

COVID-19 and Street Vending in Tribal Areas: A Qualitative Analysis From Ground Zero—Aizawl, Mizoram, Northeast India

Journal of Asian and African Studies

1–18

© The Author(s) 2022

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/00219096221143129

journals.sagepub.com/home/jas



Aayushi Lyngwa  and Bimal Kishore Sahoo

Department of Humanities and Social Sciences, IIT Kharagpur, India

Abstract

This study explores the impact of the COVID-19-induced economic crisis on tribal street vendors in Aizawl, India, using the framework of resilience theory. The paper uses a case-study approach to examine how street vendors recouped their economic losses after the relaxed lockdown phase during the region's most celebrated Christmas and New Year festivals. A total of 74 street vendors were interviewed for this study using a semi-structured questionnaire. The study discusses that despite the relaxation of lockdowns, vendors faced extreme challenges in earning their daily wages, causing an inability to satisfy basic requirements like food, paying rent, and experiencing harsher workplace conditions. We observe that street vendors had heterogeneous motives toward street vending and were not driven by a single theoretical perspective. We present that most street vendors during the lockdowns reflect resilience in their businesses, socioeconomic, and workplace conditions through their indigenous coping mechanisms and social networking. We find that street vendors displayed entrepreneurial qualities during the lockdowns by either changing the goods they sold or how they were sold before the pandemic. The study recommends different economic and financial policies for street vendors at the ground level such as improving basic workplace amenities, safety, and awareness among street vendors and consumers.

Keywords

Street vendors, COVID-19, informal sector, urban, tribal informal economy, resilience, case study

Introduction

The impact of the COVID-19 pandemic was severely felt across all sectors of the global economy. This effect was all the more significant across the unsecured informal sector, leading to an estimated decline of 60% in earnings for this sector (ILO, 2021). The informal economy constitutes about 61% of the global workforce, and 9 out of 10 workers are linked to informality in South Asia (ILO, 2021). In developing countries like India, the informal sector was harshly affected by the pandemic due to the restrained movements of the state-enforced lockdowns. This exposed the fault

Corresponding author:

Aayushi Lyngwa, Department of Humanities and Social Sciences, IIT Kharagpur, Kharagpur 721302, India.

Email: aayushilyngwa8893@gmail.com

lines of the whole sector and pushed a mass exodus of workers from metropolitan cities back to rural areas (Irudaya Rajan et al., 2020). Street vending is the most prominent and visible urban self-employed activity within the informal sector. Day-to-day earnings in public spaces determine the income of this business.

Street vendors¹ have been dynamic in terms of their linkages between urban and rural India. However, the situation induced by consecutive lockdowns created a major shock in this sector. The pandemic in urban areas disturbed the supply and demand chains due to the restricted movement of goods and services, causing both supply and demand shocks. It also negatively affected the street vendors' socioeconomic well-being as the fear of livelihood was more significant than the fear of the contagious spread of the COVID-19 infection.

Street vendors found themselves in crisis amplified by harsh workplace conditions, lack of social security, and financial inaccessibility. However, these impacts were primarily reported for metropolitan cities, while the peripheral areas received relatively less attention. Many studies have investigated the pandemic's impacts on the health and economic vulnerability of informal workers (Bhide, 2021; Wasima and Rahman, 2022). However, only a few have examined the plight and challenges of street vendors from the marginalized regions. The study attempts to investigate these issues faced by street vendors in the peripheral northeastern part of India, which remains one of the most unexplored study regions. This region's street vendors are tribals with traditional livelihoods and efficient social networks.

The tribal population in the Northeast has a relatively low economic development as compared to other states in India. Their mobility in the economic ladder is restricted, suggesting their precarity and vulnerability (Kumar and Baraik, 2020). The pandemic added challenges to these pre-existing conditions during the lockdowns. Accordingly, our primary objective is to investigate tribal street vendors' resilience and how they recouped their losses during the pandemic. The study also recommends specific policy implications as lessons for the future. The present study is significant as it considers a geographical and social setting that is less explored in larger academic development discourse and examines the impact of COVID-19. We also observed that unlike other states in India, where men dominate the street vending business, in Mizoram, women chiefly engaged as street entrepreneurs.

We used a case-study approach, and through one-to-one interaction with street vendors during the unlock phase, we observed heterogeneity among the street vendors, which is in line with the four major theoretical perspectives (*Modernization, Structuralist, Neoliberal, and Postmodern*). We explored that both migrated and residual street vendors used social networking channels during the lockdown. The study also delivers insightful information on the indigenous coping mechanism and entrepreneurial qualities adopted by street vendors during this period. These findings are novel to the literature on street vending. We have used the theory of resilience as a theoretical framework to support our results on the impact of COVID-19 on street vendors (McMurray et al., 2008; Mondal and Chakraborty, 2022). The theory of resilience assisted in understanding the resilience of the tribal street vendors at the time of the pandemic.

The rest of the paper is structured as follows: section "Conceptual framework" discusses the conceptual framework of street vendors and their precarity in the economy as informal actors and entrepreneurs, along with the impact of COVID-19 and the theory of resilience. Section "Study area and methods" presents the study area and methods. Section "Findings and discussion" discusses the findings on three significant themes, followed by section "Policy implication and concluding remarks," which reports policy implications and concluding remarks.

Conceptual framework

Street vendors as informal actors and entrepreneurs

Street vendors have often been termed as entrepreneurs (Williams and Gurtoo, 2012), who are motivated by varied reasons different from the formal elite entrepreneurs. Street entrepreneurship is frequently observed as a necessity-driven approach, while for formal entrepreneurs, it is an opportunity directed by financial gains (Neog and Sahoo, 2021; Parker, 2018). Nevertheless, these explanations are inadequate and provide only a narrow perspective. The reasons for street vending cannot be limited to their precarity and exclusivity in the formal employment structure. These motives are better validated through four major theoretical perspectives on street entrepreneurship (Williams and Gurtoo, 2012).

The first is the *Modernization* or the *premodern perspective*, which terms street entrepreneurship as “backwardness,” “traditionalism,” and “bazaar.” They are often termed as “leftovers” from the traditional backward economy and are motivated by their inaccessibility to fit into the modern formal structure (Bromley, 2007; Yusuff, 2011). Studies from Cali and Vietnam have supported this theory stating that street vendors caused confusion and chaos in the urban economy (Lincoln, 2008; Martinez and Rivera-Acevedo, 2018).

The second perspective, namely, the *Structuralist* or *necessity-driven perspective*, states that street entrepreneurship was driven out of necessity. The lack of social security, poor working conditions, and financial inaccessibility were attributes associated with street entrepreneurs (Anyidoho, 2013; Bernal-Torres et al., 2020; Roever and Skinner, 2016). Studies from Mexico, Asia, and other sub-Saharan countries have drawn an inclination toward this theory, stating that most urban and economic policies do not favor street vendors (Al-Jundi et al., 2020; Saha, 2011; Truong, 2018).

The third perspective is the *Neoliberal perspective* or *rational economic choice*. It describes street entrepreneurship as a matter of choice rather than a lack of choice. The theory states that street vendors engage in informality due to rigid and cumbersome regulations (Becker, 2004; Council, 2004; De Soto, 2001a, 2001b; London and Hart, 2004; Nwabuzor, 2005). A study in India by Saha (2009) supported this theory and echoed that street vendors would continue to grow as micro-entrepreneurs as long as government regulations remained cumbersome.

Finally, the *Postmodern perspective* describes street entrepreneurs as “social” or “cultural actors,” existing in an economy due to acquaintance, kin, neighborhoods, and other social relations (Williams, 2004). It was motivated by redistributive social, political, or identical reasons. Street vending increased social inclusivity and respect (Williams, 2004; Yusuff, 2011). A study on Manhattan city depicted vendors as cultural endeavors. They supplied goods and services to low-income consumers. Similarly, Saha (2011), in his study in India, also stated street vendors as social and cultural actors.

In India, to protect the interest of street vendors, the central government passed the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014. It was initiated to safeguard street vendors from harassment and eviction. However, the Act has not yet been implemented or monitored in many states. This particular Act protecting the street vendors as vulnerable economic actors can be better positioned under the Modernization and Structuralist perspective.

Studies in India have emphasized the Structuralist perspective, reflecting that street vendors are constantly harassed and evicted (Bhowmik, 2001; Saha, 2011). They have been commonly lacking financial accessibility, social security, and decent workplace conditions, causing more precarity to their condition. While on the contrary, cities like Bhubaneswar have a planned urban policy wherein one-third of pavements are reserved for street vending. This example of Bhubaneswar supports the Postmodern perspective (Mahadevia et al., 2013). Nonetheless, many states in India

have leakages in monitoring and implementing the Street Vending Act 2014, causing street vendors to be more of a survivalist occupation. Therefore, street vendors are subjected to exclusivity from the formal sector, making them more precarious and vulnerable.

In Northeast India, the informal sector saw a boom due to low agricultural productivity and lack of opportunities (Panda et al., 2013). Most studies on informality are in line with the micro-entrepreneurs (Das and Das, 2009; Motha, 2016; Padel and Das, 2010; Panda et al., 2013; Roy, 2009). These studies have reflected the absence of financial literacy, financial accessibility, lack of working capital, and marketing strategies. A significant study by Mahadevia et al. (2016) describes how the hill-based tribal women street vendors from Meghalaya traveled downtown to another state to sell their produce. The study discusses that most of these women met with an accident while procuring their products. This aspect, therefore, reflects the Structuralist perspective as a prominent reason for informality and street vending in Northeast India.

The prevailing literature on street vendors gives a plethora of justifications, describing them as entrepreneurs motivated by different perspectives. However, most street vendors in India are precarious. Street vendors can, therefore, be considered as *unfortunate pawns* in the economy (Williams and Gurtoo, 2012). Adding to this, the COVID-19 pandemic and the unforeseen lockdowns have amplified their pre-existing challenges.

Impact of COVID-19 and resilience theory

The impact of the COVID-19 pandemic affected both health and economic conditions (Hite and McDonald, 2020). The extended periods of lockdown across the nation caused a massive loss in employment and daily earnings. There was a shift in the work-life environment from *working from home* and flexible working hours to online dealings and transactions. Strict maintenance of social distancing, upgradation in a workplace environment, and virtual meetings were the new normal and were adopted as tools to maintain workers' productivity (Friedman, 2020). While the formal sector was secured and showed resilience in its working patterns, the informal sector was hit with a severe shock (Mishra and Rampal, 2020; Song, 2020).

The nationwide lockdown in India was a lengthy phase for the informal sector. It created adverse macroeconomic effects on employment, food security, and poverty. Inadequate savings and other financial aid led to the closure of many informal businesses and the termination of workers engaged in them—these increased vulnerabilities in food and employment, especially among the urban poor (ILO, 2020). Nevertheless, even under such difficult circumstances, many of these economic sectors showed some hardy, resilient approaches toward business operations and economic conditions (Castro and Zermeño, 2021; Dai et al., 2021; Matharu and Juneja, 2021; Pitoyo et al., 2021; Zhandu et al., 2022).

Resilience in this study can be determined as one's ability to face challenges during and after the COVID-19 lockdowns. It determines the capability of an individual, society, organization, or economy to cope with a critical situation. By definition, it can be stated as:

An interactive concept that involves the combination of severe risk experiences and a relatively positive psychological outcome despite those experiences. (Rutter, 2006: 26)

Resilience reflects the optimistic outlook of growth and positive change under unfortunate situations (Maguen et al., 2006). A study on the Chinese cluster industries facing demand and supply shocks during the COVID-19 lockdown supports this theory (Dai et al., 2021). The study found that informal agreements based on the birthplace and ethnicity of the industry owners helped reduce the risk.

The pandemic also came as an opportunity for better innovations and modification for entrepreneurs. It encouraged the adoption of critical and structural changes (Castro and Zermeño, 2021). Hardiness, perseverance, and optimism were significant attributes reflected by women entrepreneurs during the pandemic (Matharu and Juneja, 2021). India's micro, small, and medium enterprises (MSMEs), which faced huge revenue loss, claimed to attain better resilience through adjustments to liquidity crunch, technical skills, and digitization (Gupta and Singh, 2022).

Studies in developed nations like the United Kingdom and the United States suggest that informal workers could become more resilient in the long run through security, employment flexibility, and the formation of inclusive measures (Webb et al., 2020). Studies in countries like Indonesia and Zimbabwe represent women being largely affected by the COVID-19 lockdowns. The pandemic led to more significant gender disparity and food insecurity. However, resilient approaches such as social emergency plans and social safety nets could encourage resilience for informal workers, especially in the long run (Pitoyo et al., 2021; Zhanda et al., 2022).

With respect to India's informal sector, daily income workers were highly impacted by the pandemic as self-isolation rules affected daily wages and increased food insecurity for the urban poor (Ahmad et al., 2022). The restrictions during COVID-19 added severe economic volatility, especially for self-employed street vendors (Pereira and Patel, 2022). This becomes even more essential as we address a pre-existing vulnerable section, that is, the street vendors in an economy.

Street vendors became even more precarious as they were restricted from public spaces. Cities famed for their street vending activity, like Barcelona, New York, and Rome, were deserted and left "ghostly" (Honey-Rosés et al., 2021). Also, after the relaxation of restrictions, many street vendors were drastically affected by the digital means of transaction (Guo et al., 2022). The theory of resilience functions as a backbone in determining the challenges and positive outlook of the street vendors to recover quickly from critical situations in the COVID-19 pandemic.

Study area and methods

Study area

The present study is conducted in the capital city of Mizoram, Aizawl. The state is among the eight northeastern states in the southernmost part of northeastern India. It is sandwiched between international borders such as Bangladesh and Myanmar and the state borders of Assam, Tripura, and Manipur (Figure 1). Due to its rough terrain and weak infrastructure, it is scarcely accessible only through road and infrequent flights. However, it is interesting to note that while the state has weak connectivity with the other state economies, it is closely connected to the international borders of Myanmar. The exchange of goods, especially agricultural commodities, is allowed between Mizoram and Myanmar daily. These exchanges were heavily impacted during the lockdowns as the state's international borders were the first to be closed.

The state's local population constitutes the most significant tribal populace, which is 95%. The tribals in this state are called the *Mizos*. It is the third most literate state in the country, and Christianity is the primary religion practiced. The state's economy is predominantly skewed toward agriculture and allied activities (Government of Mizoram, 2020). With increase in urbanization, decline in agricultural goods productivity, and nominal growth in traditional and cottage industries, tribals have found their way into informal employment. Most migrant workers, particularly women, are engaged in the urban informal activity of street vending (Lalchhanhimi, 2016). In our study, we have considered two significant markets for collecting data on street vendors. These markets are *Bara Bazaar* and *Treasury Square*. Both these marketplaces are 'natural markets'² and centers for retailing and businesses.

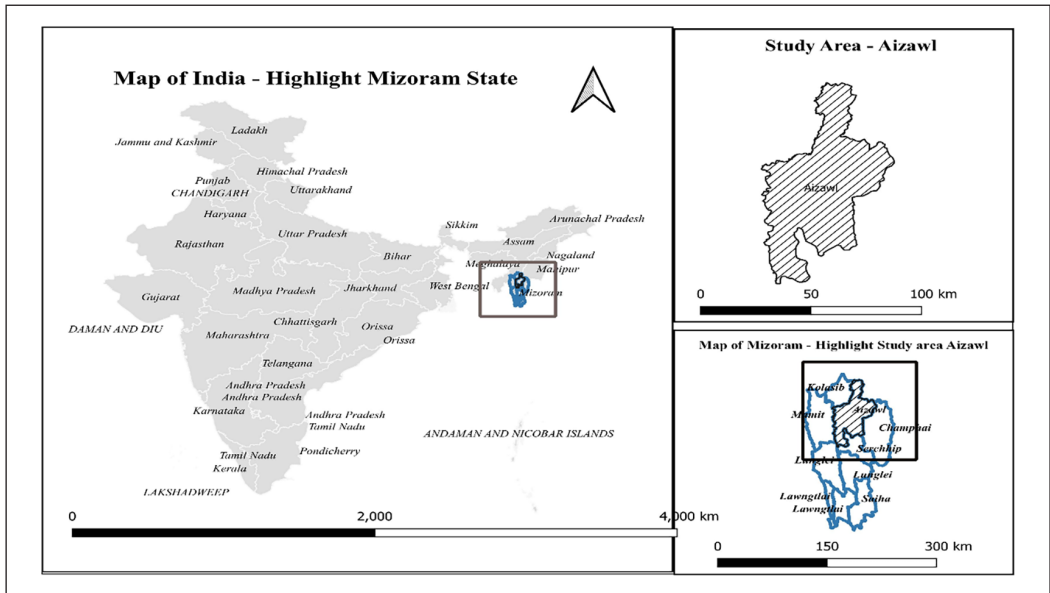


Figure 1. Study area.

Method

This study is based on a qualitative data analysis. We collected data through non-participatory observation and an in-depth personal interview. We made a non-participatory observation by visiting the markets at flexible working hours between 7:00 am to 6:00 pm for 2 consecutive months.

We collected information through observation by understanding the market conditions such as peak working hours, daily working and handling of goods by the street vendors, and the number of vendors and buyers at different hours of the day. Women dominated the street vending business as compared to their male counterparts. Most goods sold by street vendors were of international origin, like Myanmar, China, Indonesia, Korea, and Thailand. Saturdays were usually the primary market day for street vendors from rural areas. These street vendors would come to the city on Friday evenings, sleep on the pavements, sell their goods the next day, and then leave for their homes the same evening. Most of them were vegetable and fruit sellers, while some were also farmers who sold their produce.

A detailed structured questionnaire and an interview guide were prepared after 2 months of the observational survey. The questions were open-ended and semi-structured, with 52 items containing 32 items on socioeconomic conditions and workplace challenges and 15 items on challenges before, after, and during the COVID-19 restrictions. The sample size was 74. We used stratified sampling and made stratification on the types of vendors, namely, permanent structured (with kiosks),³ street vendors sitting on the footpath or mobile in nature (temporary structured),⁴ the goods they sold, and the location of the marketplaces. Interviews were conducted with street vendors selling vegetables, fruits, shoes, cosmetics, electronics, and mobile accessories to account for the market's heterogeneity. The interviews were conducted between 27 December 2020, and 7 January 2021. Each interview took 25–30 minutes. We discontinued our survey once repeated answers were received. Ease and comfort of the vendors were ensured, and an attempt was made

not to disturb them during their busy hours. We halted the interview for a brief period when street vendors had buyers.

The interviews were carried out in the state's local language, Mizo. We applied thematic analysis (Berg, 2004) to our data. After discussions, transcripts were put together and analyzed. Repeated words, phrases, and issues are further discussed on varied themes in the "Findings and discussion" section. We also received information on aspects that were not part of the interview guide and were relevant to consider; therefore, we have placed them in the paper's discussion section.

During these challenging times, we maintained all the COVID-19 protocols while conducting in-depth interviews and following social distancing norms. To preserve the confidentiality of the street vendors, we have provided them with pseudonyms.

Findings and discussion

The findings in this paper are divided into three main themes: motives behind street vending, the socioeconomic profile of the vendors, and challenges faced by the street vendors during and after the lockdown phase (COVID-19).

Motives behind street vending

We found that street vendors usually engaged in street vending due to minimal education, lack of employment opportunities, low acquired skills, and to upgrade their quality of living (Saha, 2011; Tokman, 1978). Most of the street vendors in Aizawl were women in their mid-ages, divorced, widowed, or single. They were also the only independent earning members and sometimes heads of their families.

Pi.⁵ Lalrinsangi, an 80-year-old widow selling hair clips and daily essentials like safety pins and earbuds had been vending on the footpath since 2014, said:

I started vending after my husband's death. I did not know what to do after his death, and no one would employ me at this age. Through street vending, I can also look after my disabled son. This is the best form of employment for me.

Similarly, Pi. Zothanpui, a 46-year-old female selling vegetables, said:

When I was young, I used to work in a restaurant, but now I cannot work there. The restaurant owners do not demand my services as I have become old. I do not have any other skills, so I do street vending for a living.

In line with the existing studies, women were motivated toward street vending due to the lack of skills, unemployment, and low-level education attained (Kasseeah and Tandrayen-Ragoobur, 2014; Muyanjanja et al., 2011). A Structuralist approach drove them. Their main aim was to fulfill their children's necessities: food, shelter, clothing, and education (Tokman, 1978).

We further observed that an intergenerational factor was also associated with street vending. For example, a 35-year-old man named Pu. David⁶ shares how he was practicing his grandmother's street vending poultry business. Pu. David said:

I am doing this business because my mother and grandmother were doing it. I like this job because I have customers who have known us since my grandmother's time. Also, there is much respect in this profession, and I feel happy carrying forward what my grandmother was doing.

Pu. David further adds that before street vending, he worked as an employee in two shops but could not find peace and respect at his workplace. While in the street vending business, he could express free will, gain self-respect, and was likely to interact with people who had known his family for ages, like Pu. David and other street vendors practicing their family's business also exhibited a similar though a much broader perspective to intergenerational street vending.

Ahmed, a 22-year-old man, selling poultry goods in Treasury Square, stated that he migrated from Bihar a few years ago to carry forward his father's poultry business. He mentioned that he would not quit street entrepreneurship even if he was offered better opportunities. Ahmed reasons out the importance of street vending to his life. He said:

I get my goods from Bihar, so everyone involved in getting them from Bihar to Aizawl may lose their jobs. I enjoy street vending as it helps many people associated with me in the supply chain to get employed.

Ahmed further adds that he enjoys street entrepreneurship as it gives him a sense of happiness in doing something productive for himself, the poor people in his village, and all those connected to him through the supply chain. Both Pu. David and Ahmed reflect a Postmodern perspective driven by social relations. Like Ahmed, most street vendors were also migrants from the rural areas of Mizoram (Al-Jundi et al., 2020; Truong, 2018). For instance, Pu. Jerry, a 37-year-old street vendor selling ladies' handbags, said:

I like doing street vending as it is easier than farming and much more profitable when you live in a city. Also, I can give good quality education and fulfill the family's basic needs with this business.

The primary push factors, such as low agricultural productivity, primitive agrarian techniques, unemployment, rising population, slow regeneration of the land, and the lack of basic living standards were the main reasons for rural-to-urban migration. On the contrary, the availability of employment opportunities contributed as a pull factor to the increase in urban street vending in the city (Al-Jundi et al., 2020; Igudia, 2020; Truong, 2018; Widjajanti and Damayanti, 2020).

We observed that the maximum narratives on rural to urban migration were driven by the *slash and burn* or shifting cultivation method. The *slash and burn* technique results in slow regeneration of the land, accounting for almost a decade. Traditional agricultural practices, low agricultural productivity, and land crunch have left most rural poor accessible to only one major factor of production, that is, labor. Therefore, in search of better employment opportunities without the requirement of skills and education, the rural poor find themselves in the street vending business as it has easy entry and exit points. This motive falls in line with the Neoliberal perspective.

The information gathered from the field exhibited an inclination toward three major theoretical perspectives, Structuralist, Post-modern, and Neoliberal (Anyidoho, 2013; Roever and Skinner, 2016; Yusuff, 2011). Similar to its market diversity, the motives behind street vending are also heterogeneous. Therefore, street vending cannot be narrowed down to a single perspective.

Socioeconomic profile

Females constituted a majority of our sample; most females were single-earning members and sometimes the heads of their families. The average age group was 47.16. The oldest street vendor interviewed was 80-years old, while the youngest was 22-years old. Most street vendors were married. Being a tribal-populated state, street vendors mostly belonged to the Scheduled Tribe (ST) category practicing Christianity. A skinny composition of Hindus and Muslims was also observed (Table 1). Despite the state's literacy rate being third in the country (Government of India (GoI),

Table 1. Descriptive statistics on the socioeconomic characteristics of the study sample.

Socioeconomic characteristics	
Age ^a	47.16
Gender ^a	
Female	70.28
Male	29.72
Marital status ^a	
Married	74.32
Never married	10.93
Divorced	10.81
Widow	5.4
Religion ^a	
Christian	95.94
Hindu	2.7
Muslims	1.35
Educational qualification ^a	
Primary level schooling	36.48
No education	25.67
Secondary schooling	24.32
Higher Secondary	4.5
Middle school	9.45
Total migrated ^a	66.21
Intra-state	58
International	13
Inter-state	5
Houses lived in ^a	
Rented	78.3
Own house	18.91
Government quarters	2.7
Entrepreneur characteristics	
Earnings per day (after COVID-19) ^b	Rs. 1000
Earnings per day (before COVID-19) ^b	Rs. 647.92
Access to bank account ^a	
Access to saving account	50.4
No bank account	32.43
Saved at home	2.7
Whether borrowed any loan ^a	
Access to loan	14.8
Active days in a week ^b	6
Active hours in a day ^b	8.43
Years of experience ^b	13.31
Number of street vendors	74

Source: Primary survey 2020–2021.

COVID-19: coronavirus disease.

^aPercentage.

^bAverage.

2011), street vendors had below primary-level education. Only about a quarter had secondary-level schooling.

It was also observed that most street vendors were migrants. Rural-to-urban migration within the state amounted to about 58% from the districts of Champhai, Mamit, Kolasib, Serchip, Lunglei, and Saitual (Figure 1). Street vendors who had migrated internationally, mainly from Myanmar and Nepal, constituted 13%. During the lockdowns, these vendors faced a severe supply crunch as they could no longer get the goods through cross-border trade. We also observed that street vendors from Myanmar left for their hometowns during the festive seasons. However, the prolonged periods of lockdown, loss of business, and stringent border movements made it impossible for them to visit their country. Inter-state migration amounted to 5% from states like Manipur, Bihar, and Assam.

We investigated the street vendors' living conditions by looking into the types of houses they lived in, namely, owned, rented, and government quarters (Table 1). The heterogeneity among the street vendors in this aspect was quite visible. Vendors selling clothes and poultry goods had their own houses, while those selling packet food, electronic items, and shoes had rented houses. A small percentage of street vendors also lived in government quarters—these comprised women whose husbands had government jobs. Lack of employment and to generate a hobby, these women engaged themselves in street vending activity (Al-Jundi et al., 2020; Torri and Martinez, 2014). Overall, 78% lived in rented houses with single rooms.

With respect to a street vendor's economic and entrepreneurial profile, it was observed that a street vendor could earn an average of Rs.1000 per day. These were the earnings obtained before the pandemic hit the economy. Earnings of the street vendors were observed to reduce between 40% and 50% after the lockdown, depending on the goods they sold. Most street vendors had a savings account in the bank (Table 1). They would save in banks every week, whenever they had excess earnings. At the same time, others stored their money at home. Many street vendors stated having no savings at all. Regarding borrowing a loan, few street vendors stated to have taken loans from banks and the Aizawl Municipal Corporation (AMC) for business or family purposes.

On an average, street vendors were observed to be active 6 days a week because Christianity dominates the state; they usually did not sell goods on Sundays. The average hours active in a day was 8.43 and the average years in business was 13.31 years (Table 1).

We also investigated if housing conditions (owned vs rented house and the number of rooms) and access to formal financial products (proxied by having or not having a bank account) were related to different types of street vending through their capital requirements and risk-taking attitude.

For this, we divided the type of street vendors into two significant groups: goods sold by the street vendors and the structure of vending establishment. The goods sold by the street vendors were divided into food⁷ and non-food goods,⁸ while the structure of vending establishment was divided into permanent and temporary structured. We then applied the chi-square test. The results from the test suggest no association between access to a bank account and the types of goods sold by the vendors. This result is in line with our observation during the field visits and discussion with the street vendors where the capital requirements for both types of goods were similar. Vendors usually required working capital to run their day-to-day business. The trust established between the supplier and the vendors helped them access working capital without the need to get a bank loan. For instance, Lalremruati, a 54-year-old widowed woman selling ice cream in Bara Bazaar, said:

I take the ice cream box from the supplier, sell it the whole day and then return it to the supplier taking my portion of the profit.

Similarly, we could not establish any relationship between the houses lived in (rented and owned houses) with the type of vendors. However, when we examined the relationship between the

number of rooms (economic status) with vendor types, we noted that street vendors selling food items were economically better off and more likely to have a permanent establishment. Street vendors selling food items faced high-risk and high-reward situations compared with those who sold non-perishable goods. Due to their higher risk-taking attitude, the former had a more profitable business than the latter which sold non-perishable goods. Street vendors selling non-perishable items, on the contrary, benefited from storage of goods for an extended period. The detailed results are provided in Appendix 1 of the paper.

Challenges faced by the street vendor during and after the lockdown phase (COVID-19)

It is well known that the lockdown induced a myriad of challenges to street vendors, but the challenges they faced during the unlock phase are only a little known. Most street vendors during this period faced financial loss, and the lack of savings brought them to a vulnerable position. We examined whether the street vendors could recoup their losses during the most celebrated festivals. Street vendors were interviewed during the weeks of Christmas and New Year. It is to be noted that during this time of the year, the demand for commodities is high. Street vendors claimed that they were pushed to the most vulnerable position financially and could not think of any solution. A few recalled receiving no help from local bodies, churches, and neighborhoods.

Pi. Nuimawii, aged 57, a divorced woman selling socks and hair accessories, stated that the lockdowns severely affected her financial condition. She said:

I have to look after my grandchildren and daughter. My daughter and I lost our husbands a few years ago in an accident. I am an asthmatic patient and was severely ill during the lockdown months. I did not receive help from anyone except my far-off relatives, who got me hospitalized and paid my bills. Even though I am not feeling so well now, I have to come here for vending because I'm the only earning member in my house.

When enquired about her business after the government announced the unlock, she informed that she could not recoup her losses even during the festive season. She added:

What can I say? I did not even manage to earn Rs. 20 today.

As the sole bread earner of the family, Pi. Nuimawii's condition became challenging as she could not earn what she was formerly earning. Most female street vendors also stated the same. A female street vendor named Pi. Lalmangayi, aged 41, selling packet food items, mentioned that she could not repay her bank loan. She said:

I could not recover from the loss during the festive season of Christmas and New Year. I took a bank loan for my business, and after the lockdown, since not many people moved freely, I could not sell my goods and had severe problems filling my installments for the loan.

After relaxation of the lockdowns, street vendors also faced challenges with restricted working hours, seasonal availability and unavailability of agricultural products, and lack of supply with overpriced transportation disrupting the income earned before the pandemic and after the lockdown was relaxed (Agarwal, 2021).

Women-headed households faced severe food insecurity, increase in debt, and loss in income during the lockdown. Widows solely dependent on street vending faced higher incidences of poverty. They also suffered a *decent workplace deficit* after the lockdown. They lacked basic amenities

like toilets and drinking water. Unlike the formal sector, street vendors lacked norms and preventive measures on workplace conditions after the lockdown. Pi. Ramengpui, a 46-year-old married woman selling mobile phone covers, expressed:

My shop was near an office, and I often used their washroom and drank water from their office. However, since these offices were closed after the lockdown, I had to walk a few kilometers to use the toilet.

Similar to Pi. Ramengpui other female street vendors also reported the same. Few street vendors stated that despite being registered and having a permanent space, they did not receive any additional benefit or upgradation at the workplace after the unlock for COVID-19. This shows their precarity in their workplace. Nonetheless, there were also incidences when women street vendors on the footpaths stated they had access to toilets and clean drinking water in nearby restaurants and shops. Pi. Puisangi, a 52-year-old married woman selling packaged food, stated:

The restaurant owners here in Treasury Square are very kind to all the female street vendors sitting with me on the footpaths. When we request them to use the washroom, they understand and allow us to use it.

It is to be noted that permanent structured street vendors in Treasury Square had an association named Treasury Square Association. This association charged a certain amount of money every month for electricity, accessing public spaces, and toilets. Pi. Dingi, a 57-year-old vegetable woman street vendor, mentioned:

We all pay Rs. 250 every month for using the washroom and electricity, we do not have any problems. However, we visit a nearby office to get drinking water or we purchase it.

With respect to assistance provided to street vendors during the lockdowns, many street vendors stated that they received the support of a local body organization named the Young Mizo Association (YMA)⁹ and from the churches. Pi. Sangi, a married 46-year-old woman selling vegetables, informed us how she managed during the lockdown. She said:

I did not receive any help from any NGO or other organization for my business. However, I did receive assistance with food and other essentials from neighbors, YMA, and the church.

The help of the restaurant owners, offices, churches, and YMA depicts the solid social networking channels present during these critical times. Throughout the lockdowns, street vendors with intergenerational characteristics having long-term associations with their customers provided home delivery. Scattered street vending was also observed wherein two or more family members would sell the same goods; however, one would sell the good in a *natural market* while the other would move around and sell from door to door. All these aspects reflect the indigenous coping mechanism adopted by street vendors during these challenging times.

We further observed that a few street vendors exhibited entrepreneurial qualities. A couple named Sanjay and Shanti, aged 52 and 50 years, vending clothes and packet food items for around 15 years, said:

We buy goods from Assam and sell them over here because it gives us some profit. Since we could not get our goods from Assam due to the lockdown restrictions, we were at a complete loss. When we ran out of food, my wife made “muri”¹⁰ and requested people to buy them. Only by selling a few “muri” packets we could get some eatables at home. We later learned that the YMA provided vegetables, rice, and oil.

Moreover, street vendors traveling from the hinterlands to cities stated they were in a better position because they did not have to travel to the urban areas to sell their products and make additional expenditures. Pi. Rosangliani, a female vegetable street vendor aged 50, said:

I come from Kolasib (approximately 3 hours from Aizawl) to sell vegetables. I travel through passenger sumo services¹¹ and come to the city three times a week. During the lockdown, I gained a lot of profit as I did not have to travel anywhere. People used to come and buy vegetables from my village. During the lockdown, I saved a lot of money, time, and energy.

Sanjay, Shanti, and Pi. Rosangliani showed entrepreneurial qualities during the lockdown. Here, for the former, the immediate challenge was the transformation of the goods that they sold to increase purchases, while for the latter, the pandemic was used as an opportunity to boost their sales.

Tribal street vendors in Mizoram undoubtedly reflected resilience in these challenging times. As an example of their close-knit society, the YMA and churches actively distributed basic rations like fruits, vegetables, and oil and helped ensure food security. The business was slow as buyers displayed reluctance to gather in marketplaces, yet, street vendors showed resilience in varied ways during the lockdown and unlock phases. Peer influence encouraged maintaining COVID-19 protocols. The coping mechanisms and social networking strategies motivated them to overcome their critical situation. Their entrepreneurial qualities during this time also determined an optimistic change in structural and behavioral outcomes, which promises a positive attitude toward resilience.

Policy implication and concluding remarks

Street vendors in Aizawl expressed despair over their inability to sell goods and their harsh workplace conditions. After the relaxation of lockdowns, consumers' immobility could not help vendors recoup their losses. The need for better workplace conditions with the availability of toilets and drinking water has been neglected for a long time. It needs appropriate attention, especially after the pandemic, where hand-washing is a primary preventive measure. Apart from this, the lack of financial accessibility and social security has created more stagnant growth among street vendors. Had these issues been addressed earlier, street vendors would not have been trapped in a grim economic crisis, especially during the lockdown period.

It is also to be noted that due to certain administrative leakages, street vendors often miss out on schemes, programs, policies, training, and awareness programs. Tribal women were the worst hit during the pandemic, especially in households where women were the only earning members. Therefore, policies should focus special attention on women, particularly in times of crisis. Training programs and workshops must be encouraged for better awareness and clarity on the existing and new schemes introduced for street vendors so that none are left out.

Trade unions have always been an integral part of the street vending business, especially during the lockdown. Therefore, trade unions must be motivated and encouraged, particularly for creating awareness of financial programs and schemes, training, and workshops. However, such lessons must not just be limited to the tribal areas and must be noted for future considerations through efficient ground-level implementation.

As an indigenous mechanism in Aizawl, the YMA, churches, and neighbors helped street vendors cope with the ongoing food insecurity crisis. This coping mechanism enabled them to become more resilient. However, many street vendors were left out due to unawareness. There was also exclusivity and a lack of awareness in the context of policies and programs. Although street

vendors did not achieve exceptional growth after the lockdown, the strong-willed mindset found amongs most street vendors, coupled with a resurgence of customers and social activity due to global vaccination programs, resulted in steady business growth. Therefore, this resuscitation of business with a positive attitude can be attributed to the fact that the street vendors have been reflecting on resilience strategies over the pandemic.

In conclusion, the study presents the concern of street vendors in Aizawl and should not be generalized to any other state in India. It is also limited to looking at the post-lockdown conditions of urban tribal street vendors in the natural markets of Aizawl city. The study elaborates on the concerns of the tribal street vendors, which may vary from the other states in India with respect to tribal lifestyle and traditional livelihoods. It is further limited to the city's urban areas and has excluded the peripheral and rural areas of the state. In the future, studies depicting how the street vendors' supply chain was hampered during the lockdown and other ground-level analyses on the coping mechanism of street vendors during the pandemic could encourage in redefining our policies efficiently.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The first author acknowledges the fellowship recieved for pursuing Ph.D from the Ministry of Tribal Affairs, Government of India and the Indian Institute of Technology Kharagpur. This is part of her Ph.D work.

ORCID iD

Aayushi Lyngwa  <https://orcid.org/0000-0002-2548-3155>

Notes

1. "A person engaged in vending of articles, goods, wares, food items, or merchandise of everyday use on lanes, sidewalk, footpath, pavement, public park or any other public place or private area from a temporary built-up structure or by moving from place to place including hawkers, peddler, squatter and all other synonymous terms which may be local or region-specific" (Table 1). Despite the state's literacy rate being third in the country (GoI, 2014: 2).
2. Natural markets are areas where large congregations of people gather, such as beaches, parks, and malls. These are the prominent location where street vending can be easily noticeable. Street vendors get the maximum demand for their goods at such places as these places are often commercially viable areas with easy access to buyers.
3. Permanent vendors sell at the exact location and same place every day. They usually have a built-up structure under which they sell. These may be made up of bamboo, wood, tin sheets, and cane in the tribal areas.
4. Temporary street vendors may be selling in the exact location. However, they may change their place of sitting from time to time, depending on the restrictions made by the municipal and police officials. They lack permanent seats and registration. In the tribal areas, these vendors mostly come from the villages once or thrice a week to sell local vegetables and fruits.
5. "Pi" is addressed to married women in the Mizo language (Mrs).
6. "Pu" in the Mizo language is referred to a man as Mister. We have used the word "Pu" only for the tribal men street vendors. This is how we addressed them during the surveys.
7. Food vendors: The street vendors selling food goods include vegetables, fruits, cooked food, packed food, and hot and cold beverages.
8. Non-food vendors: The street vendors selling non-food goods include shoes, clothes, plastic, electronics, toys, and mobile covers.

9. Young Mizo Association (YMA) is an organization created as a need for cultural conservation by the Mizos to preserve the Mizo tribe and from social and political modernization. The organizations believe in developing the Mizo society with good habits/manners, social commitments, and the preservation of culture.
10. *Muri* is puffed rice added with Indian spices and eaten as a light snack.
11. Sumo services: Private travel vehicles used to commute between inter and intra-state.

References

- Agarwal B (2021) Livelihoods in COVID times: gendered perils and new pathways in India. *World Development* 139: 105312.
- Ahmad F, Chowdhury R, Siedler B, et al. (2022) Building community resilience during COVID-19: learning from rural Bangladesh. *Journal of Contingencies and Crisis Management* 30: 327–338.
- Al-Jundi SA, Ali M, Latan H, et al. (2020) The effect of poverty on the street vending through sequential mediations of education, immigration, and unemployment. *Sustainable Cities and Society* 62: 102316.
- Anyidoho NA (2013) Informal economy monitoring study: street vendors in Accra, Ghana. Available at: <https://ugspace.ug.edu.gh/handle/123456789/8579>
- Becker KF (2004) The informal sector. *SIDA, Stockholm*. Available at: <https://www.sida.se/en/publications/the-informal-economy>
- Berg BL (2004) *Qualitative Research Methods for the Social Sciences*. Boston, MA: Pearson Education, p. 191.
- Bernal-Torres CA, Peralta-Gómez MC and Thoene U (2020) Street vendors in Bogotá, Colombia, and their meanings of informal work. *Cogent Psychology* 7(1): 1726095.
- Bhide A (2021) Informal settlements, the emerging response to COVID and the imperative of transforming the narrative. *Journal of Social and Economic Development* 23(2): 280–289.
- Bhowmik SK (2001) Hawkers and the urban informal sector: a study of street vending in seven cities. Prepared by Sharit K. *Bhowmik for National Alliance of Street Vendors of India (NASVI)*. Available at: <https://www.wiego.org/publications/hawkers-and-urbaninformal-sector-study-street-vending-seven-cities>
- Bromley G (2007) Foreword. In: Cross J and Morales A (eds) *Street Entrepreneurs: People, Place, and Politics in Local and Global Perspective*. London: Routledge, pp.15–17.
- Castro MP and Zermeño MGG (2021) Being an entrepreneur post—COVID—19—resilience in times of crisis: a systematic literature review. *Journal of Entrepreneurship in Emerging Economies* 13: 721–746.
- Council SB (2004) Small business in the informal economy: making the Scer, M.W. and Lunstedt, S.B. (1976): understanding tax evasion. *Public Finance* 31: 295–305.
- Dai R, Mookherjee D, Quan Y, et al. (2021) Industrial clusters, networks, and resilience to the Covid-19 shock in China. *Journal of Economic Behavior & Organization* 183: 433–455.
- Das A and Das V (2009) Tribal self-governance: a reality check. In: International seminar on Adivasi communities in India: development and change. Seminar papers, Institute for Human Development (IHD), New Delhi, India, 27–29 August.
- De Soto H (2001a) Dead capital and the poor. *Sais Review* 21(1): 13–43.
- De Soto H (2001b) The mystery of capital: why capitalism triumphs in the west and fails. *Canadian Journal of Latin American and Caribbean Studies* 27(53): 172–174.
- Friedman Z (2020) How COVID-19 will change the future of work. *Forbes*, 6 May. Available at: <https://www.forbes.com/sites/zackfriedman/2020/05/06/covid-19-future-of-work-coronavirus/#5b1320a273b2>
- Government of India (GoI) (2011) Population census 2011: literacy in India—census 2011. Available at: <https://www.census2011.co.in/literacy.php> (accessed 4 November 2022).
- Government of India (GoI) (2014) The Street Vendors Act 2014. Available at: <https://egazette.nic.in/WriteReadData/2014/158427.pdf>
- Government of Mizoram (2020) Economic survey Mizoram. Planning & Programme Implementation Department, Aizawl, Mizoram, pp.1-36.
- Guo F, Huang Y, Wang J, et al. (2022) The informal economy at times of COVID-19 pandemic. *China Economic Review* 71: 101722.

- Gupta A and Singh RK (2022) Managing resilience of micro, small and medium enterprises (MSMEs) during COVID-19: analysis of barriers. *Benchmarking: An International Journal*. Epub ahead of print 31 May. DOI: 10.1108/BIJ-11-2021-0700.
- Hite LM and McDonald KS (2020) Careers after COVID-19: challenges and changes. *Human Resource Development International* 23(4): 427–437.
- Honey-Rosés J, Anguelovski I, Chireh VK, et al. (2021) The impact of COVID—19 on public space: an early review of the emerging questions—design, perceptions, and inequities. *Cities & Health* 5(Suppl. 1): S263–S279.
- Igudia EO (2020) Exploring the theories, determinants and policy options of street vending: a demand-side approach. *Urban Studies* 57(1): 56–74.
- ILO. (2020) Impact of lockdown measures on the informal economy: a summary. May 2020 factsheet, ILO, Geneva.
- ILO. (2021) ILO monitor: COVID-19 and the world of work. *Seventh edition: updated estimates and analysis*. Available at: https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_767028/lang-en/index.htm
- Irudaya Rajan S, Sivakumar P and Srinivasan A (2020) The COVID-19 pandemic and internal labour migration in India: a “crisis of mobility.” *The Indian Journal of Labour Economics* 63(4): 1021–1039.
- Kasseeah H and Tandrayen-Ragoobur V (2014) Women in the informal sector in Mauritius: a survival mode. *Equality, Diversity and Inclusion: An International Journal* 33: 750–763.
- Kumar B and Baraik VK (2020) Non-inclusive tribal workforce participation urban spaces: a case study of Jharkhand. *National Geographical Journal of India* 66(3): 208–221.
- Lalchhanhimi G (2016) *ICT in elementary teacher education programmes: case studies of diets in Aizawl and Lunglei*. MSc Thesis, Mizoram University, Aizawl, India. Available at: [http://mzuir.inflibnet.ac.in/bitstream/123456789/421/1/Gloria%20Lalchhanhimi%20\(Education\).pdf](http://mzuir.inflibnet.ac.in/bitstream/123456789/421/1/Gloria%20Lalchhanhimi%20(Education).pdf) (accessed 8 July 2021).
- Lincoln M (2008) Report from the field: street vendors and the informal sector in Hanoi. *Dialectical Anthropology* 32(3): 261–265.
- London T and Hart SL (2004) Reinventing strategies for emerging markets: beyond the transnational model. *Journal of International Business Studies* 35(5): 350–370.
- McMurray I, Connolly H, Preston -S hoot M, et al. (2008) Constructing resilience: social workers’ understandings and practice. *Health & Social Care in the Community* 16(3): 299–309.
- Maguen S, Vogt DS, King LA, et al. (2006) Post-traumatic growth among Gulf War I veterans: the predictive role of deployment-related experiences and background characteristics. *Journal of Loss and Trauma* 11(5): 373–388.
- Mahadevia D, Brown A, Lyons M, et al. (2013) *Street vendors in Ahmedabad: status, contribution, and challenges*. Center for Urban Equality Working Paper No. 22, p. 64. Available at: http://cept.ac.in/UserFiles/File/CUE/Working%20Papers/Revised%20New/022_Street%20Vendors%20in,20
- Mahadevia D, Mishra A, Joseph Y, et al. (2016) *Street vending in Guwahati: experiences of conflict*. CUE Working Paper Series No. 30, pp.3–13. Available at: <https://docslib.org/doc/7253630/street-vending-in-guwahati-experiences-of-conflict> (accessed 21 November 2022).
- Martinez L and Rivera-Acevedo JD (2018) Debt portfolios of the poor: the case of street vendors in Cali, Colombia. *Sustainable Cities and Society* 41: 120–125.
- Matharu SK and Juneja D (2021) Factors impacting the resilience of women entrepreneurs in India in the face of COVID-19. *Vision*. Epub ahead of print 19 October. DOI: 10.1177/09722629211043299.
- Mishra K and Rampal J (2020) The COVID-19 pandemic and food insecurity: a viewpoint on India. *World Development* 135: 105068.
- Mondal M and Chakraborty C (2022) The analysis of unparalleled struggle for existence of urban women informal workers in West Bengal, India for survival and resilience to COVID-19 pandemic risk. *GeoJournal* 87: 607–630.
- Motha K (2016) Micro Entrepreneurial activities among tribal women in Andhra Pradesh. *SEDME (Small Enterprises Development, Management & Extension Journal)* 43(1): 27–50.
- Muyanja C, Nayiga L, Brenda N, et al. (2011) Practices, knowledge and risk factors of street food vendors in Uganda. *Food Control* 22(10): 1551–1558.

- Neog BJ and Sahoo BK (2021) Defining and measuring informality in India. *Journal of Human Development and Capabilities* 22: 486–505.
- Nwabuzor A (2005) Corruption and development: new initiatives in economic openness. *Journal of Business Ethics* 59: 121–138.
- Padel F and Das S (2010) *Out of This Earth: East India Adivasis and the Aluminium Cartel*. New Delhi, India: Orient BlackSwan.
- Panda SM, Lund R, Kusakabe K, et al. (2013) Gender, mobility, and citizenship rights among tribals of Khurda and Sundargarh, Odisha (India). *Gender, Technology, and Development* 17(2): 105–129.
- Parker SC (2018) *The Economics of Entrepreneurship*. Cambridge: Cambridge University Press, p. 301.
- Pereira I and Patel PC (2022) Impact of the COVID-19 pandemic on the hours lost by self-employed racial minorities: evidence from Brazil. *Small Business Economics* 58(2): 769–805.
- Pitoyo AJ, Aditya B, Amri I, et al. (2021) Impacts and strategies behind COVID-19-induced economic crisis: evidence from informal economy. *The Indian Journal of Labour Economics* 64(3): 641–661.
- Roever S and Skinner C (2016) Street vendors and cities. *Environment and Urbanization* 28(2): 359–374.
- Roy A (2009) *Listening to Grasshoppers: Field Notes on Democracy*. London: Penguin Books.
- Rutter M (2006) The promotion of resilience in the face of adversity. In: Clarke-Stewart A and Dunn J (eds) *Families Count: Effects on Child and Adolescent Development*. Cambridge: Cambridge University Press, pp.26–52.
- Saha D (2009) Decent work for the street vendors in Mumbai, India—a distant vision!. *Journal of Workplace Rights* 14(2): 229–250.
- Saha D (2011) Working life of street vendors in Mumbai. *The Indian Journal of Labour Economics* 54(2): 301–325.
- Song S (2020) Street stall economy in China in the post-COVID-19 era: dilemmas and regulatory suggestions. *Research in Globalization* 2: 100030.
- Tokman VE (1978) Competition between the informal and formal sectors in retailing: the case of Santiago. *World Development* 6(9–10): 1187–1198.
- Torri MC and Martinez A (2014) Women’s empowerment and micro-entrepreneurship in India: constructing a new development paradigm. *Progress in Development Studies* 14(1): 31–48.
- Truong VD (2018) Tourism, poverty alleviation, and the informal economy: the street vendors of Hanoi, Vietnam. *Tourism Recreation Research* 43(1): 52–67.
- Wasima S and Rahman MN (2022) Economic vulnerability of the underprivileged during the COVID pandemic: the case of Bangladeshi domestic workers. *Journal of Social Service Research* 48(2): 163–175.
- Webb A, McQuaid R and Rand S (2020) Employment in the informal economy: implications of the COVID-19 pandemic. *International Journal of Sociology and Social Policy* 40(9–10): 1005–1019.
- Widjajanti R and Damayanti M (2020) Space compatibility based on spatial behavior of street vendors in urban public space in Chinatown, Semarang. IOP Conference Series: Earth and Environmental Science 409(1): 012055.
- Williams CC (2004) *Cash-in-Hand Work: The Underground Sector and the Hidden Economy of Favours*. Basingstoke: Palgrave Macmillan, pp.13–106.
- Williams CC and Gurtoo A (2012) Evaluating competing theories of street entrepreneurship: some lessons from a study of street vendors in Bangalore, India. *International Entrepreneurship and Management Journal* 8(4): 391–409.
- Yusuff OS (2011) A theoretical analysis of the concept of informal economy and informality in developing countries. *European Journal of Social Sciences* 20(4): 624–636.
- Zhanda K, Garutsa N, Dzvimbo MA, et al. (2022) Women in the informal sector amid COVID-19: implications for household peace and economic stability in urban Zimbabwe. *Cities & Health* 6: 37–50.

Author biographies

Aayushi Lyngwa is Senior research fellow in the Department of Humanities and Social Science at Indian Institute of Technology, Kharagpur, India. She was awarded a Fellowship from the Ministry of Tribal Affairs, Government of India for her ongoing research work on tribals. She is presently working on the urban informal sector street vendors in the tribal areas.

Dr. Bimal Kishore Sahoo is an Associate Professor in the Department of Humanities and Social Sciences at the Indian Institute of Technology, Kharagpur, India. His present research interests are informal self-employed, food security, climate change, tourism, poverty and inequality.

Appendix I

Association between financial accessibility, housing condition, and vendor types.

Name of variable	Types of goods sold (%)		Structure of the vending establishment (%)	
	Food	Non-food	Permanent	Temporary
Bank account				
Yes	50(17)	60.00(24)	41.38(12)	64.44(29)
No	50.00(17)	40.00(16)	58.62(17)	35.56(16)
	Pearson χ^2 (1)=0.743#		Pearson χ^2 (1)=3.797*	
	Fisher's exact test#		Fisher's exact test**	
House lived in				
Own	79.41(27)	75.00(30)	72.41(21)	80.00(36)
Rented	20.59(7)	25.00(10)	27.59(8)	20.00(9)
	Pearson χ^2 (1)=0.2021#		Pearson χ^2 (1)=0.573#	
	Fisher's exact test #		Fisher's exact test #	
No. of rooms at home				
1	29.41(10)	52.50(21)	13.79(4)	60.00(27) 20.00(9)
2	32.35(11)	30.00(12)	48.28(14)	20.00 (9)
3 or more	38.24(13)	17.50(7)	37.93(11)	
	Pearson χ^2 (2)=5.295*		Pearson χ^2 (2)= 15.62***	
	Fisher's exact test *		Fisher's exact test***	

Source: Primary Survey 2020–2021.

Note: within parenthesis is counts.

Level of significance is *0.10, **0.05, and ***0.01; # denotes not significant.