



IMPACT OF COVID-19 PANDEMIC ON HOUSEHOLD DECISIONS: A CASE OF GUWAHATI, ASSAM

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Abstract: The covid-19 pandemic has had an adverse impact on economies globally. The worst of all are the middle and lower-class families and the ones living below the poverty line. At the micro-level, impacts are seen on the standard of living of households. Accordingly, this paper focuses on the impact of the covid-19 pandemic on household decisions. The area of study is Guwahati city- Northeast Indian state of Assam. Data used is primary in nature collected through a schedule with a sample size of 100. The study included variables such as household income, household expenses, employment status of respondents, education status of children, and food insecurity. These variables are further categorized for better comprehension of the subject matter and derivation of observations. The study found that the covid-19 pandemic has adversely impacted the livelihood of the respondents as observed in the nature of household decisions. The low and middle-income households are currently the hardest-hit segments. In the end, the policy implications from the study mainly concern the creation of a reliable database of families living below the poverty line, the development of effective health infrastructure, and the generation of social capital and cohesiveness amongst the masses through awareness measures.

Keywords: pandemic, impact, standard of living, low and middle-income households, Guwahati

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INTRODUCTION

Pandemics are large-scale outbreaks of infectious diseases that can greatly increase morbidity and mortality over a wide geographic area and cause significant economic, social, and political disruption¹. The global impact of Covid-19 became a focus in March 2020 when the World Health Organization declared it a pandemic after it affected more than 118000 people in 114 countries and killed 4291. Coronavirus cases in India grew exponentially within weeks, from a single case to nearly a thousand. Subsequently, Covid 19 has been marked as the fifth documented pandemic after H1N1².

At the outset of the pandemic, a complete global shutdown was declared for which all economic activities came to a standstill and cash flows zeroed in the absence of trade. Various public health measures were adopted by countries to contain the spread of covid-19 which included the social distancing norm. As a result of this, businesses, educational institutions, community centers, recreational centers as well as NGOs were required to close down. Large gatherings were prohibited and travel was allowed only if very essential³. The Indian rupee touched an all-time low every other day with crude oil prices falling and the stock market sloshing down⁴. Global Economic Prospects, 2021, reported the contraction of the world economy by 3.5 percent. Although this is set to expand to 5.6 percent in 2021, the global outlook shall remain subject to significant downside risks, including the possibility of additional covid waves and financial stress amid high emerging markets and debt levels of developing economies. The

pandemic reversed the scenario of global poverty reduction by creation of 'new poor' and deepened the challenges of food insecurity with inflated food prices for millions of people^{5,6}. The ongoing crisis has culminated in low investments, loss of jobs and human capital, stoppage of schools, food insecurity and fragmented supply linkages. Approximately, 140 million people lost employment while others got their salaries reduced to at least half⁷.

While observing the degree of impact on financial markets and human psychology, there is also a need to focus on impacts at the micro level as households are crucial players in an economy⁸. Studies conducted by ⁸ and ⁹ concluded that with a drop in earnings, households were most likely to change or reduce their investment portfolios. It was also found that more than half of the population considered reducing their consumption expenses and refraining from larger purchases due to reduced incomes. The major sources of income for most families are salaries and wages¹⁰. With the fall in income, financial decision-makers of households had to alter their consumption and investment behavior. Limited production and distribution of goods implied a shortage of food supply resulting in inflated food prices which evidently indicated the high cost of nutritious food¹¹. The middle and low-level-income households also saw a high quantity of school dropouts as parents failed to bear the burden of fee payments and online modes of learning. Taken together, there was a massive change in purchases of essential and non-essential goods, change in investment portfolios, consumption of bank or other

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savings, formal or informal borrowings, loss of learning and deprivation in terms of food availability and quality. This list is however non-exhaustive. In this paper, we will try to analyze and interpret the condition of middle or low-income households in the face of the ongoing pandemic and how these people are coping with the cash crunch.

Our survey is based on Guwahati, the biggest city of the Indian state of Assam and also the ‘Gateway to North East India’. The city lies on the south banks of the river Brahmaputra with Dispur as its capital and the administrative centre of the Government of Assam. It sprawls over an area of 1528 sq kilometers with a population of 957,352 as per the 2011 census. The major religious communities comprise of Hindu, Muslim, Christian, Sikh, Buddhist and Jain. As per records, the sex ratio is stated as 933 females per 1000 males along with a decent literacy rate of 91.47 percent. Petroleum manufacturing and tea production and processing activities contribute a sizeable share to the city’s economy. The city is a hub of esteemed educational institutions and even has a huge range of tourism resources that generate a striking number of tourists every year.

REVIEW OF LITERATURE

A *pandemic* is defined as –an epidemic occurring over a very wide area, crossing international boundaries, and usually affecting a large number of people¹². There have been many significant disease

outbreaks and pandemics recorded till date including Spanish Flu, Hong Kong Flu, SARS, H7N9, Ebola, Zika and H1N1¹³. The increased incidence of outbreak/pandemic is because of a rapidly growing and mobile world population, urbanization trends and the concentration of people, industrialized food production in global value chains, increased consumption of higher-order foods including meat and the development of global transport networks acting as vectors in the spread of pathogens¹⁴. According to ¹⁵ as was quoted by ¹⁶, pandemic impacts range from forgoing consumption and purchases of specific products, small direct costs like medical expenses to larger indirect costs such as loss of labour and production and the cascading effects like disruption of services, travel and others. India too struggled with low demands in all sectors, be it manufacturing, travel, hospitality, production or construction⁴.

Impact of Covid-19 pandemic

The covid-19 pandemic has caused a socio-economic impact that has so far been unseen in the past. Although its fatality rate is low as compared to other outbreaks/pandemics, the extremely contagious nature of covid-19 has meant that its impact on the global economy has been the worst. Table 1 shows the geographic extent, fatality rate and estimated impacts of covid-19 as compared to others. Across the board, the adverse nature of the covid-19 pandemic can be seen. The other outbreaks/pandemics such as SARS, MERS and Ebola do not even come close to the economic downturn as caused by covid-19.

Table 1. Geographic extent, Mortality rate and impacts of Covid-19 as against another Pandemic/Outbreak (improve)

Starting Year	Pandemic/Outbreak	Geographic Extent	Fatality Rate/Mortality	Estimated Impacts
1918	Spanish flu influenza	Global	20 million – 100 million deaths (111 – 555deaths per 10000 persons)	The world bank estimated a cost of 4.8% of global GDP or nearly US\$ 4trillion
2003	SARS	4 continents; 37 countries	8098 possible cases; 744 deaths Fatality rate – 10%	Global economic cost of US\$ 100 billion; US\$48 billion in China alone
2009	Swine Flu	Global	Fatality rate- 0.2 to 0.8 per 10000 persons	The economic impact in Mexico where the flu started was estimated at US\$3.2 Billion
2012	MERS	22 countries	Fatality rate- 34.30%	US\$2 billion losses in the Republic of Korea
2013	Ebola	10 countries	Fatality rate- 50%	Economic burden of the West African outbreak range from US\$2.8 to US\$32.6 billion in lost GDP; US\$2 billion loss in Guinea, Liberia and Sierra Leone
2019	Covid-19	Global	Fatality Rate - 1 - 3.4%	Monetary GDP loss of US\$ 4 – 5 trillion

(Source: World Bank Reports, Statista, 2021)

(<https://www.statista.com/topics/6139/covid-19-impact-on-the-globaleconomy/#dossier> Summary)

In continuation from the above, Table 2 portrays the global impact of covid-19 with regard to various indicators such as poverty levels, effects on women, school dropout, food insecurity, etc. In all the cases, covid-19 has had a devastating impact. These impacts are going to have a long-term effect on the

livelihood of the households, particularly those in the lower income brackets. The socio-economic fallout of covid-19 is widespread and it is going to take years before the affected will be able to recover to normal positions as seen during pre-covid-19 pandemic periods.

Table 2. Global impact of Covid-19 pandemic

Variable	Indicator	Impact
Poverty	Gradual increase in poverty levels	40-60 million people will be pushed into extreme distress and poverty
Gender equality	Effects on the women populace	In developing countries; the vast majority of women employment is in the informal economy with no job security. In addition, there has been a spike in domestic violence due to quarantine needs (UN Women, 2020) Women do three times as much unpaid care work as men. With the covid-19 pandemic, unpaid care work has increased with children out-of-school and additional care needs of older persons (UN Women, 2020)
Education	Students out of school	1.2 billion learners (68% of the total students enrolled) are affected by school closures in 144 countries
Social protection	Lack of adequate social protection	55% of the world's population (as many as four billion people) are not covered by social insurance or social assistance. Globally, only 20% of unemployed people are covered by unemployment benefits and in some regions the coverage is much lower
Internally displaced people (IDPs)	Increased risk and uncertainty for IDPs	1/3rd of the world's IDPs live in 10 countries which are most at risk to the socio-economic downturn
Slum dwellers	Poverty and health issues on the rise	Over 90% of covid-19 cases are predominantly confined to urban areas. With over one billion people living in informal settlements and slum-like conditions, the pandemic is exacerbating the vulnerability of these population groups (UN habitat, 2020)
Jobs	Income and jobs lost	1.6 billion informal workers lost 60% of their income with little/no savings and no access to social protection
Commodities	Falling commodity prices	Commodity prices fell by a record 20% in March, 2020 driven by steep drops in oil prices
Food insecurity	Increase in food insecurity	The covid-19 pandemic is likely to double the number of people facing food crises. About 265 million people in low and middle-income countries are at risk of acute food insecurity by the end of 2020 unless swift action is taken

Source: UNDP

On the above backdrop, the impact of covid-19 pandemic is presented on the basis of the following sub-heads, namely, economic, social, psychological and household decisions.

Economical. Covid 19 paved the way for a massive economic downturn which was identified as worse than the recession of 2008. Ministry of Statistics reported a fall in the Indian growth rate to 3.1 percent in the fourth quarter of 2020. A survey conducted by International Labour Organisation (ILO) presented that about 70 percent of Micro, Small and Medium Enterprises (MSMEs) shut down operations either temporarily due to covid restrictions or permanently due to cash crunch¹⁷. Indian MSMEs were being expected to see a revenue fall of 21 percent with a profit margin of only 4 percent to 5 percent¹⁸. According to ¹⁷, some 81 million jobs were wiped out in this region with the youths especially losing 3 to 8 times higher rate of employment compared to their total share in the market. In the months of April and May 2020, individual income was reduced by almost 40

percent. The contracted GDP of India in the entire 2021-21 session was recorded as 7.3 percent¹⁹. The tourism sector is also facing an unprecedented challenge. Curfews and travel restrictions to contain the spread of covid-19 brought global tourism and travel to a complete standstill. It grounded airplanes and shut down hotels in the process²⁰. Health systems were strained with the responsibility of combating the crisis. World Bank pointed out 'learning' as a crisis when about 1.5 billion students across 160 countries were forced to sit in their homes due to the closure of institutions⁵. In India, the economic loss corresponding to 1/3rd and 2/3rd year of lost learning was estimated at USD 6.3 billion and USD 12.5 billion respectively when compared to the 2019 GDP of USD 9.2 billion⁷.

Social. Keeping aside the immediate impact of covid in terms of morbidity and mortality, the global health community is increasingly concerned about the indirect effects of the pandemic and its ensuing response on vulnerable populations, especially women and children.

Health, nutrition and social well-being of these groups would be intensely impacted. South Asian countries have more than 1.8 billion people of which 1 in 10 lives below the International Poverty Line²¹. The economic decline proportionately affected the per capita income of every country pushing millions of people into extreme poverty.

Fear is, that emerging markets and developing economies (EMDEs) that immensely rely on tourism, global trade and remittances shall be the hardest hit by the end of the pandemic. As per the latest reports, EMDEs saw a 2.2 percent decline in GDP in the Financial Year 2020-21¹⁹. Another phenomenon was the ever-increasing job losses and/or salary reductions with a resultant decline in remittances by migrants to their home countries which appeared to be a major source for poverty alleviation and sustainable growth of developing countries. This paved the way to a rise in poverty levels, loss in food security and inability to afford essential services like proper healthcare⁵. Old people were most susceptible to contracting the infection. With a crippled healthcare system and shortages in ventilators, oxygen cylinders and hospital beds, this segment of people was at highest health risks. Migrant youths and workers of the informal sector and even the service sector were rendered jobless and homeless because of the health crisis and the entailing restrictions²². In more than a year's time, family dynamics saw a sea change. Domestic abuse in all forms was on the rise because of the lockdown. Vulnerable ones were more exposed to violence. In the initial few months, cases of domestic abuse in the UK surged by 25 percent²³.

Psychological. With the closure of educational institutions and with the initiation of online classes, parents had to play the role of an 'educator' accompanied by their personal job-related responsibilities as well as household commitments. The absence of household help and grandparents added to the hardships. These factors indicated a major burden on parents with an increasing stress level. As per a study by Sprang and Silman in 2013, the build-up of stress and other negative emotions in parents has a cascading effect on 'children's well-being'. Previously, scholars had also identified the presence of psychological distress like depression, anxiety, post-traumatic stress and irritability in the face of self-isolation and home quarantines²⁴. The tendency to cause self-harm or commit suicide was widespread in areas that were most affected by the pandemic. Some other related elements were feelings of helplessness, separation from loved ones, loss of freedom etc. Noteworthy were the psychological problems associated with the nationwide lockdowns. Children and youth were more likely to experience irritation, restlessness, loneliness and other emotional and behavioural changes due to the prevailing situations²⁵.

Impact of Covid-19 on Household Decisions

In July 2020, McKinsey and Company published that for Indians, household income reduced by

60 percent, household savings decreased by 60 percent and household spending also decreased by 42 percent than the previous months. The first wave of Covid dragged down household savings to 8.2 percent of GDP in the December quarter as opposed to 10.4 percent in the previous quarter. Private consumption contracted by 9 percent in 2020 characterised by little or no expenditure on transport, hotels and restaurants, recreation and culture. Inflation in prices of food and beverages crossed 6 percent in October 2019 and remained elevated till November 2020, contributing 54.8 percent to overall inflation in 2020-21²⁶. Financial woes of middle and low-income families caused their children to permanently drop out of school or college. Above all, to tackle the issue of the closure of institutions, authorities resorted to online mode of taking classes and provision of study materials. This affected low-achieving students and disadvantaged households in two ways. Firstly, the cost involved in availing such services (Eg. smart devices and internet connectivity) and secondly, the absence of skills in parents to train their children¹⁰.

Notably, 'food insecurity' was another outcome of the pandemic-induced economic slowdown combined with other climate and conflict-related drivers. Recent trends show how the unaffordability of healthy and nutritious food has accelerated world hunger thereby deviating from the 'Zero Hunger' agenda of Food and Agriculture Organisation of the UN²⁷. The economic effects of any crisis excessively impact individuals in the society, depending on their socio-economic status, access to markets, livelihood strategies and so on. It is thus important to understand the impacts at the household level and the probable support mechanisms that can be devised for smooth money flow in such households. Few studies in India revolve around the impacts of covid-19 and the authority restrictions on 'smallholder farmers' and the results found are heterogeneous with regards to agricultural activity, income, and food security^{28,29}. With the risks of the second and a supposedly third wave hovering over people's heads, the country's financial standing and an individual's personal finances still remain affected.

METHODOLOGY

Data and Sample

The area of the study is Guwahati city. It is the main city of the North-East Indian state of Assam. The focus is primarily on the stresses on household decisions due to the covid-19 pandemic. The data used in the analysis is primary in nature. It has been collected from the respondents on the basis of a 'schedule of questions'. Its collection was conducted from 1st August to 8th August 2021 by using the convenience sampling method. The total sample size is 100 which is spread across Guwahati city. The survey samples are 'households' characterized by a pre-covid monthly income of not more than INR 20,000 with one or more children who are either studying or are 'unemployed'.

Impact Variables

The variables in the study include household income, household expenses, employment status of the respondent, education status of children, and food security of the household. These variables are further classified into categories for better comprehension of the subject matter and derivation of observations. Household income and household expenses were measured in absolute terms. The other variables were measured in terms of a five-point Likert scale. For the purpose of analysis of quantitative data, descriptive statistics is used along with correlation coefficient.

Analysis and findings

Table 3 presents the statistics of the demographic profile of respondents. We surveyed a diverse group of people aged 25 years to 80 years of which most respondents primarily belong to the age group of 36 to 46 years (median = 36-46). A major portion of respondents are ‘shop owners’ constituting 22 percent of the sample size (mode = shop owner). Shops include apparel stores, jewellery stores, grocery, tailoring, furniture, food outlets etc. In addition to this, about 19 percent of the samples are engaged in ‘private jobs’ and 14 percent work as ‘household helps’. These groups also form a major part of the responses. Family size of the majority of households consists of 4 to 6 members on average which sometimes also includes the extended family of the respondent. We understood that for certain households, a single family member was in charge of feeding all the members of the household. A significant chunk of these families have 1 to 2 children who are either studying or are unemployed (median = 4-6; median = 1-2). This indicates higher financial dependencies on households.

Table 3. Descriptive statistics of the Profile of respondents

Variable	Category	Respondents	Average
Age	25-35	44	Median: 36-46
	36-46	31	
	47-57	19	
	58-68	4	
	69-79	2	
Occupation	Household help	14	Mode: Shop owner
	Small business	7	
	Private job	19	
	Shop employee	9	
	Driver	5	
	Daily wage	6	
	Teacher	5	
	Shop owner	22	
Family members	1 - 3	36	Median: 4 - 6
	4 - 6	61	
	7 - 9	3	
Children	1 - 2	83	Median: 1 - 2
	3 - 4	17	

N = 100
(Source: Author)

A comparison of household incomes and expenses before and during Covid is tabulated in Table 4.

Table 4. Descriptive statistics of Household Incomes and Expenses (Before and During Covid-19 pandemic)

Variable	Category (in INR)	Respondents	Descriptive
Household income before	5000-10000	21	Median: 10001-15000
	10001-15000	40	
	15001-20000	39	
Household income during	5000-10000	69	Median: 5000-10000
	10001-15000	21	
	15001-20000	10	
Household expenses before	5000-10000	46	Median: 10001-15000
	10001-15000	41	
	15001-20000	13	
Household expenses during	5000-10000	51	Median: 5000-10000
	10001-15000	31	
	15001-20000	18	

N = 100
(Source: Authors)

As per results, income for most households before the pandemic used to be specifically between INR 10,000 and INR 20,000. Similarly, expenses before Covid ranged from INR 10,000 to INR 15,000. Expenses were in tune with incomes and people maintained a balance of expenditures and savings. After Covid, evidently, it fell down to a range of INR 5,000 to INR 10,000 which indicates a significant change. This was no surprise as most respondents were quoted saying –since income is less, we definitely try to spend less to sustain. 69 percent of responses indicated a steep fall in salaries or wages below INR 10,000 along with 51percent responses indicating a subsequent fall in household expenses after the occurrence of the pandemic. We noticed how households were planning to use their resources responsibly in the times to come. This seemed a necessary decision owing to the present conditions we are in.

Table 5 disaggregates the mean scores of the major Impact Variables. We developed five statements to understand the ‘impact of employment status on household financial decisions’. Results show that households have been hugely impacted by either the ‘reduction or loss of pay’ or ‘temporary stoppage of work’ due to lockdowns, curfews and other psychological factors (mean score = 3.88 & 3.68 respectively). Following this, we tried to analyse the ‘impact of children’s education status on households’ and gathered that ‘regular fee payments’ and ‘online classes’ tend to have a major impact on household finances (mean scores = 3.30 & 3.37 respectively). ‘Permanent closure’ of educational institutions reported a neutral response by households. The final variable ‘food security’ was described by availability, quality, price and frequency of purchase of food items. Observed

values indicate that the price of food items rarely guides a purchase decision (mean score = 2.14). We came across respondents commenting on how one needs to eat healthy and nutritious food for stronger immunity and better resilience regardless of its price. As a consequence, inflated prices highlighted a dive in purchase frequencies of groceries, fruits, vegetables as well as fish and meat. From Table 3, we could see that ‘quality of food’ has an underlining effect on food insecurity (mean score = 2.70). The present scenario of disturbed food production, surplus demands as opposed to supply and interrupted distribution channels, itself explain the mediocre quality of food items or agricultural produce.

Table 5. Descriptive Statistics of categorical variables under Impacts of Covid-19 pandemic on Household Decisions

Variable	Category	Mean Scores	Degree
Employment status	Job loss	2.02	Minor
	Reduced working hours	3.26	Moderate
	Stoppage of Work	3.68	Major
	Loss or reduction of salary	3.88	Major
Education Status	New job role	1.44	Insignificant
	Stoppage of educational institution	2.53	Moderate
	Online class	3.37	Moderate
	Closure of educational institution	2.77	Moderate
Food Security	Regular fee payment	3.30	Moderate
	Availability of food	2.63	Moderate
	Quality	2.70	Moderate
	Price of food	2.14	Minor
	Frequency of purchase	2.57	Moderate

N = 100;

Use of five-point likert scale where, insignificant = 1, minor = 2, moderate = 3, major = 4, catastrophic = 5.

(Source: Authors)

In Table 6, we found a significant correlation between household incomes before and during covid (r = .45; p < .01). More often than not, samples accepted that

their earnings automatically fell after the spread of the pandemic. Similar is the case with household expenses before and during covid, which shows a high correlation between the two (r = .61; p < .01).

Table 6. Correlation matrix of Household Incomes and Expenses (Before and During covid comparisons)

	Household income before	Household income during	Household expenses before	Household expenses during
Household income before		0.45**	0.55**	0.43**
Household income during	0.45**		0.17	0.25*
Household expenses before	0.55**	0.17		0.61**
Household expenses during	0.43**	0.25*	0.61**	

N = 100; Spearman’s correlation coefficient; Two-tailed tests **p < 0.01, *p < 0.05

(Source: Authors)

There is supposedly a positive correlation between income and expenses regardless of the prevailing times. We try to align our expenses and savings with our earnings so as to maintain sustainability. While surveying, we came across samples who claimed that expenses increased despite their earnings, unlike a few others who claimed to have kept their expenses in check given the current crisis. As such, incomes and corresponding expenses of families during covid have depicted a significantly correlated result at a 5% Level of significance (r = .25; p < .05). This means families are either spending more cautiously than pre-covid times or are spending more due to the prevailing circumstances. It is imaginable as to why household expenses might rise despite low earnings. Reasons are inflated prices of products and investments in essential items for instance masks, sanitizers, oxygen pumps and the like.

SUMMARY AND CONCLUSION

Our findings exhibit the financial implications of covid-19 on household decision-making, especially for the low and middle-income groups. We tried to compare and contrast the changes in household finances, if any, and saw how households experienced sea changes in earnings and expenses over this period. For salaried employees, there were permanent job losses and pay cuts. A few respondents employed in ‘private jobs’ claimed to be working from home but were soon called back as restrictions eased. Respondents complained of massive workloads and a growing threat to their safety against the disease because of close human contact and lack of social distancing. To add to this, they received

only half their salaries or sometimes even less. For wage earners, there was a complete loss of livelihood. Most migrant workers went back to their villages in the absence of work. Women working as 'household help' either stayed home or engaged in other job roles. Another difficulty was the inability to pay house rent despite constant reminders from the landlord. What followed was either relocating to other places of stay or vacating and returning to their native villages. The scenario was similarly grim for the small business owners. Initial phases of lockdown and curfews limited the scope and time for public movements. Fewer customers and low stocks affected business sales and revenue.

After studying the impact variables, we noticed that loss in household earnings naturally controlled investment and purchase decisions. The majority of respondents were 'living hand to mouth' without proper meals specifically due to cash constraints. A few samples even confessed to engaging in other sources of earnings to deal with the ongoing difficulties. We identified a mass of respondents who revealed using up their past savings to sustain in the present. Similarly, some others went for taking loans from self-help groups and even borrowed from relatives or friends.

Although the closure of educational institutions was a global phenomenon, it did not seem to affect the economically weaker section because fees were waived off in most government-run institutions. However, the mandatory 'online class' was an ordeal, for getting access to a smartphone and a decent internet connection was a costly affair. Children enrolled in private schools and institutions, on the other hand, were not given any consideration for either fee payments or online learning. Finally, we tried to link food insecurity with household decisions and were surprised to see how 'price' was never a deciding factor for purchasing 'essential items'. Nonetheless, there were involuntary alterations in food habits and frequencies of purchasing highly-priced products in this process.

A respondent was quoted saying: *"If, for example, we ate chicken or fish every alternate day in a week, due to this pandemic we have reduced it to just one meal of chicken or fish in a week."*

Another one said almost a similar thing - *"I used to buy a kg of potatoes and onions almost every third day which now has come down to just a kg for a week."*

Such statements clearly indicate judicious decision-making by the households.

Theoretical and Policy Implications

Our study was an attempt to shed light on the stresses meted out on household financial decisions by covid-19. The pandemic has adversely impacted the livelihood of the respondents. The economic impact of

covid-19 which is primarily seen in the decrease in income and spending has a cascading effect on household decisions. As a result of the covid-19 pandemic, the household's standard of living has declined. This is primarily seen in the nature of household decisions taken during the pandemic. In the process, we concluded that low and middle-income households are currently the hardest-hit segments. Such households were forced to compromise on their food habit and consume whatever fitted their budget. Parents now spent more on essential items which also included medicines.

Our findings have a theoretical implication that deepens our understanding of how a particular segment of households is impacted by a financial crisis. It adds up to the existing pieces of literature under the domain of 'pandemics and household finances' thereby giving weightage to previously conducted studies in this area. The practical implication of the study indicates the necessity of formulation of techniques and measures by 'households' to maintain economic sustainability in the long run, as and when the need arises.

A pandemic is an uncertain phenomenon that tends to dramatically change the face of the economy and society alike. The paramount focus of micro-level households should be on chalking out ways and means to maintain economic sustainability during financial crises. This calls for planned savings in financial as well as non-financial institutions. To combat the obstacle of poor network connectivity, higher authorities should make provisions for easy and affordable access to the Internet for unprivileged classes of society.

The policy implications arising out of this study are three-fold. Firstly, the creation of a reliable database of families living below the poverty line. This may include the middle and lower-middle-class families who are most likely to be impacted by such pandemics. This will ensure fast identification of people who are in need of economic help during pandemics in the future. Secondly, the development of an effective health infrastructure so as to ensure a dedicated push towards the mitigation of novel coronaviruses. This will help in reducing fatalities and reduce the impact on economic activities because of restrictions/lockdowns. Lastly, the generation of social capital and cohesiveness amongst the masses in densely populated cities like Guwahati through awareness measures. This will contribute to controlling the spread of contagious viruses thereby mitigating the adverse socio-economic impacts of future pandemics.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest.

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REFERENCES

- Madhav N, Oppenheim B, Gallivan M, et al. Pandemics: Risks, Impacts, and Mitigation. In: Jamison DT, Gelband H, Horton S, et al. (Eds). *Disease Control Priorities: Improving Health and Reducing Poverty*. 3rd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 Nov 27. Chapter 17. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK525289/> doi: 10.1596/978-1-4648-0527-1_ch17.
- Drake, T. L., Chalabi, Z., & Coker, R. (2012). Cost-effectiveness analysis of pandemic influenza preparedness: What's missing? *Bull World Health Organisation*, 90(12), 940-941. DOI: 10.2471/BLT.12.109025
- Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E., Ryu, S....Cowling, B. J. (2020). Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures. *Emerging Infectious Diseases*, 26(5), 976-984. <https://doi.org/10.3201/eid2605.190995>.
- Poddar, A. K., & Yadav, B. (2020). Impact of covid-19 on Indian economy- A review. *Journal of Humanities and Social Sciences Research*, 2, 15-22.
- Blake, P., & Wadhwa, D. (2020). 2020 year in review: The impact of COVID-19 in 12 charts; World Bank blogs. <https://blogs.worldbank.org/voices/2020-year-review-impact-covid-19-12-charts>. Accessed on January 2021.
- World Bank. (2021). *Global Economic Prospects*. Washington, DC: World Bank.
- World Bank. (2020). *Global Economic Prospects*. Washington, DC: World Bank.
- Yue, P., Korkmaz, A. G., & Zhou, H. (2020). Household financial decision making amidst the covid-19 pandemic. *Emerging Markets Finance and Trade*, 56(10), 2363-2377. <https://doi.org/10.1080/1540496X.2020.1784717>.
- Dietrich, A. M., Kuester, K., Müller, G. J., & Schoenle, R. (2020). News and uncertainty about COVID-19: Survey evidence and short-run economic impact. *Federal Reserve Bank of Cleveland*, Cleveland.
- Hanushek, E. A., & Woessmann, L. (2020). The economic impacts of learning losses. *Education Working Papers*. Paris: OECD Publishing.
- Kansiime, M. K., Tambo, J. A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2021). COVID- 19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment. *World development*, 137, 105199. DOI: 10.1016/j.worlddev.2020.105199
- Porta, M. (Ed.). (2014). *A dictionary of epidemiology* (6th ed.). Oxford: Oxford University Press. <https://doi.org/10.1093/aje/kwv031>.
- Qiu, W., Rutherford, S., Mao, A., & Chu, C. (2017). The pandemic and its impacts. *Health, Culture and Society*, 9, 1-11. DOI 10.5195/hcs.2017.221.
- Pongsiri, M. J., Roman, J., Ezenwa, V. O., Goldberg, T. L., Koren, H. S., Newbold, S. C., Ostfeld, R. S., Pattanayak, S. K. & Salkeld, D. J. (2009). *Biodiversity loss affects global disease ecology*. *Bioscience*, 59(11), 945-54. DOI: 10.1525/bio.2009.59.11.6.
- Jonas, O. B. (2013). *Pandemic risk*. Washington, DC: World Bank.
- Brodeur, A., Gray, D.M., Islam, A., & Bhuiyan, S. J. (2021). A literature review of the economics of covid-19. *Journal of Economic Surveys*, 35(4), 1007-1044. <https://doi.org/10.1111/joes.12423>.
- International Labour Organisation. (2020). *Asia–Pacific employment and social outlook 2020: Navigating the crisis towards a human-centered future of work*. Thailand: ILO Publication. Available at https://www.ilo.org/global/docs/WCMS_764084/lang--en/index.htm.
- Indrakumar, D. (2020). Covid-19 and its impact on micro, small and medium enterprises in India. *Manpower Journal*, 3 & 4, 75-88
- Dhingra, S., & Ghatak, M. (2021). The pandemic in data: How Covid-19 has devastated India's economy. *Economics observatory*. Retrieved from <https://www.economicsobservatory.com/how-has-covid-19-affected-indias-economy>. Accessed on December 2021.
- Lock, S. (2021). *Coronavirus: impact on the tourism industry worldwide*. Retrieved from <https://www.statista.com/topics/6224/covid-19-impact-on-the-tourism-industry/>.
- UNICEF. (2021). *Direct and indirect effects of the COVID-19 pandemic and response in South Asia*, 1-57. Available at <https://www.unicef.org/rosa/reports/direct-and-indirect-effects-covid-19-pandemic-and-response-south-asia>.
- Everyone included: Social impact of COVID-19. Department of Economic and Social Affairs. United Nations. Retrieved from <https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>. Accessed on January, 2021
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185–193. DOI: 10.1016/j.ijsu.2020.04.018.
- Spinelli, M., Lionetti, F., Pastore, M., & Fasolo, M. (2020). Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy. *Frontiers in Psychology*, 11. DOI: 10.3389/fpsyg.2020.01713.
- Saladino, V., Algeri, D., & Auriemma, V. (2020). The psychological and social impact of covid- 19: New perspectives of well-being. *Frontiers in Psychology*, 11. DOI:10.3389/fpsyg.2020.577684.
- Annual report. Reserve Bank of India. Retrieved from <https://rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1315>. Accessed on March 2020.
- Major drivers of recent food security and nutrition trends. *The state of Food Security and Nutrition in the world*

2021. Retrieved from http://www.fao.org/3/cb4474en/online/cb4474en.html#chapter-3_0. Accessed on February, 2021.
28. Ceballos, F., Kannan, S., & Kramer, B. (2020). Impacts of a national lockdown on smallholder farmer's income and food security: Empirical evidence from two states in India. *World Development*, 136, 105069. DOI:10.1016/j.worlddev.2020.105069.
29. Harris, J., Depenbusch, L., Pal, A. A., Nair, R. M., & Ramasamy, S. (2020). Food system disruption: Initial livelihood and dietary effects of COVID-19 on vegetable producers in India. *Food Security*, 12(4), 841-851. DOI: 10.1007/s12571-020-01064-5.