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## Regular Article

# COVID-19 pandemic and work precarity at digital food platforms: A delivery worker's perspective

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## ABSTRACT

This study tries to establish a conceptual and empirical understanding of the precarity of work in the platform economy using food aggregators as illustrations and in the context of the COVID-19 pandemic. Internet access and smartphone facilitated the creation of platform aggregators, which emerged as a new workspace for young workers in India. However, food aggregators term these workers as 'delivery partners'; this changes the employer-employee relations and allows companies to avoid liabilities and reduce costs. This has led to systematic exploitation and dismal working conditions for food delivery workers. Further, Workers at platforms suffer from low wages (and benefit), absence (or lack) of welfare measures, and discriminatory practices. The COVID-19 pandemic and resultant lockdown have further aggravated the precarity of on-demand work and workers. Pandemic has shown that with loss of livelihood and income, the notion of autonomy and flexibility at work is meant for the privileged few. This precarious situation of food delivery workers calls for affirmative action in terms of regulations, social security, and protection.

## 1. Introduction

The spread of the COVID-19 pandemic and the announcement of nationwide lockdown on March 24, 2020, by the government of India, threatened the livelihood of 90 per cent of the workforce of the country, which happens to be unorganised or informal sector. Resultantly, the economy got a shock effect with a GDP contraction of 7.4 (Govt of India, 2021), making both informal and formal economies highly precarious. The lockdown was one of the world's most draconian acts, which left most workers highly vulnerable and resulted in unprecedented pain.

In this background, this study tries to understand the labour market in India dynamics in the emerging platform economy. Expansion of platform economy has created a new form of work arrangement. It has facilitated the rise of gig workers in India, characterised by short-term contracts, temporary, and pseudo-self-employment. Generally, gig work is supposed to be autonomous flexible with better pay. However, the reality is different and essentially precarious in India, as most workers are unskilled and uneducated.

Considering on-demand work, the precarious work arrangement is attributed to dependent labour and working conditions that impede the realisation of individuals' active social and economic participation (Stewart & Stanford, 2017). Therefore, precarisation of work at platforms describes the structure of dependent labour with low wages,

contractual employment, unscheduled timings, absence of union and predominantly consuming working conditions (Johnston & Land-Kazlauskas, 2018). However, work precarity is limited to is an explicitly specific problem or concerned social groups (young persons, women, the unqualified), but this is considered a structural classification. Academic debate refers precarisation as the outcome of a 'neoliberal' regime and policies (Bourdieu, 1998) while emphasising the role of capital (Fidler, 2016; Srnicek, 2017).

Majority of literature tend to focus on unique characteristics of the app-based platform work, as platform aggregators rely on algorithms for work arrangement (Kenney & Zysman, 2016; Rosenblat & Stark, 2016; Zwick, 2018) and future of work and regulations (Stewart & Stanford, 2017; Cherry and Antonio, 2017). However, there is inadequate focus on work arrangements, practices and profiteering on workers' expenses.

The Digital revolution has changed how people work and provides a glimpse into work's future (Huws et al. 2018). Many online services demands for app-based food delivery have become popular. The food aggregators such as Zomato and Swiggy are India's most prominent cases of such platforms. The online food delivery sector's rapid growth (25–30 per cent CAGR) will likely become an \$8 billion market by 2022 (Google and Boston Consulting Group, 2020). This should create a considerable amount of employment and raise the question of 'what kind of employment.

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This study contributes to sharpening and redefining the framework of work precarity by integrating precarious work processes in the on-demand platform work and labour market. Further, this draws evidence from qualitative interviews with food delivery workers to evaluate the interface of the specificities of on-demand platform work and aggravation of precarity in the COVID-19 pandemic. This posited essential research questions:

Research Questions 1. How is on-demand platform work becoming precarious?

Research Questions 2. How has the precarity of food delivery workers aggravated and shaped during the COVID-19 pandemic?

Our study makes some significant contributions to the body of academic knowledge in the following ways. This study is a detailed examination of processes in work precarity for delivery workers at platforms in India. Second, we also examine aggravation in the precarity of work due to the COVID-19 pandemic.

## 2. Research methods

We have applied a two-phase method to understand the prevailing platform based on-demand work in general and in the context of the COVID-19 pandemic. The approach of the first phase was dedicated to a literature review on on-demand platform work and food delivery workers to understand work precarity. The second phase of the study was focused on the empirical exercise with platform-based food delivery workers.

### 2.1. Systematic literature review

In the first phase, we conducted an interdisciplinary review of the literature to understand the socio-economic impact of platform-based food delivery work on workers. The literature review was extensive but restricted by limited on-demand platform work, especially in food delivery workers. So, we covered most of the literature we could, depending on accessibility and time constraint. This literature mainly dealt with the work precarity, on-demand platform work, and food delivery workers to get a broader understanding of the working condition in the on-demand food delivery work.

For the literature review, we identified 71 documents on 'food delivery workers' and related areas using the research databases- Scopus, ProQuest, Web of Science, and EBSCO. The wide breadth of databases examined and used owing to the interdisciplinary nature of the subject. Further, literature screening also included books and book chapters, policy briefs, reports, working papers, and other grey literature. While the app-based food delivery work is new, our initial search reveals that a systematic literature review was not viable as there is not enough publication on the subject. Therefore, we adopted a more exploratory approach to the literature review and used narrative synthesis to further critical understanding.

The source literature used was published between 2010 and 2020 due to apparent reasons of newness in the platform economy and the emergence of literature.

### 2.2. Field data and interactions

The second phase focused on empirical evidence from field responses of food delivery workers. Respondents were well informed and consented before interaction. We used a qualitative case approach with an influential case design to assess the work precarity for food delivery workers. Only those respondents who operated for at least one of the two platform aggregators (Zomato and Swiggy) during the COVID-19 pandemic and before were selected for interview. We interviewed thirty-seven (37)<sup>1</sup> Food delivery workers (in Table 1) and two focus

group discussions comprised of 7 and 9 workers each, so, in total, we interacted with 53 workers. The interviews were based on a semi-structured questionnaire capturing the various aspects of work precarity for food delivery workers and likely aggravation of precarity in the COVID-19 pandemic.

The focus group discussion (one each for Zomato and Swiggy) was conducted outside the two famous restaurants located in close proximity. To capture the extent of the precarity of work, a multi-tiered recruitment strategy of respondents was employed. This led us to adopt purposive and subsequent snowball sampling due to limited sampling possibilities caused by the COVID-19 pandemic. All interviews were conducted with the semi-structured questionnaire and in person. The Hindi language was used for interviews for better comprehension. During August–December 2020, the peak time of the COVID-19 pandemic first wave in India, the interviews were carried out. Each interview lasted between 25 and 40 min. All the respondents were food delivery workers with a bike/scooter and a smartphone. As the movement was highly restricted, early interactions were face-to-face street intercepts in Jaipur. Factors such as the COVID-19 pandemic, lockdown, diverse respondents, and study nature led to different interview dynamics. For example, street intercepts happened while we ordered food or food delivery workers waiting for their next delivery outside a restaurant; occasionally, we had to cut short these interviews, in some cases, convene again at a later stage.

### 2.3. Results

Not all food delivery workers worked solely for one food aggregator, with three workers indicating that they were also involved with other platforms. Further, 19 workers solely worked for Zomato, and the remaining 18 worked for Swiggy. Further, workers employed different types of transportation to deliver food: 84 per cent used motorcycles, and 16 per cent used scooters to commute. All participants were male. The semi-structured interview comprises specific questions on food delivery workers' work experiences and implications of the COVID-19 pandemic on the workspace. Questions were focused on - what kind of working conditions they are subjected to in the context of wage, welfare measures, social security, unionisation, social stigma, administrative apathy, health risk, and role of technology and control. This allowed us to have a thematic analysis of the interview data for better conceptualisation and capture various precarity aspects in platform-controlled on-demand food delivery work.

## 3. Literature review

The digital economy assisted by capital has emerged as a disruptive force in the traditional economic path. In the platform economy, workers provide means of production coordinated by the contractual arrangement and digital system (Srnicek, 2017). Capitalism always has been at the forefront of the conflict between capital and the working class (Coase, 1937). Even though the genesis of capitalism considers both enterprise and worker as equals entering a contractual relationship, working conditions show otherwise.

Technological advancement and the digital revolution have given new meaning to work in a dynamic economy. The platform economy is digitally enabled, extremely precarious and commodified internet-enabled labour. This is seen as a continuity of neoliberalism (Sundararajan, 2016; Gandini, 2018; Peticca-Harris et al., 2018), comprised of growing financialisation (Lapavistas, 2011), fissurisation (Weil, 2014), and precarisation of work (Rubery et al., 2018; Standing, 2016) along with features of online-Taylorism (Cherry and Antonio, 2017) and postcapitalist (Peticca-Harris et al., 2018).

Theoretically, on-demand platforms connect workers with end-users instantaneously while creating two-sided online marketplaces for services (Hall & Krueger, 2015; Srnicek, 2017). Identification of on-demand work via platform aggregators is a reconfiguration of

<sup>1</sup> Brief detail on each respondent is provided at the end of the paper.

**Table 1**  
A brief introduction to respondents.

Participant	Zomato	Swiggy
Participant 1	<i>He is a 25-year-old computer diploma holder. He has been working with Zomato for 19 months. Before joining Swiggy, he used to run a small cybercafé but soon in a year, footfall dropped, and rent increased, forced to shut down.</i>	
Participant 2		<i>He is a 21-year-old college graduate. He has been working with Swiggy for nine months. Before this, he was running a fruit-and-vegetables shop.</i>
Participant 3	<i>He is only 18 years old with secondary education. He has been working for Zomato for 11 months to support his family.</i>	
Participant 4		<i>He is a 24-year-old commerce graduate. He has been working for Swiggy for almost a year. He is working as a delivery boy as there is no other option.</i>
Participant 5	<i>He is a 24-year-old with only primary education and has worked with Zomato for seven months to support his family. He was a farmer on the outskirts of the city. However, their lack of income forced him to join food delivery work.</i>	
Participant 6	<i>He is a 22-year-old college graduate, and he has been working with Zomato for two years to earn extra income for his family.</i>	
Participant 7	<i>He is a 25-year-old diploma holder, and he has been working with Zomato for nine months. He worked as an electrician but lost the job as the shop got shut down.</i>	
Participant 8		<i>He is a 25-year-old college dropout. He is the only breadwinner of the family and working as a delivery worker for ten months due to a lack of options.</i>
Participant 9		<i>He is a 26-year-old intermediate educated, and he has been working with Swiggy for 19 months. He delivers the food with the assistance of the younger brother for a month, as he met an accident two months ago.</i>
Participant 10	<i>He is a 26-year-old school dropout and working for more than 15 months with Zomato. He joined Zomato after suffering losses in the family business. He wants to learn a foreign language and migrate abroad.</i>	
Participant 11	<i>He is a 24-year-old with a Polytechnic degree. He has been working for Zomato for the last 11 months to support and supplement the family income.</i>	
Participant 12	<i>He is a 21-year-old postgraduate student working for ten months with Swiggy. He is only working to support his expense.</i>	
Participant 13		<i>He is a 26-year-old secondary school student working for seven months with Swiggy. He is working as a delivery boy as no other decent job is available.</i>
Participant 14		<i>He is a 29-year-old with high school education, working for Swiggy for two years. He has re-joined Swiggy after eight months of gap. A year ago, he met an accident, and after treatment, he opted for the watchman's job. However, he was forced to join Swiggy again due to his meagre income.</i>
Participant 15		<i>He is a 23-year-old postgraduate, working for Swiggy for only two months. He is working to make some spare money.</i>
Participant 16	<i>He is a 27-year-old school dropout. He has been working with Zomato for 1.9 months. He likes delivering food as this is the best opportunity for him with decent pay.</i>	
Participant 17		<i>He is a 20-year-old college student, working for Swiggy for 13 months to support himself.</i>
Participant 18	<i>He is a 32-year-old college dropout, working for Zomato for one year. During the lockdown, he went back to the village. He was back in the city when the lockdown was over, but orders were low in number, and he was suffering the loss of income.</i>	
Participant 19		<i>He is a 26-year-old school dropout. He has been working with Swiggy for almost six months to support family earnings. He is happy with the work, mainly due to his flexible nature.</i>
Participant 20		<i>He is a 28-year-old with an ITI diploma. He has been working with Swiggy for 1.5 years and now looking for a job change in some manufacturing plant.</i>
Participant 21		<i>He is a 22-year-old college graduate. He has been working for Swiggy for almost four months. He wants to work as an accountant in a big company, but there are no opportunities.</i>
Participant 22	<i>He is a 20-year-old and in the second year of graduation. He has been working with Zomato for about ten months to supplement his income and expenses.</i>	
Participant 23		<i>He is a 29-year-old postgraduate working for Swiggy for 15 months. Before this, he was working as a waiter in a local restaurant. However, low wages forced him to do food delivery work.</i>
Participant 24	<i>He is 21 years old high school dropout. He has been working with Zomato for eight months. He is working to support his family, which is the best option available to him.</i>	
Participant 25	<i>He is a 30-year-old history graduate. He has been working with Zomato for over two years. Financial difficulties and losses in the family business forced him to work delivery.</i>	
Participant 26	<i>He is a 26-year-old diploma holder and has worked with Zomato for 11 months. Before this, he was working as an electrician on contract. However, the economic slowdown in 2019 led to a large layoff, and he lost his job.</i>	
Participant 27		<i>He is a 23-year-old college dropout. He is the family's only breadwinner and has worked for Swiggy for almost eight months; and is also looking for a better and more secure job.</i>
Participant 28	<i>He is a 27-year with secondary level schooling. He has been working with Zomato for more than two years. Earlier, he was working as a watch dealer. However, the popularity of smartphones made his business unviable.</i>	
Participant 29		<i>He is a 29-year-old with only primary-level education. He has been working for Swiggy for 1.8 years. Before this, he worked as a security guard for three years.</i>
Participant 30		

(continued on next page)

Table 1 (continued)

Participant	Zomato	Swiggy
Participant 31		He is only 24 years old high school dropout. He has been working for Swiggy for almost seven months. Before this, he was running a small electronic repair shop. He is looking for a stable job. He is a 23-year-old with secondary-level schooling. He has been working with Swiggy for 13 months. He is happy with the work as pay is decent more than other places.
Participant 32	He is only 18-year-old and currently in the first year of graduation. He has been working for Zomato for only six months. He aims to supplement his income and take care of expenses.	
Participant 33		He is a 32-year-old commerce graduate. He has been working for Swiggy for more than two years to support his family as there is no other alternative.
Participant 34	He is a 22-year-old with a high school education. He has been working for Zomato for almost a year. About seven months ago, he had an accident while delivering the food. He had to pay for treatment himself and still waiting for compensation.	
Participant 35	He is a 28-year with a computer diploma. Earlier, he worked as a data entry operator for a real estate company. The later company got close and was forced to work as a delivery boy.	
Participant 36	He is a 25-year-old college graduate. He has been working with Zomato for nine months. He thinks that even though earning is decent but job precarity overwhelming.	
Participant 37		He is a 21-year-old college student. He is working with Swiggy to supplement the family income. He also does not consider food delivery work as a long-term option.

Source: by the author

on-demand work and workers and related institutions (Parwez, 2015). It is a relationship between the worker and a customer, arranged by a digital shadow employer (Heeks, 2017; Gandini, 2019). On-demand platform work has been differentiated between labour and capital-based platforms. "click-work" platforms employ workers for short-term online assignments (Gandini, 2019). Then there are platforms facilitated as meeting places for workers with their clients (Parwez, 2015), and (c) work-on-demand, or consumer-led services, this includes delivery via an arrangement made and controlled by platforms aggregators (Heeks, 2017; Stewart & Stanford, 2017). App-based food delivery by food aggregators such as Zomato and Swiggy<sup>2</sup> India falls in this category. Additionally, 'capital platforms' facilitate renting assets or labour; it covers highly precarious domestic work (Stewart & Stanford, 2017). Platforms profit from the percentage of each transaction from customer to workers and resultants/eateries and low pay to workers, taking advantage of labour surplus (Peticca-Harris et al., 2018; Gandini, 2019). This could be the case of 'rent-seeking' behaviour.

The arm's-length contractual relations between platforms-workers play are structured non-standard work arrangements (Rubery et al., 2018). It allows the transfer of economic risks to workers who need a motorbike and a smartphone to work as food delivery workers and be remunerated on a piece-rate basis (De Stefano, 2016). This arrangement excludes workers from social protection. Resultantly, in absence of any labour rights, platform workers are highly exposed and vulnerable to market forces (Stewart & Stanford, 2017). This reflects precarious working conditions, lack of social protection, low wages, safety issues, occupational stress, irregular work schedules, and lack of collective actions (Fidler, 2016; Drahokoupil & Piasna, 2019; Parwez, 2016a).

However, there is no universally accepted theory on precarious on-demand work (International Labour Organization, 2016). However, precarity is the contractual arrangement and derives from invisible working conditions. In a traditional employer-employee relationship, a worker faces precarity due to low wages, work pressure, and occupational stress (Standing, 2016; Stewart & Stanford, 2017). However, precarity in on-demand work for platforms aggregators is largely hidden with entrenched distinct forms of control, feedback, ranking, and rating system (Gandini, 2019).

Additionally, in India, platform-based on-demand work is not regulated by customary labour laws, as workers are termed and in the

contract as to delivery partners. Resultantly, work arrangements between platform and workers do not fall in the traditional employer-employee relationship. These platforms aggregators do not recognise food delivery workers as employees; instead, they refer to them as 'delivery partners'. This allows companies to avoid traditional employer-employee relationships and compliance with labour laws, increasing transaction and labour costs while controlling workers' movement via digital system (Leighton & Wynn, 2011; Parwez, 2015).

Despite the small size of the online food delivery market, there is pressure on regulatory bodies, as it may bear severe implications for working conditions and labour market institutions. There is a likelihood of severe implications of platform work arrangement on local industrial relations and employment standards.

#### 4. The precarity of work at platforms: opportunities and risks

The working relationship between platforms and food delivery workers is not traditional because the official terminology used for food delivery workers is of 'delivery partners' by the companies. So, there is no formal employer-employee relationship; this allows the company to do away with many labours related costs. This makes them disposable and informal; they can be hired and fired at any given time (Parwez, 2015; Standing, 2016; Stewart & Stanford, 2017).

Food delivery is achieved by a contractual arrangement with a willing worker having a bike and smartphone. Food delivery workers are essential for the proper functioning of the food delivery cycle. Platform aggregators only provide the pick-up location and customer address to food delivery workers but this creates opaqueness in the task allocation and influences workers behaviour. It is largely because they do not know the modus operandi of apps, especially regarding orders, allocation, and incentives (Peticca-Harris et al., 2018; Gandini, 2019).

Food delivery workers are supposed to deliver food from the respective restaurant to the assigned address in the minimum possible time. The app-based food management system provides a tracking system, and being late in delivery could lead to a low rating. A low rating for food delivery tends to go against workers and impacts the incentive and commission they get for each delivery. As wage and incentives for food delivery workers also depend on these ratings. This rating practice also reflects the precarious situation of workers (Gandini, 2019). It is all managed by the digitally enabled information system.

This information system exercises control over workers with reward and punishment. This facilitates platform aggregators to track, supervise, and extract surplus labour value. This system pushes delivery workers to work longer hours, defeating the purpose of autonomy and

<sup>2</sup> Zomato and Swiggy are India's two largest food aggregators, with more than 300000 food delivery workers and more than 50 million orders per month across India.

flexibility in work (Agrawal et al., 2015; Parwez, 2016b).

This reflects on current working conditions in the food delivery space being precarious and non-standard. International Labour Organization (2016, 396) defined non-standard work as 'temporary work, part-time work, temporary agency work and other multi-party employment arrangements, disguised employment relationships, and dependent self-employment.

Further, non-standard work is attributed to temporary, fixed-term, part-time, and self-employment (Parwez, 2016b). Kalleberg (2018) denote precarious employment with uncertainty, unpredictability, and risk from the worker's perspective.

Dörre (2005) identifies work precarity in the material sphere, social communication, and legal/institutional sphere in on-demand platform work. The material sphere capture job insecurity and lack of economic dignity in the job. Precarity in social communication focuses on the lack of social networks at the workplace. Then legal/institutional sphere talks about the exclusion of certain social rights. This provides a multidimensional structure and reflects on the precarious working conditions for on-demand workers.

#### 4.1. Technological control and illusion of autonomy

When data is becoming the new oil, those who own it have higher power over others. Here digital platform aggregators by design capture and control data on stakeholders' viz., customers, platform personnel which gets aggregated and refined over time (Arntz, Gregory, and Zierahn, 2016). This large-scale data that comes in volume, velocity, variety, and veracity increases the power of capital over labour (Romei, 2015).

Even though these online platforms have been hailed for market efficiency, there is the reality of forced labour underlying this free-market phenomenon. It is the outcome of imperfect information and the low bargaining power of workers. Because platform aggregators only provide the pick-up locations (the restaurants) and customer addresses to food delivery workers. The opaqueness about the task allocation tends to influence workers' behaviour. As workers are uncertain about how the app works, for instance, how proximity to restaurants and rating affects their capacity to get orders and incentives. Data is managed and controlled by a platform; this influences the labour process in general. This prevents workers from making an informed decision about the orders they accept, curbing their capability to choose (Interviews 2 and 17).

*Participant (10) said, "Everything happens through the mobile app. We do not know how it works".*

Further, organisational culture emphasising workers' autonomy and flexibility keeps labour welfare activity aside while these food delivery workers consider themselves company employees. This is an outcome of institutional inclination towards capital and power play between platform and workers. This inclination is post-LPG (Liberalisation, Privatisation and Globalisation<sup>3</sup>) phenomenon embedded in information asymmetry due to institutional, societal, regulatory, and economic arrangements (Gyulavári, 2020).

Digital enterprises such as Zomato and Swiggy have created excitement among investors, consumers, and policymakers. The business model is primarily based on the transportation of requisite products. This form of service is achieved by a contractual arrangement with a fleet of cyclists to deliver food to the respective customers. To be employed, an individual only requires a bike and smartphone (Interviews 3, 5, 9, 13, 16–17, 20, 25, and 32). This may sound simple and

convenient, but on the contrary, there is a detrimental impact on food delivery workers (Aloisi, 2016). It impedes the entry for a segment of the worker who does not own either or both assets (Interviews 14). Further, the nature of food delivery requires a worker to be on the move in odd hours for a long duration, constraining the entry of women in the workforce.

#### 4.2. Precarity of work

Digital platforms are changing the very nature of work while facilitating the upsurge of the gig economy. The platform aggregator Zomato and Swiggy are the most prominent food delivery platform. However, platform practices have aggravated the precarity of work, as workers suffer considerable misery in the absence of labour protection (Interviews 1, 7, 11, 12, 28, and 32). It is mainly because employment in food delivery is temporary and on-demand. Participation in this form of economy is regular or occasional for primary or supplementary earnings (Interview 7, 10, and 19).

Most food delivery workers are educated, male and young, while lack of employment opportunities makes on-demand work attractive. These workers come from diverse socio-economic backgrounds, reflecting the general composition of any other industry in India. In most cases, graduates or postgraduates work as food delivery workers (Interviews 2, 4, 6, 12, 13, 15, 17, 20, 30–32, and 37). Food delivery workers and their work are primordial to the proper functioning of food delivery platforms. They are the primary risk bearers in the food delivery cycle. Constrained by lack of time and fast delivery forces them to risk, sometimes it leads to road accidents and issues with traffic police (Interviews 5, 9, 14, 16, 24, 28, 32 and 34–35).

*Participant (14) said, "I met a fatal accident on duty and fractured the arm. However, there was no response from the company, and I was forced to pay for medical expenses by myself. This accident left me seriously injured, and I could not work for five months. Later I tried to claim medical insurance, but there was no relief even after many attempts".*

Food aggregators such as Zomato and Swiggy use the term 'delivery partner' for food delivery workers to avoid legalities, liability and cost. This allows them to treat delivery workers as self-employed independent contractors. They defend this with the notion of freedom, autonomy, and work flexibility. Further, control is exercised by the food aggregators through structured incentives and penalties, which determines the final wages of workers (Agrawal et al., 2015). Nevertheless, workers consider themselves employees of these platforms and expect decent wages and working conditions (Interviews 9, 17–18, 23, 26–29, and 32). This is repackaging and aggravation of the precarity of work for some time. International Labour Organisation (2016) suggests a lack of clarity in defining gig work and workers causing precarious working conditions (De Groen & Ilaria, 2016).

*Participant (25) said, "My business ran into huge losses, and he was forced to work as a food delivery worker. I aspire to earn enough money to meet losses and re-start the business with more capital and market experience".*

The terms 'delivery partner' has severe ramifications for the traditional employer-employee relationship. These terms may sound a bit upmarket, sophisticated, and progressive. However, the work arrangement reflects working conditions with low wages, insecurity, absence of social security and labour unions. This leads to the aggravation of systematic precariousness (Hall & Krueger, 2015).

The contractual arrangement between platforms and workers is not always based on a written contract specifying terms of duty, benefits, notice period and more (Parwez, 2015). The majority of workers do not even understand the terms and language of the contract, often unclear in constructing the statements (Interviews 6, 7, 12, 13, 28, and 29). Such a working condition reinforces informality, which is relatively better than

<sup>3</sup> Liberalisation, Privatisation, and Globalisation are the three elements of the new economic model introduced in 1991. It ensured the opening of the Indian economy for trade, investment, services, and technology to the world. It aims to achieve a competitive economy and rapid economic development of India.

traditional informal work.

*Participant (19) said, "Every day I am forced to work for 12 hours a day. The flexibility in work hours is only an incentive for me. I am looking for a government job".*

For example, the risk of driving on the highly crowded roads of Indian cities, with the pressure of delivering the food in or before time, adds to occupational stress (Interviews 6, 9, 12, 19, 26–27, and 30). Further, food delivery workers are forced to work in extreme weather conditions (extreme heat, rain and cold) (Interviews 1, 4, 7, 12, 15–17, 19, 23, 27, and 29). Control is a further exercise with a system of reward and punishment. Delivery of an order within the prescribed time is a must, failure to do so result in a strike against their name in the digital system (Interviews 2, 6, 9, 10, 12, 17, 22, 25–29, 32, 33, and 37). This allows the platform to control, supervise, incentivise, and punish workers for extracting surplus labour value. It may reflect on the dystopian system, a gargantuan reality with the increasing use of digital instruments and processes to track and monitor workers.

#### 4.3. Social protection and security

For most of these food delivery workers average working hours is 12 h/day; this goes against the ILO standard. The composition of wage arrangements is based on a piece-rate and incentives. The incentive-based system pushes delivery workers to work longer hours. The idea of flexibility and autonomy combined with the pressure to 'keep the app switched on is a significant issue. Companies' promise of flexibility in work and autonomy does not hold much for the workers (Interviews 11, 19, 25, 27, 30–31, 33, and 37). The increasing occupational stress and dismal working conditions have led to further discontent and stress. In the name of welfare measures, platforms claim medical insurance is provided to workers, but they are largely unaware of the modalities of availing insurance benefits (Donovan et al., 2019).

*Participant (31) said, "You can be your boss, and you can work as you wish, but this rarely happens".*

*Participant (30) said, "I want an office job, so I do not have to run all day long. I want to leave this job as I cannot do this all life, but there are no other options."*

Whether Zomato or Swiggy, ratings are important; they reflect on service and food quality. These ratings were given by a customer voluntary, but this made out to be forceful and emotional. While delivering the food, all food delivery workers always ask (request) customers to give high ratings. A restaurant tends to get higher orders with higher ratings as most customers tend to rely on ratings before making any order. Every food delivery worker requests the following quote "please give the rating". It is always an emotional pitch (Interviews 1–3, 5, 8–10, 12, 17, 21, 26, 28–29 and 33).

As wage and incentives for food delivery workers also depend on these ratings. This practice of ratings also reflects on the precarious situation of workers.

Food delivery work is primarily considered an unfeasible long-term source of earning (Interviews 9). This, among many other factors, tends to impact participation in the labour market of the platform economy. However, in the recessionary Indian economy, this makes a case for an employment option, but there is also a case of high labour turnover.

Though, precariousness and exploitative practices are part of the labour market reality in the platform economy (Veen et al., 2017). It calls for affirmative actions towards desirable digital enterprises and should be necessary to improve workers' conditions. This must not be left to the ethical considerations but regulations and laws.

## 5. Food delivery work in COVID-19 pandemic: aggravating the work precarity

The spread of the COVID-19 pandemic and subsequent lockdowns for months led to the loss of millions of jobs and threatened many more. It has created a precarious and uncertain future for the economy and livelihoods. The platform economy is also one of the most affected sectors. The informal nature of work arrangement at the platform has made the situation of food delivery workers appealing.

Digitalisation of the economy, socio-economic inequality and institutional issues has facilitated the precarity of work to insurmountable proportions.

### 5.1. COVID-19 pandemic and lockdown: loss of livelihood

COVID-19 pandemic has exposed and aggravated the precarious nature of work and uncertainty of on-demand platforms, undermining the dignity of work and workers (Stewart et al., 2020). This has further reflected the precarity of work at the platform without employment rights, social security measures, protection, and compensation (Johnston & Land-Kazlauskas, 2018).

*Participant (14) said, "Most Zomato officials are working from home, there is no customer-care option for any problem. I am also worried about losing this job or getting a new rate card for delivery. I do not have enough savings to last for even a month."*

*Participant (18) said, "These days I am getting very few orders to deliver even though lockdown is eased. I am still working 10 hours/day, but the company is neither concerned nor providing any incentive."*

*Participant (23) said, "During the lockdown, there was no roadside (affordable) food to eat. Luckily, there were two restaurants providing food to people like us."*

COVID-19 pandemic and several nationwide lockdowns have led to job loss for thousands of food delivery workers and threatened many more livelihoods (Interviews 9, 11, 14, 18, 21, 23, 27, 29 and 33). In the middle of lockdown, Zomato cut 13 per cent of its workforce and pay cut for the remaining workers. This was followed by a similar move by Swiggy, which cut about 1000 jobs (IndianExpress, 2020). The step is primarily directed towards reducing costs and surviving the COVID-19 pandemic. Even though platform aggregators are digital firms, food delivery is highly labour-intensive. Lack of demand and higher labour costs force companies to retrench workers (so-called delivery partners).

### 5.2. The apathy of platform aggregators

Along with the risk of job loss, food delivery workers were also highly vulnerable to infection to the highly contagious COVID-19 pandemic (Lalvani & Seetharaman, 2020) as on-demand work of food delivery requires transportation of food, physical proximity, and contact receive/delivery with restaurants and customers. Even though these digital firms rely heavily on food delivery workers, steps taken by platforms suggest otherwise.

Evidence suggests that these digital companies were not taking measures for workers' security, welfare and safety in this Covid-19 pandemic barring a few ornamental cases where masks are distributed. Platforms claim an adequate supply of sanitisers and disinfectants to workers, but reports suggest a different story. In the absence of support from the company, food delivery workers are forced to purchase masks and sanitiser at their own cost (Interviews 1, 4–7, 15–18, 26, 27, 29, 36, and 38). Food delivery workers do get health insurance, but as per the pre-COVID-19 pandemic norms, this does not insure workers from COVID-19 pandemic-related health risks. Even standard insurance coverage is of little help, given their past experiences with accidental insurance (Interviews 2, 5, 8, 14, 16–17, 23–24, 27, and 34–35). For

example, workers are unaware of claiming insurance, amount insured, time frame, kind of treatment, place of treatment, and medicines.

*Participant (8) said, "I am the only breadwinner of the family and delivering food due to a lack of options. One of my friends met an accident and lost his life while delivering food. As he was driving hurriedly to deliver food on a rainy day, his motorcycle slipped and got skid to road divider and died due to a head injury. His family could not claim medical insurance due to the grief and the hassle of making the claims".*

*Participant (36) said, "Somehow I am managing without any work but do not know what will happen next month onwards. I am not even able to send any money back home. Moreover, there is much pressure to pay for rent and loans."*

Further, it was evident that these platforms are more focused on communicating hygienic practices to customers and authorities rather than practising in reality and providing protection to both workers and customers. These platform aggregators preserve and expand their reputation by regularly texting customers regarding safety measures. They also keep consumers informed about the adoption of World Health Organization protocols for each delivery, with hygiene images on the app webpage. They seem to be more focused on image build-up feedback than helping workers with health and economic risk. However, most delivery workers are unaware of the health protocol and guidelines, reflecting on platform aggregators' little efforts and priorities.

*Participant (6) said, "I am not getting enough orders to earn a reasonable incentive, for this today I waited for extra 2 hours, but all in vain".*

Even though the services have expanded to food groceries, orders were still low. This forces a food delivery worker to take more orders and work long hours, adding to health risk, stress, and more expense on fuel (Interviews 7, 9, 13, 20, 25, and 32). Despite the demanding realities, food delivery waits for the next order to remain employed at any cost and risk (Interviews 2, 4–6, 9, 12–14, 17, 20–21, 25, 29, and 36). For example, these companies are supposed to ensure contactless delivery, but they also allow cash transactions; this dilutes the rationale of contactless delivery (Interviews 2, 7, 9, 14, 17, 21, and 26). It also underlines the approach and lack of platforms' understanding of their workers' safety requirements.

### 5.3. Safety and social stigma

Even though the authorities categorise food delivery as an essential service, it was not easy to get passes to move around. This had a severe implication on workers, and they were penalised for not being able to work even though they were available (Interviews 3, 5–6, 10, 13–14, 19, 21–22, 24, 28–29, 33).

Reporting a few food delivery workers being tested positive with the COVID-19 pandemic has further aggravated the situation.

*Participant (25) said, "Customers shout and tell us to deliver and ask us to leave food at the door, even though we are supposed to make contactless delivery. We are forced to make delivery at doorsteps bearing the risk of contamination. Further, a few days ago, a customer complaint against me as I asked him to come to the gate and collect the food."*

*Participant (29) said, "it is scorching in summer; still, I wear the company's uniform over my cloth as an extra layer for safety. So, I will shed the uniform outside whenever I come back home. Then I go to the bathroom to change cloth, wash my hands and face before interacting with the family."*

Understandably, food delivery workers have a great incentive to conceal symptoms and go on with the work, as this is the only source of income during a pandemic. If workers get infected, their accounts are temporarily put on hold without financial assistance.

These food aggregators have also set up funds through crowd

funding, but there is no transparency on the particulars of the funds, which raises questions about transparency. Further, they have requested or referred workers to government agencies for financial support. It also suggests that these platforms are trying to shift responsibility to the government. This further echoes the increasing precarity of on-demand workers with these platform aggregators in this pandemic.

*Participant (18) said, "After April 15, I wanted to join the food delivery work again, but the extension of lockdown left me with no choice but to return to hometown. As there were not enough savings for food and rent and no other form of job is available."*

Food delivery workers are also subject to social stigma due to the ongoing COVID-19 pandemic. Workers are being harassed and discriminated against by the police and customers, making it difficult to work (Interviews 1, 3–4, 6–7, 10–13, 15–17, 19–22, 26–27, 30–32 and 35). The poor implementation of COVID-19 pandemic guidelines has further constrained the movement and safety of food delivery workers (Interviews 2, 5, 8–9, 13–14, 19, 22, 27, and 31). Further, there were reports of physical assaults on food delivery workers by police in Bengaluru and Delhi.

*Participant (3) said, "There is road blockade at every corner, and police harassment is part of everyday work."*

*Participant (16) said, "Once I was delivering food in an outlying area, but some antisocial element robbed me with food, phone, and cash. I was also threatened with physical assault. I also tried to call the Field manager, but the call got diverted to Customer Care, which was not helpful at all".*

### 5.4. COVID-19 pandemic and social security: working hard but earning less

As mentioned, the COVID-19 pandemic led lockdown has forced considerable job loss in the platform economy. Resultantly, platform aggregators lay off thousands of workers, most of whom are their families' sole breadwinners (Interviews 4, 9, 13, 19–20, 27, and 34). The job loss and fear of job loss make food delivery work highly precarious (Raj, 2020). Though food aggregators rely heavily on the workers, there is no plan for workers safety and compensation even after months of lockdown.

*Participant (4) said, "I am not able to complete my daily target as there are not enough orders. Every day I start delivery of food to customers at 8 in the morning to 11 in the night in order to complete the target, so I remain employed with the company even though I am making very little."*

*Participant (13) said, "My landlord warned me against going out for work. However, I had only meagre savings during the COVID-19 pandemic, and it was not going to last long. So, I and some of my friends rode for thousands of kilometres to Bihar. It took us about three days to reach home in dire circumstances".*

*Participant (24) said, "All problems began with the lockdown in March. Before, this job felt good and stable, but now it feels like slavery."*

The fear among customers of COVID-19 pandemic infection results in fewer orders and loss of income and jobs. Even though lockdown has eased, fear remains, reflecting on new normal and consumer behaviour. Further, the practice of social distancing is detrimental to these labour-intensive works as fear psychosis of the virus and hesitancy to order are adding to the misery. Consumers are slowly coming back to these food platforms. However, demand is low, resulting in low earnings for the food delivery workers as they tend to get paid according to delivery completed (Interviews 2–3, 5–6, 8, 11–13, 16, 17, 21 and 32).

*Participant (5) said, "Before working as a food delivery worker, I used to do farming. But due to meagre income and losses I was forced to migrate, but my family continues to live in the village".*



*Participant (10) said, "I used to own a family shop where they manufactured and sold bangles. Nevertheless, my income was not enough so, now I am delivering food to earn extra income. However, my dream is to learn a foreign language and migrate abroad".*

Further, there is a severe infringement on the privacy of food delivery workers. Food aggregator Zomato's made it mandatory for its food delivery workers to install the controversial *Aarogya Setu*<sup>4</sup> App in their smartphones. This practice inherently infringes on their autonomy and right to privacy (Interviews 9, 16, and 27). Nevertheless, these platforms tend to ignore workers' autonomy like most players in the platform economy. This has circumvented India's complex labour laws regime, following inequitable conditions where workers are precarious (Cherry and Antonio, 2017).

*Participant (16) said, "I have no idea how this app (Aarogya Setu) works why I am told to install it on the phone".*

Furthermore, food delivery workers are hired as 'delivery partners' makes them subject to exploitation, unethical practices and unforeseen eventualities. It was evident in this COVID-19 pandemic.

### 5.5. Collective actions

Collectives are essential to advance the agenda of emancipated beings. The risk associated with working conditions, health, and social security call for collective actions to mitigate unethical practices and precarious working conditions at on-demand workspaces. The collective action in terms of unionisation of food delivery workers is challenging in the digital platform. In the absence of labour union, expression of any form of protest, resistance, and discontent can lead to job loss (Interviews 1, 3, 5–6, 8, 10–11, 15–17, 20–21, 23–26, 29, 32, and 37). It is primarily embedded in cultural precariousness that demotivates the workers from unionising. The competitive culture in the labour market tends to dispose a worker against the other to discourage collective actions (Interviews 7, 19, and 21).

*Participant (9) said, "There is a union that want us to be part of the movement and agitate, but I need this job".*

Even though several trade unions demand monetary support and safety measures for food delivery workers in these dire times, success is limited. This is mainly due to the complexity of the digital platform, lack of support from the established unions and absence of government regulations (Interviews 6, 11, and 19).

Few basic precautionary measures for sanitisers, disinfectants, and masks are provided. However, only after several reports in the media and the issue was raised by the Indian Federation of App-based Transport Workers. Resultantly, there is a rise in dissent among food delivery workers leading to protests. For example, there was a protest by food delivery workers in Bengaluru, Delhi, Chennai and Hyderabad against pay cuts and lack of safety measures.

*Participant (32) said, "Since lockdown is enforced, we are forced to bear expensed of mask and sanitiser. Our manager says we will be getting them soon, but it went like this for many weeks. We also never received any reimbursement for the expenses on mask and sanitiser."*

In the prevailing work environment, the importance of collective actions increases. There is evidence of dissent and unionisation of food delivery workers, especially during the COVID-19 pandemic. For example, the *Indian Federation of App-based Transport Workers*, who represents gig workers across the country, is trying to reduce workers vulnerabilities with demand for social security and fixed-wage but has

met with limited success in making a difference in the workplace. *Marathi Kamgar Sena* provided resilient support to the strike called for monetary help by food aggregators to food delivery workers during the COVID-19 pandemic in Mumbai. *Maharashtra Navnirman Kamgar Sena* has raised a voice for equal treatment to food delivery workers with formal employment, but success is elusive. *Namma Chalakka Trade Union* demanded to regulate the food aggregators and implement labour welfare measures in Bengaluru. Several demonstrations have been backed by the *Centre of Indian Trade Unions* in West Bengal, Kerala, Telangana, and Andhra Pradesh for social protection. The *United Food Delivery Partners' Union* in Bangalore supports food delivery workers with their formal employment with social security.

The COVID-19 pandemic crisis has brought adversity and provided an opportunity to bring about desirable change in the labour market institutions. This will improve the conditions of food delivery workers and provide them with an opportunity to counter their precarious socio-economic conditions. Thus, bringing about desirable social change has been kept at bay and aggravated by current structures and the COVID-19 pandemic.

## 6. Discussion and conclusion

The food delivery workers are a new source of the transnational movement of precarious labour. These on-demand workers lack recognition, and regulations and social protection are absent. They remain invisible and ignored in public discourse.

However, the COVID-19 pandemic has captured the public and private space. Along with the consequences to life and health, it has devastated the economy. It has affected all sectors, leaving the informal economy most vulnerable. Resultantly, this exposed the precarious condition of on-demand work. Those involved in contractual employment with platforms suddenly became unemployed. The most significant impact is on platform-based on-workers, and food delivery workers' precarity reflects on such conditions. Pandemic has exposed the absence of regulations and social protection and made the precarious situation of food delivery workers worse.

This empirical analysis contributes to understanding labour-capital relations and increasing work precarity at India's app-based food platforms. However, the operating model of platforms facilitates information asymmetries restricting options for food delivery workers'; this limits their capacity to make educated determinations. The complicated performance management systems limit workers' knowledge of the complex controls and work as additional controls. The distinct control elements in the digital platform allow platforms to control labour processes that are physically scattered. It enables them to standardise delivery services while advancing the arm's length relations with workers. This also ensured less interaction between delivery workers and possible unionisation. This model further increases the precarity of work with a shift in economic risks from employer to employee.

It has also reversed the labour effort indefiniteness, shifting the obligation on workers to make most of the time effort bargain. The labour process control tricks labour-capital indefiniteness while minimising regulatory risks.

Market forces demand the presence of vulnerable labour to allow platforms to obtain surplus value with low labour costs and labour standards. The terminology 'delivery partner' has avoided traditional employer-employee relations between platforms and food delivery workers. This means a lack of employment rights and creating conditions of non-standard employment. Food delivery workers are termed independent agencies operating their own business and providing services on demand. However, unofficially food delivery partners are treated as workers. It makes food delivery work makes workers highly vulnerable.

Further, the COVID-19 pandemic has aggravated the vulnerability of food delivery workers. Pandemic followed by sudden nationwide lockdown took away their livelihood with little else to fall back. This calls for

<sup>4</sup> Aarogya Setu is a mobile application developed by the Government of India to trace COVID-19 infection & spread and create awareness among citizens.

labour regulations and social protection to protect labour rights. It made them highly dependent on relatives/friends leading to financial distress. Besides economic risk, food delivery workers also suffered from high health risks and associated social stigma from customers and authorities alike.

There were instances when food delivery workers expressed dissent in various ways but largely continued to be limited, and collective actions were absent. Even though few unions raised their voices against the precarious situation of food delivery workers, results are far from desirable.

In the pre-COVID-19 pandemic, there was a widespread argument favouring gig work with associated terminology of 'flexibility', 'freedom' and 'autonomy'. However, the pandemic has exposed that gig work is a luxury meant for only a privileged few and showcased the usefulness of traditional employer-employee relationships regulated by labour laws. It means the idea of flexibility or autonomy should not come at the cost of most basic social protection. This precarious situation calls for affirmative action from policymakers in terms of labour laws and social security.

The recent court judgment in the United Kingdom provides guidelines for formalising food delivery workers with traditional employer-employee work arrangements. Along these lines government of India should think about enacting legislation to make platform and food delivery workers relationship into formal employer-employee relation with requisite social protection. This will provide workers with some social security protection.

The government of India passed the Social Security Code, 2020, aiming to bring unorganised workers, including food delivery workers, within the social security net, but implementation is slow. This process should be expedited as the COVID-19 pandemic has made the situation of food delivery workers highly precarious and vulnerable.

Currently, neither the central nor the state governments collect data on the number of food delivery workers in the country. Data, information and documentation of food delivery workers will put them in the centre of discussion and allow better policy formulation. Much clarity is needed on the definition of platform, gig and informal workers. This ambiguity needs to be removed from policy documents.

Further, the need for unionisation is vital to raise voices and to put forward grievances. There are very few dedicated unions for food delivery workers. They are only located in metro cities, making most food delivery workers vulnerable. Since there is limited access to platforms, future research on management's perspective on the labour process remains critical.

#### Data availability statement

There is no additional data available with the study.

#### CRediT authorship contribution statement

**Sazzad Parwez:** has contributed to, Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing.

#### Declaration of competing interest

This is an original paper and there is no conflict of interest.

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