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Assessing The Impact Of Covid-19 On Food Security, Nutrition, And Social Cohesion: A Case Study Of Varanasi, India

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Abstract:

This research paper aims to comprehensively analyze the impact of the COVID-19 pandemic on food security, nutrition and social cohesion in India, with a special focus on Varanasi. The study investigates the challenges faced by the local population in accessing and ensuring food availability with nutritional value, as well as the heightened vulnerabilities and social disruptions experienced by different segments of society during the Pandemic. By conducting an in-depth case study analysis that incorporates primary and secondary data sources, this research provides valuable insights into the multifaceted impact of COVID-19 on food security, nutrition and social cohesion in India. The findings of this study contribute to a deeper understanding of the local dynamics, shedding light on the specific challenges faced by the community in terms of nutrition, vulnerability and social fabrics. Unequal power relations become visible due to fake news and social media channels targeting particular communities and groups.

Keywords: Food security, nutrition, vulnerability, COVID-19, social cohesion, hate speech.

Introduction:

Human history from the Stone Age is a history of food and survival. The hunting of animals and collecting fruits and insects from the forest depicted the importance of food for peaceful human

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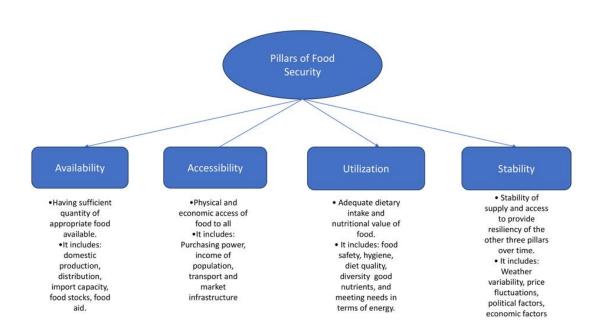
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survival. Even in the contemporary world, food insecurity is a continuous threat for many developing and less developed countries. Despite this, the world formally recognized the importance of food for peace much later, in 1966, when the United Nations further affirmed the 1948 Declaration of Human Rights by adopting two treaties: the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). The right to food and the right to health was embedded in ICESCR along with other rights including the right to education, labour rights, and the right to an adequate standard of living without any discrimination on the grounds of any identity (UNHR, 2010).

The establishment of the Food and Agriculture Organization (FAO) in 1945 gave momentum to the concept of 'Food Security'. Later, European and North American governments attempted to ensure food security in light of the World Food Survey, published by the FAO in 1946, which highlighted the insufficiency of food for at least one-third of the world's population (Simon, 2012). However, despite awareness, over the two decades from 1970 to 1990, nearly half of the developing countries worldwide experienced a food crisis. At that time, Amartya Sen brought about a significant change, shifting the focus towards distribution rather than access (Anant, 2022). Eventually, the holistic definition of food security evolved in the World Food Summit of 1996 as "Food security" is defined "when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". This also specified the four important pillars of food security: availability, stability, access and utilization of food (FAO, 1996). Moreover, it was also realized that food insecurity acts as a source of other problems, such as refugee crises and terrorism, indirectly hindering attempts to achieve social sustainability and long-lasting peace (Borras & Mohamed, 2020).



By the 1990s, with a shift towards a unipolar world, the problems re-surfaced with the initiation of liberalization. The IMF and World Bank offered a Structural Adjustment Program, which provided loans that created a significant gap between the Global North and Global South, an existing disparity. The lack of nutritious food, the decline in agricultural productivity, the excessive use of fertilizers, and the price rise were the outcomes of this liberalized economy. This posed a grave challenge to achieving the broader spectrum, encompassing all four dimensions of food security (Upadhyaya et al., 2022).

By the 2000s, with the adoption of the Millennium Development Goals, food security had become a primary concern at the global level. It was the first UN development goal that was time-bound; however, the Millennium Development Goals were criticized for not being holistic, as they omitted some important social issues, such as peace and security, and mainly employed a top-down approach (Ruhil, 2015; Simkiss, 2015). After the Millennium Development Goals, the Sustainable Development Goals (SDG) was formulated by the United Nations General Assembly in September 2015 under its '2030 Agenda' to act as a post-2015 Development agenda, including Zero Hunger and Good Health and Well-being as important agenda out of 17 goals.

When the Sustainable Development Goals (SDGs) were adopted in 2015, the underlying scenario was free from the spread of the Pandemic that erupted in 2019 and was officially declared as the COVID-19 Pandemic in 2020 (Saccone, 2021). The COVID-19 pandemic has now affected almost entire dimensions of human life and stands as the greatest humanitarian crisis and has affected every walk of life, including the entire food supply chain (Aday & Aday, 2020; Onyeaka et al., 2021), especially in

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the low- and middle-income countries of Asia and Africa (Udmale et al., 2020; Laborde et al., 2021). The most affected are vulnerable and low-income individuals working in unorganized sectors due to the increase in uncertainty regarding employment and income patterns (Saccone, 2021; Laborde et al., 2021). This paper examines the aftermath of COVID-19 on food security, analysing the associated risks and providing an early warning system for future challenges.

Food security in India:

Ensuring food security in India is a challenging task due to the large population size. The first fiveyear plan document focused on development, with a primary emphasis on agriculture and irrigation, aiming to establish self-sufficiency in food production. However, the uncertainties of food sufficiency surfaced from the 1960s onwards, and India witnessed severe famines in Bihar and eastern Uttar Pradesh. The introduction of the Green Revolution in India to maximize food production in the year 1965 was a sign of relief in prevailing conditions of poverty and lack of availability of grain; however, the Green Revolution favoured commercial farming rather than subsistence farming, increased the gaps between large and small farmers and between different regions by concentrating on rich states such as Punjab and ultimately led to the widespread criticism and social unrest in the country (Harwood, 2019; Dutta, 2012). The political upheavals and environmental constraints of the 1970s contributed to the country's food shortage (Swain, 1996; Tripathi & Singh, 2016). Ultimately, in 1991, India introduced a set of economic reforms based on a market economy, promoting globalization, privatization, and liberalization. This globalized market system favoured the production of cereal crops such as rice and wheat due to more profit return, and it lessened the production of other crops and added vulnerability by increased soil degradation due to the rotation of wheat-rice production at one field (Ghosh, 2005).

In the last few decades, the entitlement to food ensured by the National Food Security Act (NFSA) 2013, enacted on July 5, 2013, the enlarged scope of article 21 and the directive principle of state policy enshrined in the Indian constitution have helped people experiencing poverty to access the basic food grains for survival (Jani, 2013; Srivastava, 2021; Sandhu, 2014). However, the unexpected recent rise of the Pandemic in 2020 adversely impacted all dimensions of food security due to disruptions in the food supply chain and reduced income generation resulting from nationwide lockdowns (Summerton, 2020; Aday & Aday, 2020; Kesar et al., 2021). The Pandemic mostly harms the labourers and low-income people working in the informal, unorganized sector with declined nutritional quality. (Khanna, 2020; Summerton, 2020). Caste, Class and region disparities are also witnessed in India, wherein lower caste people are in more vulnerable positions, and Uttar Pradesh, along with Bihar, Chhattisgarh, Madhya Pradesh and Odisha, are affected most by the Pandemic due to prevailing poverty in the region (Ram & Yadav, 2021; Deshingkar, 2022).

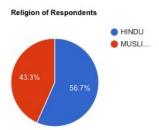
Methodology:

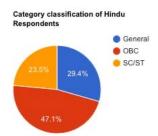
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Earlier research studies have focused on the state of food security in terms of nutrition and human safety. The novelty of this study lies in analyzing the variability of food security status after COVID-19 and its social implications. Both primary and secondary data have been employed, utilizing a mixed-methodology approach that combines quantitative and qualitative methods to gain a comprehensive understanding of the state of food security, vulnerability, and its social implications.

Varanasi, one of the districts of Uttar Pradesh in India, has been chosen as the site of study for this paper because Varanasi is primarily a home to people working in the unorganized sector. The people who live there are more vulnerable to the crisis due to a lack of savings and daily earning routines. This is due to evolutionary behaviour in which people settle near the banks of rivers for easy access to essential items in the absence of road transportation. This gave easy access to the transition from rural to urban areas during the introduction of industrialization and urbanization in India. People became less dependent on agriculture and started living in small houses with a daily routine of earning livelihood through unorganized sectors. This place of Varanasi is also distinct in the state of its population. According to the 2011 census, Muslims in Varanasi comprise 28.82% of the population, which is higher than the national proportion of Muslims in India, which is around 14% as per the 2011 census. This good proportion of Muslims in a city that is famous as a place of Hindu pilgrims makes it a unique place to represent the entire population of India. Further, Varanasi represents the rich demography of all religions.

The selection technique is based on purposive and snowball sampling to arrive at a conclusion. One hundred samples were taken in the first stage, out of which only 60 respondents are being considered as subjects of study in the second stage. These 60 respondents are drawn from diverse social groupings, with 26 coming from the Muslim community and the rest, 34, from the Hindu community, in almost equal proportion from all categories of caste within Hinduism. These respondents include people from various backgrounds, from those who run small shops at the Ghat of Varanasi to those who work in factories and homes as labourers. Data were collected through a questionnaire method, including both open-ended and closed-ended questions, to assess the actual position of this place.





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Varanasi: Demographic and Socio-economic Profile:

Varanasi is a district in Uttar Pradesh, India. With a total population of 3,676,841 as per the 2011 census, it is one of the most densely populated regions in Eastern Uttar Pradesh. Lies on the bank of river Ganga, it is one of the oldest cities in India. It has been the centre of learning for ages. It is also a constituency of current PM Narendra Modi due to its historical and contemporary importance. Mostly, the natives of Varanasi engage in small businesses to earn their livelihood in Godowlia, Hadha Sarai, and nearby places. The ghats of Varanasi, too, are a place for many to earn for their daily survival needs. Due to these reasons, it attracts many poor and unorganized workers from the backward regions of Uttar Pradesh and Bihar, offering them jobs and opportunities. It becomes the main reason for the growing population in a district and reduced dependence on agricultural lands, unlike other regions of Uttar Pradesh, which are mainly agricultural. Despite this, a prevailing regional disparity exists within Uttar Pradesh between Eastern and Western Uttar Pradesh. This is because the Eastern Uttar Pradesh experience differed after the abolition of the zamindari system, unlike Western Uttar Pradesh, which underwent a green revolution in the 1960s that expanded from Punjab and Haryana to Western Uttar Pradesh (Sen, 2010; World Food Programme, 2008).

Varanasi, a city in Eastern Uttar Pradesh, is surrounded by less developed districts and stands at a high risk of food and nutrition insecurity due to its large population. The population density of Varanasi, as per the 2011 census, is 2,395 persons per square kilometre, and it ranks 18th in terms of population. Due to the proportion of around 44% of the urban area, the slum population of Varanasi district is also high. The maximum number of people, including street vendors, shopkeepers, and labourers, who earn a daily income in the unorganized sector is due to the high population size. The commoditization trend is evident in Varanasi due to the rapid urbanization process and the limited scope for households to produce. The rates of food items keep fluctuating, and buying daily vegetables and fruits is an added task for people.

Impact of COVID-19 on Food Security in Varanasi:

Food security relies on a well-functioning food supply chain. It is a process that includes agriculture production, harvest handling, processing, distribution and consumption. Disruption at any stage can disturb the proper handling of food security. The 2019 COVID-19 Pandemic has disrupted not only one but the entire food supply chain process at the global level due to restricted borders (Aday & Aday, 2020; Udmale et al., 2020; Onyeaka et al., 2021). Due to disruptions in the food supply chain, people at the local level also faced changes in their dietary patterns. It was in a good direction for the well-off due to their heightened awareness of health during the Pandemic. However, due to halted jobs, the majority of poor people working in the unorganized sector reduced their expenditure on food.

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Dietary intake of respondents			
Items	Before Covid	After Covid	Change in %
Egg	27%	23.4%	-13.33%
Fruits	30%	16%	-46.67%
Meat	12%	10%	-16.67%
Milk	23%	17%	-26.09%
Pulses	39%	42%	+7.69%
Rice	68%	79%	+16.18%
Wheat	54%	61%	+12.96%
Vegetables	43%	37%	-13.95

The above table is based on the respondent's responses from Varanasi via questionnaire, revealing that despite having an awareness of health risks due to nutritional deficiency, they opted to skip expensive food items such as fruits, eggs, milk, meat and vegetables, etc. and relied more on subsistence food items such as wheat, rice and pulses during covid-19 Pandemic. The other side is due to the increased welfare facilities provided through free rations under the PM-GKAY (PM-Garib Kalyan Anna Yojana) scheme, which helped people experiencing poverty during the COVID-19 pandemic under the Public Distribution System (PDS). Although this scheme became a saviour for these people, it ultimately led increased dependence on survival foods and reduced dietary diversity beneficiaries. However, Uttar Pradesh is still a reviving state in terms of PDS performance (Upadhyaya et al., 2022), as some respondents are unable to avail themselves of basic PDS facilities, drawing attention to the inefficiency and corruption in the PDS system due to the limited margins of voters. There is also reported deaths due to starvation in the state.

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The recent COVID-19 Pandemic added fuel to the inefficiency of the PDS system by increasing vulnerability in the state due to changes in demography resulting from reverse migration. Uttar Pradesh, one of the major recipient states of reverse migrants during the COVID-19 pandemic, experienced changes in the demographic profile of its native population and increased pressure on the government (Tripathi & Agrawal, 2022). Some respondents in Varanasi who have returned from other states and countries are still without ration cards and are dependent on the market for food items, which is a significant concern that has increased due to COVID-19. Additionally, the Indian census, which is typically revised every decade, was halted in 2021 due to the COVID-19 pandemic, leading to an increase in food insecurity. The number of food-insecure people, which has increased since 2011, is not covered in the government data. Food price hikes due to COVID-19 directly affected them.

Inflationary Pressures on Food Prices in Varanasi:

Varanasi, a constituency of the Prime Minister of India, also sparks controversy over a price hike of food items. During the monsoon, a surge in price hikes leads to unaffordable situations for certain vegetables and nutritional food items, which only a few people can afford. This demand depression due to inflation, which also persists in Varanasi, has risen during the COVID-19 pandemic. Food insecurity due to rising food inflation was not initially evident. However, during the second wave, it became apparent on the ground in India that the cost of nutritious food had become unaffordable for the majority of people. Respondents in this study also highlighted the rising food costs, which were around triple the normal prices during the COVID-19 pandemic.

Inflation during the COVID-19 pandemic increased due to several factors. One primary reason was the mismanagement between demand and supply. The supply side was disrupted due to lockdowns and restrictions on the movement of goods. This led to a shortage of agricultural labourers and deprived farmers of access to market products essential for food grain production (Emediegwu & Nnadozie, 2023). During this period, the food supply was largely unaffected by global effects; however, production was impacted due to farmers' concerns about making informed investment decisions (Bairagi et al., 2022; Dilnashin et al., 2021). The demand side, on the other hand, also experienced panic buying of household items by customers due to the prolonged lockdown (Bairagi, 2022). This combined with job loss and economic halt, resulted in a decrease in the purchasing power of consumers. Since the harvest did not reach the final consumer, these factors contributed to the rise in food item prices, especially the retail prices of basic food items (Jena et al., 2022; Bairagi et al., 2022; Lotanna et al., 2023). In any way, the problem of overall affordability affected the poor households. The significant dependency of Varanasi on daily wage income increased the vulnerabilities and enlarged the challenges to deal with.

Heightened Vulnerabilities and Social Implication:

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A deadly virus spread during a pandemic as a dangerous threat unable to stop the movement of people in India despite the lockdown. When one section of society afforded self-isolation and quarantine safely, some people kept walking despite the closure of state boundaries. It is due to the social inequalities that the menace of the Pandemic did not impact everyone at the same degree and intensity. Along with health access as a worrisome factor, food and survival factors troubled the poor and vulnerable section of society (Sengupta & Jha, 2020). The choice is either to die of the virus or hunger. They are trapped in an ever-ending cycle of poverty, and governments keep a close eye on their plight (Rajan et al., 2020). The suffering did not end for those who crossed the state barricade despite all the difficulties in reaching their respective destinations. The isolation and quarantine centres were still an unaffordable luxury, and they spent their lives in deplorable conditions after their return (Mondal & Karmakar, 2021; Sengupta & Jha, 2020). The respondents of the study were mainly natives, except a few who had managed to survive with savings, belonged to supportive families, or came from other countries, such as the Middle East at the time of the field study of this paper; otherwise, rest returned to the places from where they were abandoned during the Pandemic is itself a paradoxical situation. The discrimination was apparent when the government made arrangements for the return of Indians living abroad, and only the people of lower strata were labelled as migrants (Bhanot et al., 2021).

The unequal power relation became visible during the Pandemic when the stigmatization associated with COVID-19 negatively impacted the marginalized communities of society (Bhanot et al., 2021). Certain sections of society have been targeted with hatred and stigma due to the fear resulting from the Pandemic (Ahuja et al., 2021). Social media became a political tool to give rise to prejudicial attitudes of xenophobia on racial basis and Islamophobia, and Varanasi is not immune from its effects. The rise of coronavirus and resultant death from the viruses amplified the negative covert behaviour of the people in India. The controversial racial discrimination issue came to light through self-reported cases of northeast people as 'Chinki' and 'Coronavirus' sadly hurt their sentiments and put a question mark on their recognition and acceptance as Indians (Haokip, 2020). This heightened intensity of blaming Muslims is also revealed in social media, news bulletins, periodicals, etc. (Ushama, 2021). This triggered an Islamophobic attitude underpinned by the Tablighi Jamaat missionary congregation held in Delhi during the Pandemic. The polarised social movement with hate speeches became visible on social media with the hashtag 'Coronajihad' and misinformation by the hate spreaders (Ghasiya & Sasahara, 2022). The respondents of the study were divided well into categories to understand this phenomenon. The holy place, known as 'Moksh ki Bhoomi', has been popularised as a Hindu pilgrimage site. However, according to the 2011 census, Muslims comprise approximately 28.82% of the population and live in peace at regular times. The recent Gyanvapi controversy gained some limelight when a petition was filed in court, but upon closer examination, the seed of communalism appears to be primarily political, ignited by political leaders to garner support from their respective communities. Hate speeches and misinformation on social media fuel the hatred ISSN-Online: 2676-7104

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and discrimination based on caste and race. During the COVID-19 pandemic, it became visible both online and offline.

The scale of vulnerability was more pronounced in the private sector than in the public. The effects of hazard are exacerbated for women due to the normalized social hierarchies heightened in the lockdown social isolation phase. This extraordinary pandemic situation impelled the families to live together. This leisure time and insecurity of jobs expressed in the form of violence and anger added to increased cases of domestic violence (Kumar, 2020). This created a position of 'Pandemic within Pandemic' due to little access to protective services during the lockdown and placed women in an inappropriate situation. The invisibility of female migrants and their struggle is a clear manifestation of an absent gender aspect. The famous attempt of a 15-year-old girl who cycled 1200 kms with a disabled father to reach home due to sudden lockdown is one example in India, unfurling many other additional responsibilities of low-wage working women. Even before the Pandemic, domestic women workers were found working in more pathetic and exhaustive conditions than sex workers (Menon, 2012: 17). This invisibility of women is due to the assumption that migration is dominated by men (Saldanha et al., 2023). This assumption holds even though most women underwent life-changing adjustments, such as childcare, due to their presence in single rooms and reduced expenditure on their own food and menstrual hygiene (Azzez et al., 2021). In Varanasi, when speaking with women respondents, the same situation was observed on the ground, where women were considered less suitable and not capable of interacting with others in the presence of male family members. One respondent (Hema Patel) on the ghat of Assi, while answering the questionnaire, handed over to his father even when she was an adult and ran a shop in his absence. The other respondent's (Shyama Prajapati) wife left him during COVID because of his inability to help her overcome her disease; how she would have managed it further without financial security was not answered by him. She would have probably gone back to their natal home, as this is very common in India on the presumption of dowry, and another respondent (Sarajuddin) also accepted openly that his in-laws helped him financially during the Pandemic, which made his family life easier. This shows that, ultimately, the financial burden is handled by the wives of the family. Also, the transgender people who usually live with their gurus and community and earn money with Badhai, begging and sex work tried to contact their families during the pandemic lockdown. However, they did not get the response they expected.

Coping Strategies and Adaptation Measures

Vulnerability is not a fate but rather a structure that arises from a lack of coping strategies and adaptation measures. A resilient government structure can mitigate the vulnerability of its people. There are always two things involved in any discrimination: 'Tip' and 'Base' of an iceberg as a metaphor to represent overt and covert behaviour, respectively, given by Gilbert Gee and others, where the base, including covert symbolic acts, is more hazardous than the overt act of racial discrimination and hate crimes and affect the minds of the people for long (Haokip, 2020). In a pandemic situation, when life

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was so miserable for the vulnerable section of society, it worsened due to a lack of government coordination and communication. The sudden announcement of the lockdown due to the COVID-19 pandemic, with less than four hours of notice, panicked migrants into reaching their respective rural homes in the first phase from March 24 to 31, 2020, for 21 days. The further extension of the lockdown for 15 days, followed by an additional 15-day extension starting May 18, created a complete mess in populated urban areas (Sengupta & Jha, 2020). This could have been done more effectively by proper planning to ensure at least the necessities for everyone or by a decentralised approach that categorises the entire country into different zones and applies different lockdown rules for each zone. This haphazard situation also led to the insecurities of women. The densely populated urban areas, characterised by a hierarchical structure and limited space for informal, vulnerable workers, compelled them to survive a pandemic without access to clean water, proper toilet hygiene, health care, and menstrual hygiene (Azeez et al., 2021; Sengupta & Jha, 2020). Women domestic workers face numerous problems, including job loss and compromised food and health, due to the absence of a legislative framework that ensures the social security of domestic workers. Certain sections of society endured multiple deprivations, social injustice, rights violations and deplorable quarantine facilities due to the intersections of class, religion, caste, ethnicity, region, migrant identity, gender, age and other structural factors, which resulted in the weak bargaining power of poor people and women domestic workers (Sengupta & Jha, 2020). These events all occurred during the Pandemic due to a lack of inclusive measures from government officials. Hence, apart from government intervention, NGOs, civil society, psychologists, and others should also be encouraged to participate in helping people experiencing poverty rather than merely becoming spectators (Kumar, 2020). The inclusion of every section of society should be celebrated. The decentralized and bottom-up approach can also be encouraged in such disastrous conditions, similar to the 'Kerala model' popularised after the 1960s.

Government Initiatives and Interventions:

To ensure food security, the availability of food grains through a self-sufficient mode is the foremost thing. The number of policy initiatives and schemes in the direction, including PMKSY (Pradhan Mantri Kisan Sampada Yojana), PMFME (PM Formalization of Micro Food Processing Enterprises) and PLIS (Production Linked Incentive scheme) is highlighted as an important programme for the food processing by the Minister of State for Food Processing in September 2023 (PTI, 2023).

Food processing is a method or technique to transform agricultural products into food or forms of food and thereby increase employment and farmer's incomes. The focus on including millet-based products in food intake was promoted, considering the declaration of 2023 as the 'International Year of Millet' (Food Forward, 2023). Recently, the National Mission on Sustainable Agriculture (NMSA), launched in 2014-15, focuses on water efficiency, soil health, and integrated farming through the use of environmentally friendly technologies. To build farmers' confidence and self-reliance, the Pradhan Mantri Fasal Bima Yojana was launched on February 18, 2016, for crop insurance, and the Pradhan

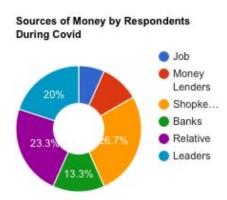
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Mantri Krishi Sinchai Yojana was introduced to ensure irrigation facilities. The e-NAM (National Agriculture Market) initiative enables farmers to access markets and receive a more remunerative price for their produce (PIB). During the Covid pandemic, Pradhan Mantri Garib Kalyan Yojana became an important government policy initiative that assured 'access' by providing additional food grains under NFSA 2013. The National Food Security Act (NFSA) was passed by the Indian Parliament in 2013 to provide legal backing and right-based entitlement to the food distribution system that has been prevalent since the 1940s, as well as the Antyodaya Anna Yojana, initiated in December 2000. Approximately two-thirds of the population is covered under this act, receiving highly subsidised food grains categorised into Antyodaya Anna Yojana (AAY) households and Priority Household (PHH) households. The Mid-day Meal Scheme and ICDS (Integrated Child Development Services) also fall under this act to ensure nutritional support for women and children. However, the stability of food is yet to be revived. During the COVID-19 pandemic, urban centres witnessed a mass migration. In Varanasi, the number of beneficiaries of food distribution schemes, such as the Pradhan Mantri Garib Kalyan Yojana and the Antyodaya Anna Yojana (AAY), is lower (as shown in the table diagram) due to the government's slow updating process.

Sample of 60 respondents

Government schemes on food distribution (PDS)	Beneficiaries' Percentage
PM Garib Kalyan Anna Yojana	50%
Antyodaya Anna Yojana	39%

Respondents who stayed in another state for a long time returned home during a pandemic devoid of ration cards. Some are also devoid of PDS facilities due to inefficiency, a high rise in corruption, and a low margin of voters. Even those who receive rations complain of not receiving complete food grains for the entire month and their dependency on market products. The people of Varanasi, who have less land for agricultural production, faced difficulties during the pandemic crisis, which resulted in increased loan and job pressure on children during their study time. They managed their food needs during COVID-19 through various sources, including job savings, moneylenders, local shopkeepers, interest-based loans, relatives, and local leaders (listed below).



Estimates from Respondents

Community-Based Solutions:

In light of the increased difficulties during the Pandemic, while nation-states have played a crucial role, substantial progress can still be made at the community and household levels to ultimately achieve collective and coherent goals (Wahlqvist et al., 2012). It empowers people by encouraging engagement. A sensitive approach to understanding the concerns of vulnerable people at the grassroots level can motivate them to participate. During the COVID crisis, panic buying and mental stress were at their peak among the poor and vulnerable in urban areas. This led to their sudden decision to go back to their respective homes. It was a tough decision for them to either die of the coronavirus or hunger due to a shortage of food grain. Government schemes during the COVID-19 pandemic were applicable but insufficient for a large portion of the population. In Uttar Pradesh, the positive initiatives by the NGOs enabled the rural communities to develop 'Community Grain Banks', and during COVID-19, it proved a saviour for them (Gupta, 2021). In this context, the importance of such types of Community Banks increases in urban areas. This needs to be initiated with the required alteration for poor and vulnerable sections of society. This can be achieved through proper engagement with diverse stakeholders, including civil society, NGOs, and health personnel, and by establishing a proper communication and coordination system, as they have a high interest but less influence. On the other hand, those who are influential and have less interest should be motivated to take on responsibilities such as corporate social responsibility and private food supply agencies, which are crucial for the health system's preparedness in urban areas (Sahoo et al., 2023). Local governments can play a crucial role in curating and spreading relevant information to the citizens (Pandey et al., 2022).

Strengthening Food Systems and Supply Chains:

Due to COVID-19, the entire food system and supply chain were affected. Supply chain disruptions led to farmers' uncertainty about investment decisions and alterations in supply-side and consumption patterns. This requires the safe handling of all stages and long-term policies that boost households' purchasing power and encourage diversification of trade options. (Udmale, 2020; Aday Aday, 2020)

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Additionally, policies related to globalisation and its adverse effects require regulation. Paying closer attention to issues such as climate change, integrated water management, agricultural pricing, and crop insurance is necessary in the Indian context, which is essentially an agrarian country. India can also revert to traditional food processing practices and shorter food supply chains. Local food supply chain systems, self-reliance and sustainability can be enhanced in this direction (Thulasiraman et al., 2021). A balanced approach can be achieved by identifying stakeholders involved in the food supply system and facilitating brainstorming sessions with them. The use of advanced technology, such as Big data and artificial intelligence, can be employed to collect real-time data. Indigenous fruits, vegetables and crop varieties can offer excellent employment opportunities and considerable food availability when operated at the local level (Thulasiraman et al., 2021). Prosperous rural agriculture areas can attract population and decrease migration and dependency at urban centres. Additionally, having proper transportation systems and a sense of belonging to their roots can provide better options for them during a crisis.

Enhancing Social Safety Nets:

The existing social security system in India adheres to the narrow definition of 'safety net' where social protection is somehow prescriptive and limited only to compensate for market failure' and heavily reliant on cash transfers. The labour markets in middle-income countries, including India, have a large number of workers in the informal sector who fall outside the purview of the law and have no access to safety nets. This led to the growing evidence of exclusions, omissions, payment failures and misdirection. This response must be just the beginning; as events unfold, it is time for Indian policymakers to rethink their development strategies and revolutionise entirely their social security system (Summerton, 2020). Ensuring sustainable employment opportunities and support programmes with accurate information and identifying the neediest and transformative approaches in the postlockdown phase are necessary to scale up (Saha & Roychowdhury, 2021). Targeting at-risk groups, such as people with disabilities, the elderly, single women-led households, transgender people, HIVaffected people, and orphan children, must be at the heart of any need-based safety net (Upadhyaya et al., 2022). Applying Amartya Sen's concept of capability development to empower people by engaging with them can enhance their purchasing power and preparedness for crises. This can decrease their dependence on cash donations and prevent them from falling into the poverty cycle. Proper awareness of the benefits of government schemes is the foremost thing before initiating government policies for them. The Pradhan Mantri Kaushal Vikas Yojana, initiated in 2015, aims to encourage and promote skill development among youth through short-duration skill training, marking a significant step forward. More such schemes need to be initiated for the broader section of society, including impoverished and undereducated individuals.

Conclusion:

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Difficulties related to food security, including hunger, food insecurity, malnutrition, and health inequities, are defined primarily from a broader perspective influenced by societal levels. Diving into this issue also means tackling some of the fundamental political, economic, and cultural conditions influenced by the everyday social experiences and surroundings of people's lives (Borras & Mohammad, 2020). The district of Varanasi in Eastern Uttar Pradesh is the most populated city with daily wage-earning routines. With less agricultural land, disruptions in the food supply chain due to COVID-19 changed the dietary patterns of the people. The dependency on subsistence food increased, and the dietary diversity of their food intake decreased due to the significant reliance on the PDS system. Government initiatives, such as the PM-GKAY, provide relief; however, the large population remains deprived of facilities due to corruption, low Kotedar margins, and, most importantly, the increased burden on Uttar Pradesh as the top recipient state of migrant labour during COVID-19. The issue of affordability for consumers to buy food grains, especially for the poor and vulnerable sections of society, increased during the period and its aftermath. The choice for the poor was either to die of coronavirus or hunger. Unequal power relations become visible due to fake news and social media channels targeting particular communities and groups, which are often ignited by political leaders rather than the residents themselves. Discrimination against women is also visible during COVID-19 in the form of low wages, increased domestic violence and negligence of health and menstrual hygiene. The COVID-19 pandemic has exposed the relationship between food and socio-economic and political structures. Identifying stakeholders involved in the food supply and distribution system is crucial for managing the food supply chain at all levels.

Along with this, inclusive social policies are needed in this direction after the Pandemic due to rising vulnerabilities and discrimination on different grounds in India. When a large number of people are dependent on the PDS system in the district, the availability of personnel in PDS system facilities draws attention to the social discrimination and power structure that directly correlates with food security. Overall, the situation in Varanasi after COVID-19 can be considered a representative sample, and further research is needed in other regions to mitigate the risk of food insufficiency, malnutrition, and social disruption.

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