buying experience, accompanied by home delivery and convenient returns hence addressing the changing demands of consumers with limited time and mobility (Fig 06). Convenience emerged as a role player for both the immediate transition to online buying and enduring behavioral transformations, as consumers increasingly appreciated the efficiency and ease of digital transactions. Additionally, socioeconomic characteristics like work status and income levels, significantly influenced e-commerce adoption. Thus rapid adoption of e-commerce in India during the pandemic was driven by interplay of various psychological factors like perceived safety and convenience and socioeconomic characteristics including income and employment position (Hasanat et al., 2020). Ecommerce platforms like Amazon and Flipkart adeptly implemented these extraordinary conditions by catering to a wide array of consumer demands and tastes hence instigating a paradigm change in consumer behavior towards online purchasing.

Apart from adoption of ecommerce, pandemic imposed a profound negative impact, which led governments to implement specific restrictions and measures that individuals must follow, thereby influencing their behavior as consumers. Consequently, customer behavior has significantly shaped the demand for business activities. Simultaneously, the widespread closure of businesses and resulting shortages of products and services have further affected purchasing behavior, leading consumers to increasingly rely on online platforms to fulfill their needs (Hasanat et al., 2020). Consumer engagement thus emerges as both a consequence and an antecedent within the process of value co-creation, reflecting customer behavior, emotions, and cognition (Brodie et al., 2013), with customer engagement exerting a considerable impact on the value generated through co-creation (Oyner & Korelina, 2016). Additional motivations for unusual purchasing patterns included social pressure, wherein individuals feared shortages and were compelled to buy products immediately, contributing to a significant surge in food purchases. The origin of perceived risk lies in the uncertain and unforeseen consequences of a potentially unpleasant nature resulting from product purchases (Rehman et al., 2020), with perceived uncertainty being intrinsically linked to perceived risk (Alessa et. al., 2021).

## 6. RESEARCH METHODOLOGY AND DATA DESCRIPTION

The current research implements extensive study of existing literature and secondary data provided by the Ministry of Statistics and Programme Implementation, Government of India (MoSPI). This study contributes to the existing literature in two ways; the first is understanding the impact of coronavirus on the customer base of Bihar and the shift in their consumer behavior. The second is the manner in which consumer behavior affects the Indian economy and how the pattern of expenditure has changed over the time. The limitation of the previous studies is worth mentioning since, until now, no study has focused on the state of Bihar exclusively illustrating the devastating impact of the coronavirus pandemic on the people of the state and the ultimate impact on the consumer behavior. This paper has three main objectives:

1. To examine the impact of the coronavirus pandemic on the global and Indian economy with special focus on the state of Bihar.
2. To examine the impact of the coronavirus pandemic on the consumers of Bihar through proper study of the available governmental data.
3. To explore the opportunities offered by the ecommerce in light of the coronavirus pandemic.
4. To understand the pattern of Monthly Per Capita Expenditure in the state of Bihar and its intricacies with the pandemic.

The National Sample Survey Office (NSSO) under MoSPI regularly conducts household surveys on consumption and consumer expenditure as part of its ongoing surveys, each typically spanning one year. The survey data was accessed through the software platform DDI-IND-MOSPI-NSSO-HCES22-23. This tool, developed in line with the Data Documentation Initiative (DDI) standards, offered a structured interface for accessing metadata and microdata from large-scale survey. The software facilitated efficient navigation, variable search, and data extraction hence enhancing the accuracy and reproducibility of data-driven research. The platform proved instrumental especially in understanding questionnaire structure, sampling design, and coding schemes, which were essential for the rigorous analysis presented in this study. The Household Consumption Expenditure Survey (HCES) specifically covers data on the expenditure incurred by households on domestic consumption during a designated reference period. This survey is structured to collect detailed information on the consumption of goods and services by households, thereby facilitating an understanding of their consumption patterns, expenditure behavior, living standards, and overall well-being. Since its establishment in 1950, the NSSO has consistently conducted the HCES. The most recent iteration, HCES 2022–23, was undertaken between August 2022 and July 2023 across the entire Indian Union, excluding a few inaccessible villages in the Andaman and Nicobar Islands. The 2022–23 survey covered 8,723 villages with 1,55,014 households in rural areas, and 6,115 urban blocks with 1,06,732 households. The size of a household was defined by the total number of persons residing within it. For HCES 2022–23, the questionnaire incorporated new items and merged obsolete ones, resulting in a total of 405 items. In Bihar, data were collected from 17,166 households, selected from 759 rural and 199 urban units. Households served as the ultimate stage units in the survey design. During the survey sampling was conducted using the Simple Random Sampling without Replacement (SRSWOR) method within a multistage stratified sampling framework, where villages and urban blocks constituted the first stage units. The consumption basket in HCES 2022–23 was organized into three broad categories: (i) Food items, (ii) Consumables and Services items, and (iii) Durable goods. The time period for which consumption is recorded is called the reference period. The reference period for various items is described in the table below:

**Table 01: Reference Periods for different groups of items considered in HCES 2022-23**

Category	Item groups	Reference period
I	Edible oil; egg, fish & meat; milk and milk products; vegetables; fruits; spices; beverages and processed foods; pan, tobacco & intoxicants	Last 7 days
II	All other food items; fuel and light; miscellaneous goods and services including medical (non-hospitalization) and rents	Last 30 days
III	Clothing; bedding; footwear; education; medical (hospitalization); durable goods	Last 365 days

The HCES survey also calculates the Monthly Per Capita Consumption Expenditure (MPCE). MPCE is defined as the total monthly household consumption expenditure divided by the household size, and it serves as a key indicator of a household’s standard of living. The total expenditure utilized in calculation of the MPCE is calculated by employing the total household expenditures on food, consumables and

services, and durable goods and the household size at the time of survey. Let  $E_1$ ,  $E_2$ , and  $E_3$  denote the total household expenditures on food, consumables and services, and durable goods, respectively, which is obtained from the three respective survey questionnaires: the Food Questionnaire (FDQ), the Consumables and Services Questionnaire (CSQ), and the Durable Goods Questionnaire (DGQ). Further assuming  $P_1$ ,  $P_2$ , and  $P_3$  be the household size as recorded at the time of conducting the FDQ, CSQ, and DGQ surveys respectively (Survey on Household Consumption Expenditure: 2022-23). The total monthly expenditure of the household, denoted as TE, is calculated using the following formula:

$$TE = E_1 + (E_2 / P_2) \times P_1 + (E_3 / P_3) \times P_1 \quad - (1)$$

Accordingly, the Monthly Per Capita Consumption Expenditure (MPCE) for the household is derived as:

$$MPCE = TE / P_1 \quad - (2)$$

## 7. RESULT AND DISCUSSION

The HCES survey provides critical insights regarding the expenditure pattern in rural and urban setting as well as different states of the country. The MPCE calculated on the basis of the data collected indicates that for rural India, the median MPCE is approximately Rs. 3268, implying that half of the rural population resides in households with an MPCE below this value. In contrast, the median MPCE in urban areas stands at approximately Rs. 5286, indicating a higher consumption standard relative to rural counterparts (Survey on Household Consumption Expenditure: 2022-23). Approximately 62.6% of the rural population has an MPCE below the rural average of Rs. 3773, while 64.5% of the urban population falls below the urban average MPCE of Rs. 6459 (Fig 07). Significant disparities are observed across consumption levels: in rural areas, the average MPCE of the top 5% of the population, at Rs. 10501 is approximately 7.6 times greater than that of the bottom 5%, whose average MPCE is Rs. 1373 (Survey on Household Consumption Expenditure: 2022-23). This disparity is even more pronounced in urban areas, where the average MPCE of the top 5% stands at Rs. 20824, roughly 10.4 times higher than the average MPCE of Rs. 2001 for the bottom 5% urban population. These figures highlight notable inequalities in consumption expenditure across both rural and urban India (Survey on Household Consumption Expenditure: 2022-23). Similarly the percentage contribution in MPCE for urban areas is larger from high class services and easy going products while for the rural areas of India the contribution of basic goods and services is higher in MPCE (Fig 08).

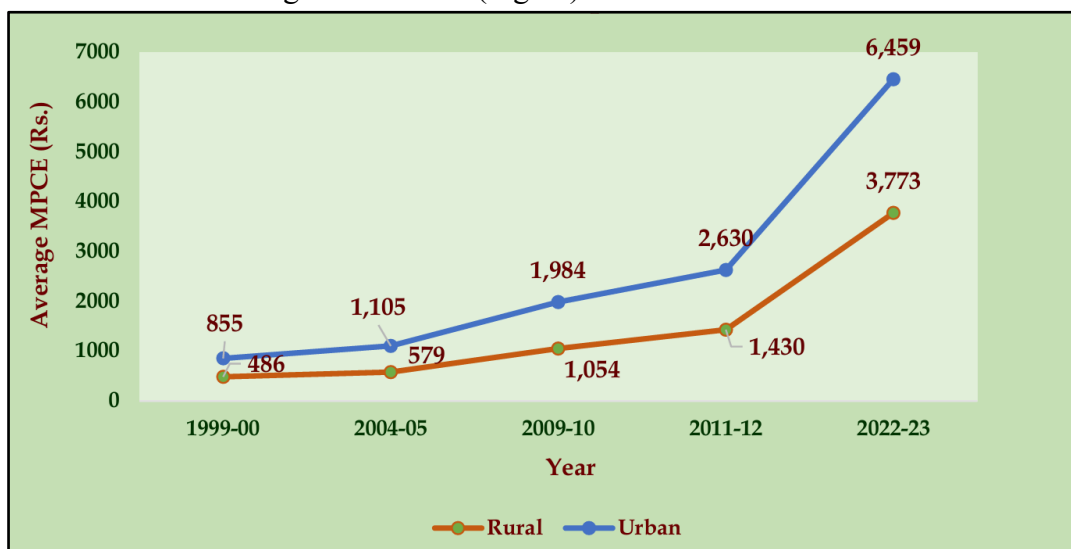


Fig 07: Trend in average MPCE since 1999-'00 : All-India (at nominal price)

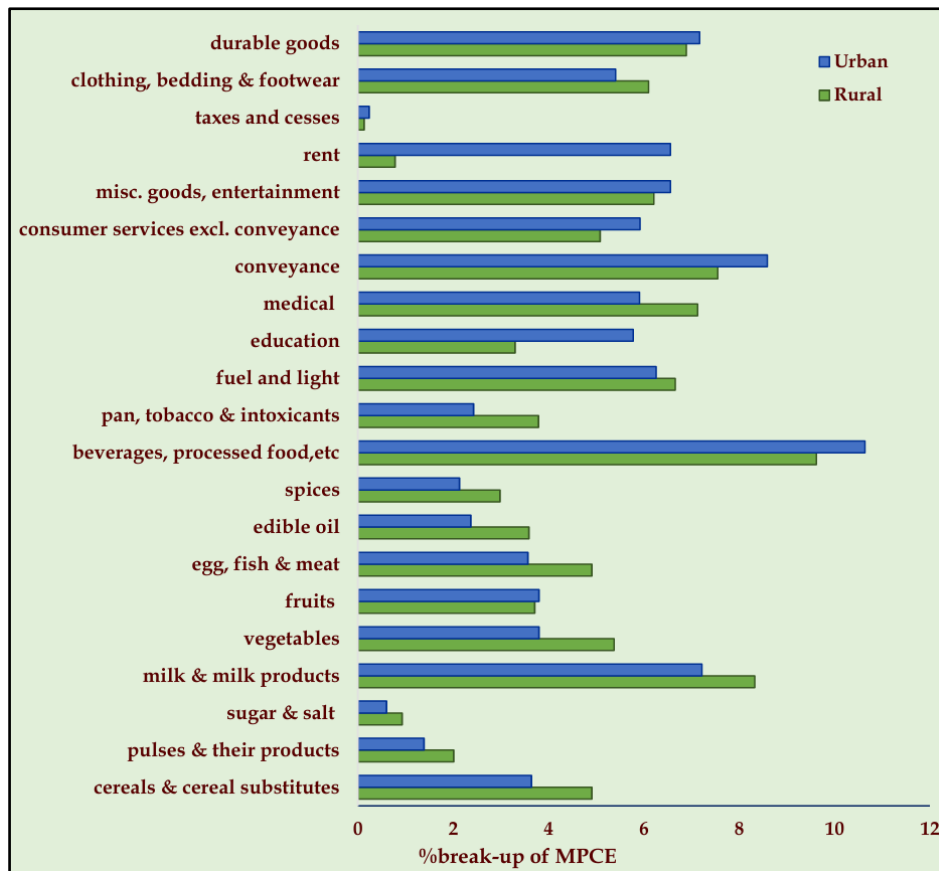


Fig 08: Percentage share of MPCE by item groups in 2022-23



Fig 09: Trend in average MPCE since 1999-'00 : All-India (at 2011-12 price)

The average MPCE for the rural setting for the state of Bihar is Rs. 3384 and for urban setting the average MPCE is Rs. 4768 which illustrates the urban-rural difference by 41%. In the prior survey the

urban-rural difference for the state was 84% which indicated towards huge gap between the expenditure capacity of the urban and rural setting. A comparison of the Monthly Per Capita Consumption Expenditure (MPCE) data from 2022–23 with that of 2011–12 indicates that, in nominal prices, MPCE has more than doubled in both rural and urban India over the span of a decade. Specifically, the nominal MPCE increased by approximately 164% in rural areas and 146% in urban areas during this period (Fig 09). While the real growth in MPCE over the same timeframe stands at 40% for rural India and 33% for urban India, reflecting a substantial improvement in consumption levels across both segments, albeit with variation in real purchasing power (Survey on Household Consumption Expenditure: 2022-23). Similarly for the state of Bihar growth in the rural and urban MPCE figures, over the corresponding period, in real prices, has been found to be 136% and 81% respectively (Survey on Household Consumption Expenditure: 2022-23).

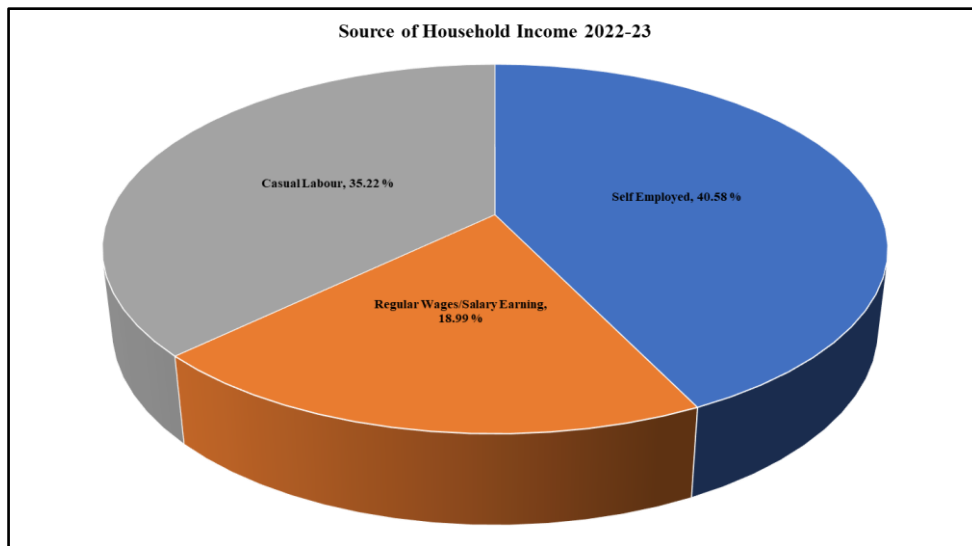


Fig 10: Source of Household Income for the state of Bihar in FY 2022-23

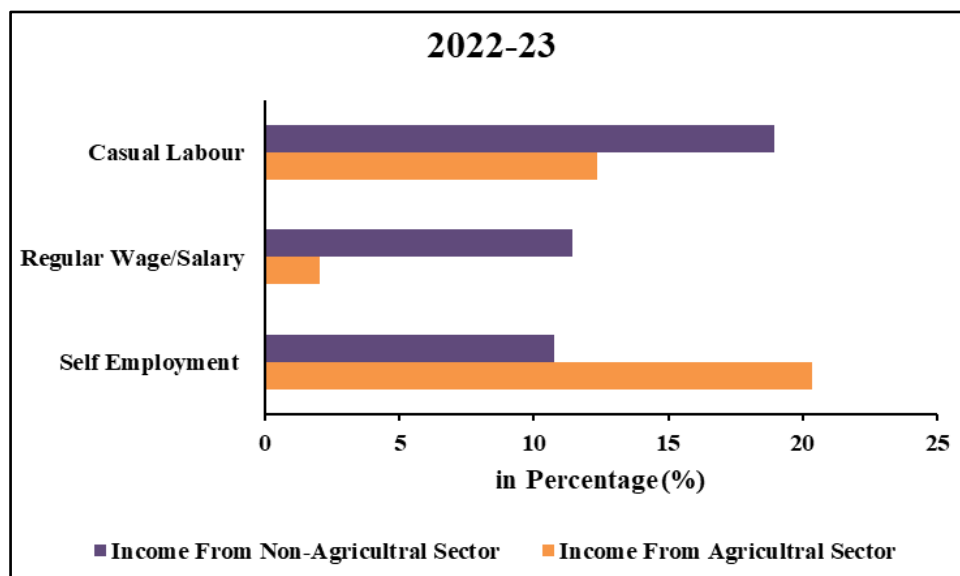
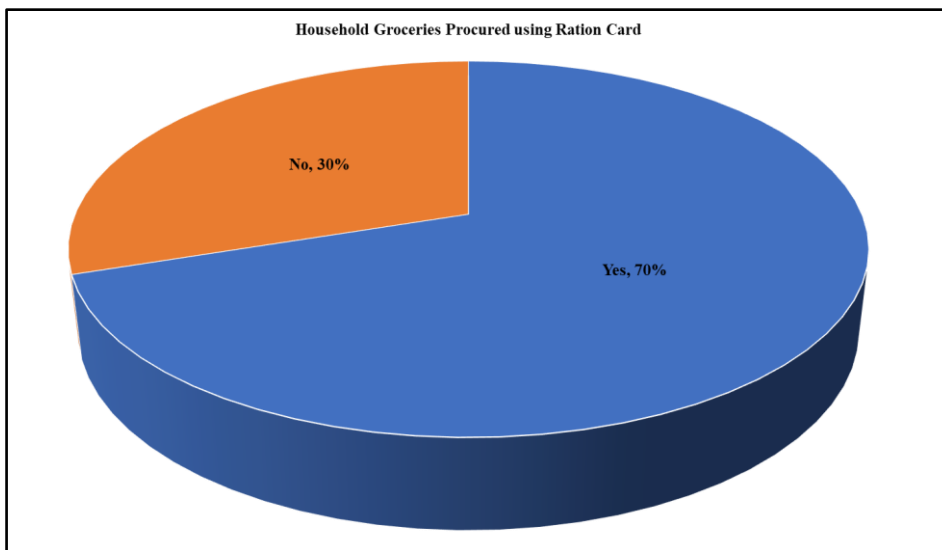
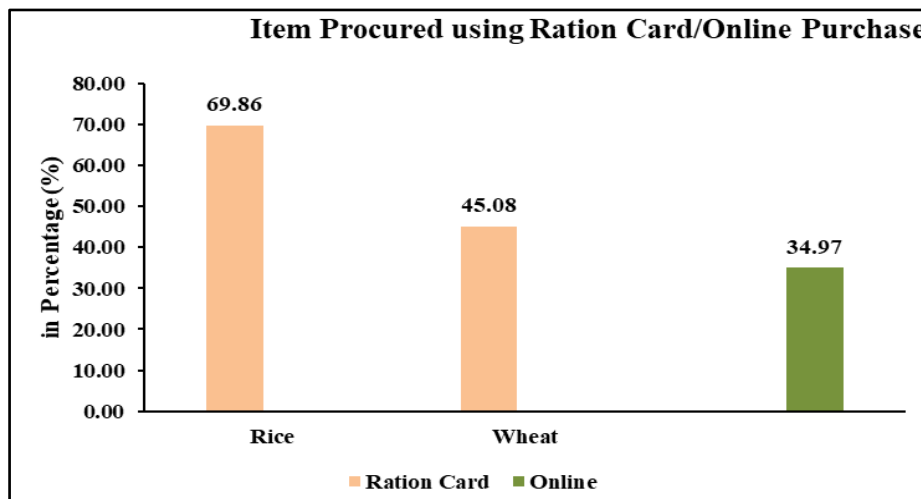


Fig 11: Source of Household Income from agricultural and non-agricultural sector for the state of Bihar in FY 2022-23

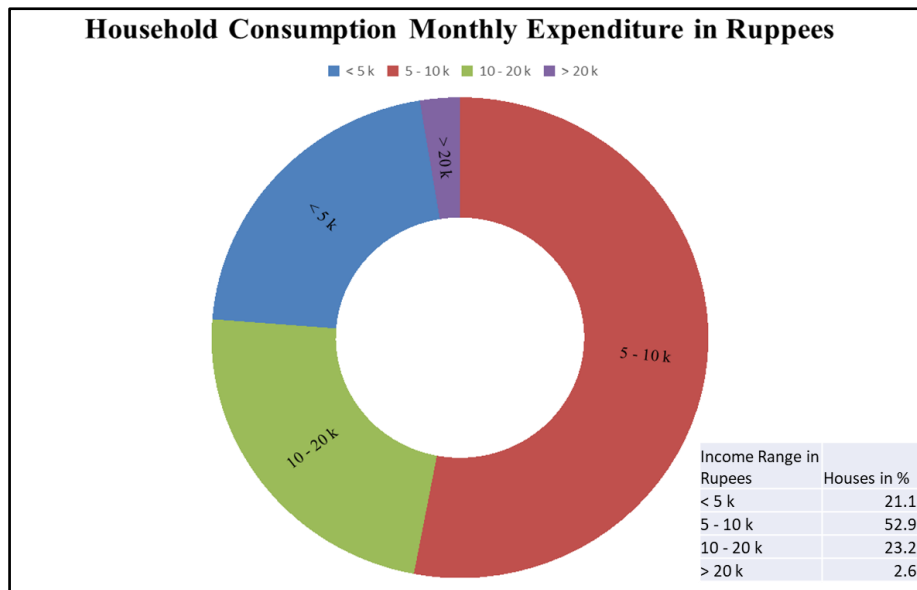
Figure shows changes in percentage composition of source of household income in terms of casual labour, wage/salary earning and self-employment wherein self-employment accounted for 40.58% of income generation while casual labour and wage/salary earning accounted for 35.22% and 18.99% respective income generation in the state of Bihar in the FY 2022-23 (Fig 10). Similarly it's evident from figure 11 that the income generation in non-agricultural sector is highest from casual labour while in agricultural sector the source of income generation is highest from self-employment. This rise in income generation from casual labour and self-employment indicates towards the impact of COVID-19 resulting in decrease of job opportunities and wage generation. Also the 70% of Bihar's population procured grocery using Ration card in the state of Bihar in FY 2022-23 indicating towards the decline in economic status of the state's population under the impression of pandemic (Fig 12). About 69.86% population procured rice and 45.08% population procured wheat using the ration card. About 34.97% population procured numerous day-today necessary items from online mode indicating the sprawl of online shopping among the consumers of Bihar as an important mode of shopping over the traditional shopping methods (Fig 13).



**Fig 12: Grocery procurement using Ration card in the state of Bihar in FY 2022-23**



**Fig 13: Percentage of Rice and Wheat procured by using Ration Card and Online Mode.**



**Fig 14: Household Consumption Monthly Expenditure for the state of Bihar in FY 2022-23.**

Further analysis revealed that for about half of the household in Bihar, the consumption monthly expenditure lies between Rs. 5000 to 10000. Figure reveals that 21.18% of population has monthly consumption expenditure less than Rs. 5000, 52.98% population has monthly consumption expenditure between Rs. 5000 to 10000, 23.25% population has monthly consumption expenditure between Rs. 10000 to 20000 while merely 2.60% population has monthly consumption expenditure above Rs. 20000 (Fig 14). These figures also indicate that the top 10% Bihar’s rural population has MPCE above Rs. 5059 while the 50% rural population has MPCE below the rural average MPCE of the state. Similarly the top 10% urban population of the state has MPCE above Rs. 7908 whereas the 60% population has MPCE below the identified average MPCE for the urban settings of the state. All these disparity in the MPCE trends of the state indicate towards the huge gap between the economic status among the rural and urban class of the state.

## 8. CONCLUSION

The findings of this study indicate that the COVID-19 pandemic substantially affected consumer behavior and spending patterns in Bihar and across India. Data from the Household Consumption Expenditure Survey (HCES) 2022–23 and secondary sources reveal a significant shift in consumption patterns and consumer preferences influenced by socioeconomic, psychological, and infrastructural factors intensified during the pandemic. The pandemic significantly accelerated a transition to online shopping behaviors due to mobility limits, health apprehensions, and social distancing protocols. This resulted in a rapid uptake of digital platforms, especially among consumers in historically under-digitized regions like Bihar. The enhanced dependence on e-commerce was driven by the necessity for contactless transactions, convenience, and broader access to both essential and non-essential goods, especially during lockdown periods. The rise in digital literacy and smartphone adoption has further facilitated this behavioral change, resulting in enduring effects on customer engagement frameworks. The study underscores the discrepancy in Monthly Per Capita Consumption Expenditure (MPCE) between rural and urban populations, with Bihar mirroring national patterns of diminished average MPCE in rural regions. This inequality intensified throughout the pandemic due to disturbances in

employment, supply systems, and income stability. Consequently, customers in economically disadvantaged segments, especially in rural Bihar, exhibited a preference for value-oriented purchases, emphasizing critical goods, health-related products, and cost-effective alternatives. Furthermore, behavioral responses such as panic buying, stockpiling, and dependence on local Kirana businesses during the early phases of the pandemic demonstrated widespread consumer apprehensions. The behavioral occurrences were constant in both Bihar and other Indian states, reinforcing the influence of psychological risk perception and information asymmetry on purchasing decisions. In conclusion, the pandemic served as a catalyst for long term changes in consumer behavior throughout India, with Bihar exemplifying how socioeconomic limitations, technology adaptability, and health risk perception combined shaped the buying patterns. The shift towards digital consumption, increased health consciousness, and changed spending priorities indicate a fundamental transformation that requires policy measures to address digital disparities, strengthen rural retail systems, and improvise consumer resilience against future systemic disruptions. The findings of the study highlight the necessity of flexible, inclusive, and technology-driven measures to ensure equitable consumer access and protection in a post-pandemic economy. Industry-friendly policies are essential for the sector's revitalization in the post COVID scenario (Global Economic Prospects, World Bank, 2021). These may encompass tax discounts, GST reductions, subsidized loans for hotels and airlines, and, if warranted, targeted financial bailouts. COVID-19 has significantly affected worldwide civilization, altering established social, economic, and professional norms (Global Economic Prospects, World Bank, 2020). Effective and adaptive policymaking is essential to address this issue and establish the groundwork for sustainable and equitable prosperity. Comprehending consumer behavior during crises such as COVID-19 provides essential insights for firms, governments, and development practitioners in creating adaptive systems that address changing requirements while promoting economic resilience and social equality.

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