# Formal Management Structure of Informal Market: A Case Study of Bou Bazar, Dhaka

#### Abstract

The increasing importance of the informal market economy as a livelihood strategy in urban areas across developing countries, particularly in Bangladesh, secures an important position for the low-income and middle-income people of a city. This study focuses on Bou Bazar market of Dhaka, to examine the spatial, temporal, and managerial dynamics of a market characterized by a unique structure that combines both formal and informal elements of a market. Thus, it allows the investigation of a distinct type of market model, which has the potential to perform better than pure informal markets. Purely informal markets often lack the structural framework to ensure adequate returns for vendors and reliable consumer experiences. The study involved Focus Group Discussion with different stakeholder groups, a series of interviews, and the utilization of different Participatory Rapid Appraisal (PRA) tools for data collection. Qualitative analysis was employed through clustering, grouping, and comparison within the collected data. Key findings include increased vendor diversity driven by growing demand, efficient use of public space with limited operating hours, improved vendor satisfaction through balancing their autonomy, external management with stakeholder collaboration and a discretionary policy of service fee which couldn't be assigned to any useful purpose other than exploitation. The study suggests that formal management of any informal market offers comparative advantages to ensure inclusive economic growth that can be beneficial for other developing countries too. To make such a model successful, municipal restructuring, formalization, demand-supply analysis and integration across different stakeholders, vendors, and customers are required.

# **Keywords**

Informal market, market dynamics, management structure, semi-formal market, urban poor, planning policy

#### 1. Introduction

Informal economic activities generally refer to employment that is not bound to the formal regulatory arrangements and laws (Martinez, 2017; Hartati et al., 2015; Raj, 2017), and the majority of these remain unregistered, unregulated, and insulated from state oversight (ILO, 2023). But this form of market is essential in combating poverty and vulnerability in developing countries (Qayyum et al., 2021; Islam & Alam, 2019; Petrova, 2019 Vanek et al., 2014; Blades et al., 2011). The networking and trade activities within informal trading promote higher income opportunities among the low-income population in developing countries (Navarrete-Hernández et al., 2023). The migrated and poor people living in urban areas had the most opportunity from the business model of informality. These characteristics of street vendors were found to be similar in different developing countries, like, Tanzania, Ethiopia, Nepal, Bangladesh and many more. The huge number of people in economic shock due to financial instability were combated by the informal sector in Tanzania (Mramba, 2015). In Addis Ababa of Ethiopia, low-income people were inclined toward informal business as it required a minimal investment to start off and provided some additional income to supplement their formal work income (Tsegay, 2022). The engagement of street vendors of Kathmandu, Nepal in such activities attributed the marginalized groups having enough income to rise above poverty line. At the same time, the lowincome and middle-income groups were highly dependent on the ingredients sold by informal sellers in reduced cost, as many items became affordable to them with the virtue of street vendors (Bhattarai & Pathak, 2020). Bangladesh had the similar interest group performing street vending to meet their own income demand and the need of majority of the population. This activity was marked as a significant contributor in youth employment and economic mobility for different cities of Bangladesh (Z. Islam & Khan, 2019). Despite these mass benefits, street vending was often perceived by the city authority as an activity promoting congestion, disruption and criminalization. Dhaka, Addis Ababa and many other cities, the authorities removed the vendors from their places without providing any proper relocation opportunity or rehabilitation (Boonjubun, 2017; Etzold, 2014; Sun & Zhu, 2022).

Though government data is not available studies claim that informal economy accounts for around 64% of the GDP of Bangladesh (Rahman & Islam, 2021; Islam & Alam, 2019; Maligalig et al., 2009) and around 89% of all occupations in Bangladesh's labor market are informal (Sultana et al., 2021; Rahman et al., 2019; ADB, 2010). The informal sector is a very important contributor to the economy of Bangladesh, especially in its capital city- Dhaka (Ahmed, 2020; Husain et al., 2015; Lata et al., 2019). According to Detail Area Plan 2022-2035, the informal sector covers 80% of total employment in Dhaka, where street vendors hold one of the major shares (RAJUK, 2015). The informal sector is a major source of income for local people of Dhaka (Mondal, 2017).

Many urban residents would find themselves in precarious situations if street vending didn't exist in their communities (Rahman et al., 2020). There are a variety of street vendors. Some are mobile, some are stationary, i.e., located in a market (GoI, 2014). The livelihood of stationary vendors is shaped by the markets they serve (Lie et al., 2018). The informal market lacks a relationship with a formal

institution and institutional means to manage it (Baland et al., 2020; Roever, 2016). Rather than being governed by explicit laws and regulations, the business is conducted mostly by customs, conventions, and values (London et al, 2014; Sutter et al., 2017). Most of the studies considered the informal economy as dichotomous – formal and informal but the level of informality of such markets lies in a spectrum. This spectrum includes – type of technology used, owner profile, market access, finance needs, social protection, etc. Depending on these characteristics, the degree of informality can vary (Becker, 2004). So, a market located at the middle part of the spectrum, i.e., having characteristics of both formal and informal markets needs to be studied as they are an important part of the urban fabric of developing countries.

Though informal business is a major part of Bangladesh's economy, the management of informal business has not been taken into proper consideration yet. Rather, many incidents related to eviction of informal sellers were found in worldwide literature. Studies have considered the socio-economic condition and vulnerabilities of different informal markets in Dhaka through questionnaire survey and statistical analysis (Ahmed, 2020; Hartati et al., 2015; Husain et al., 2015; Lata et al., 2019). Even most of the global studies have employed mostly observation and quantitative method to study street vendors (Turner et al., 2021; Giroux et al. 2021; Sekhani et al., 2019; Lata et al., 2019; Li et al., 2018; Martinez et al., 2017; Tamirat & Nega, 2015; Hussain et al., 2015; Recipe & Gomez, 2013; Onyango, 2012; Muzaffar et al., 2009) though (Kumar, (2002). The spatial and temporal dynamics of a formally managed informal market and its administrative mechanism have not been studied yet neither globally nor locally that creates a huge gap in the research field of informal markets and vendors. Chambers, (1994a; 1994b) suggested Participatory Rapid Appraisal (PRA) is an effective method for such research. So, shifting to a more participatory method is essential in the study of them (Sekhani et al., 2019). To fill this gap, the study focused on understanding the dynamics and management mechanism of the informal market.

#### 2. Literature Review

#### 2.1 Dynamics of Informal Markets

Informal economy provides one of the largest sources of global employment that is particularly dominant in developing countries (Chen, et al., 2016). It is different from formal market economy as it does not secure legal contracts or stability, and access to credit or capital investment (Navarrete-Hernández, et al., 2023). Livelihood opportunities, the attractiveness of location, accessibility, number of customers, number of competitors, and proximity to suppliers shape the distribution of such market vendors (Onyango, 2012). Vendors choose a specific time to conduct their business, such as morning to afternoon, evening hours after office time, throughout the day, etc. (Hartati et al., 2015; Loc & Moustier, 2016; Raj, 2017). The issues pertaining to informal business can be of various concerns like spatial or physical, governance or legal, and socioeconomic types. Bhowmik (2005) states that among the activities they are accused of are unsanitary urban conditions, traffic jams, disorder, criminal activity, and unauthorized entry into urban areas. During their working time, vendors face problems

from the public and get harassed by police personnel (Panwar & Garg, 2015). Street vendors are denied their right to appropriate space. They are bound to negotiate with local sources of power to get by in their everyday lives (Lata et al., 2019). Informal vending is also related to uncertainty in income. They are more vulnerable to economic and social shocks (Islam, 2018). Help from neighbors is the primary source of financial help for them (Rahman and Junaed, 2017).

## 2.2 Differences of Informal Market Dynamics from Formal Market

Formal markets are organized and controlled by government agencies through registration, photo ID collection, and trademark protection of the vendors etc. The informal market often lacks this relationship with institution and institutional means (Baland et al., 2020; Roever, 2016) though they are somehow connected with the institutes in other manners. Local authorities often take steps to evict, harass, and confiscate goods from informal vendors (Roever, 2016), though informal governance is practiced by local authorities to allow informal vendors in certain spaces (Lauermann, 2013). Formal market vendors can advertise their prices and locations as required. However, informal vendors may have to shift their location and always have to bargain the price of commodities to the consumers. Informal markets remain at a higher risk of crime or extortion, provide low quality service, and have a lower profit margin compared to formal markets (Anbarci et al., 2012). But during a crisis, a community or individual can shift from a formal job to an informal business with minimum skill and little investment (Hartati et al., 2015). An informal business model in a neighborhood can be built on social networking between buyer and seller, value commodity at nearest convenience (most needed goods are sold for the target buyer community), adaptation with local customs (e.g., selling goods at the preferable time of the buyers), flexibility with purchase-resale (due to proximity and networking, the bought goods can be returned or exchanged) (Lauermann, 2013; Raj, 2017).

#### 2.3 Concept of Semi-formal Market

As mentioned, informality can be considered as a spectrum and hierarchies in the form of formal and semi-formal market mechanisms can be addressed for moral and just practices in a society (Bell & Pei, 2022; Zhang, 2023). However, this semi-formal or formal market structure promoted by hierarchy should contribute to human well-being and better social functioning (De Shalit, 2023). So, semi-formal institutional arrangements can be defined as rules enforced on people that go against usual social practices but benefit the local stakeholders. Some authors also categorized semi-formal market typology with types of shops, transaction mechanisms, and remaining under the rules of government (Kamrava, 2004; Sutter et al., 2013). Around the world, the semi-formal model has been applied in formulating stock market strategies, better organizational frameworks, financial credit systems, and labor market control (Benhammada & Chikhi, 2010; Chipeta & Mkandawire, 1992; Osborn, 1998). As an example of a semi-formal model, credit availability provided by cooperatives, government development programs, NGOs and donors, semi-formal code to prevent exploitation to disadvantaged groups can be considered a semi-formal market (Tra Pham & Lensink, 2008). (Yoruk, 2009). So, the semi-formal model has wide implications, but it is not limited to any particular type of market or system. The

components of a semi-formal model have to be a mixture of both formal and informal sectors, which should increase the well-being of society (De Shalit, 2023; Sutter et al., 2013).

## 2.4 Takeaways from Previous Studies

Diversified global studies were conducted on informal market vendors. Several research focused more on spatial and temporal dimensions, infrastructure provision, and tactics to overcome friction with individuals and local authorities (Li et al., 2018; Onyango, 2012; Husain et al., 2015; Recio & Gomez, 2013). Some studies envisaged methodological improvement in this regard (Giroux et al., 2021; Sekhani et al., 2019; Recio and Gomez, 2013). Bhat and Nengroo (2013) explored the daily life of urban informal vendors from various perspectives in Kashmir where they did a descriptive analysis. Liu and Liu (2022) employed Street Informal Practitioners Spatial Investigation (SIPSI) methodology and explored that these vendors prefer the sites that have higher density of population. Another study, conducted in Africa, showed that vendors of urban informal markets perform better when equipped with the right skills and enabling tools (Madjdian et al., 2023). Thus, diversified studies were conducted to explore the characteristics and issues of the informal market worldwide (Singh & Yadav, 2024; Misiko & Kisiang'ani, 2024; Chibango, 2024; Tenza et al., 2024). Very little research related to this was conducted in Bangladesh too (Haque & Rahman, 2024; Rasul & Uddin, 2023; Tamanna et al, 2024). However, administration and market mechanisms of such markets have not received as much attention as the characteristics have. Guo studied the informal market's administrative mechanism in Fuyang City and concluded that this mechanism should be restructured. Employing a qualitative approach, research in Malaysia explored that functional, emotional, and conditional values are more dominant in informal markets than that of formal retail channels (Sarker et al., 2024). According to Sepadi and Nkosi (2023), fairness, consistency, and inclusivity of informal markets are tough to ensure due to not having policy guidelines like formal markets and this should be restructured through including governmental and nongovernmental stakeholders. Recent international development initiatives have focused on building informal markets while contemplating formal linkages to eradicate poverty, since the informal market sector, alone, is thought to sustain poverty (Navarrete-Hernández, et al., 2023). However, there is a lack of studies in Bangladesh considering the concepts of informal markets through formal administrative mechanisms using participatory tools. This conceptual and methodological gap generates the necessity to study this.

## 3. Research Approach and Methodology

# 3.1 Study Setting

The study was conducted on an informal market that is traditionally called Bou Bazar and located in a government quarter of Kalabagan in Dhaka. The approximate length and width of the bazaar are 42 meters and 15 meters respectively. It is located along the side of a secondary road. The geographic location of the site is indicated in Fig. 1. Initially, the market was only formed with 6-8 vendors selling green vegetables and fish. After that, groceries, poultry, and meat were added to meet the rising needs

of the residents. The market has a water supply line, sanitation facility, and waste accumulation system. For the betterment of the market, political clubs have been banned which was prominent once and caused suffering to vendors and customers. The vendors of the market have to pay little charges that are

recirculated to this market for betterment. Thus, the reconnaissance survey depicts that this market follows some formal mechanism though it is an informal one. Such dual characteristics make different from other solely formal or purely informal markets and generate the demand to do research on it.

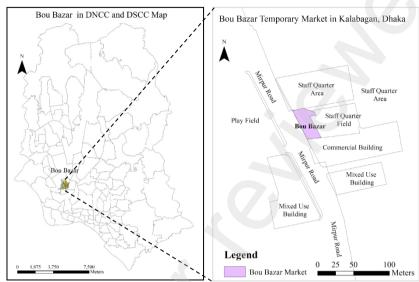


Fig. 1. Bou Bazar (Source: Author, 2024; Data: RAJUK, 2015)

#### 3.2 Data Collection Process

Data for the study were gathered from primary sources. The data was collected using Participatory Rapid Appraisal (PRA) tools, which included five Focus Group Discussions, 13 interviews, one Key Informant Interview (KII), and field observations by the research team. The data was collected within three months from November 2023 to January 2024. This study employed social and resource maps as space-related PRA, seasonal diagrams as the time-related, pairwise matrix, cause-effect diagram, and Venn diagram as relational approaches. The detailed methodology and implementation strategy of these PRA tools were followed according to the instructions from a literature by Kumar (2002). Also, focused group discussions are conducted with both vendors and the customers separately. The details of data collection are provided in Table 1.

**Table 1**Description of Focus Group Discussions (FGDs)

| Focused Group (6 groups) |                        | Duration | Number of participants | Tools and illustration                   |  |  |
|--------------------------|------------------------|----------|------------------------|--|--|--|
| Vendors                  | <b>Vendors</b> Group 1 |          | 6                      | Social and resource map, seasonal        |  |  |
|                          | Group 2                | 40 min   | 5                      | diagram, and daily activity schedule     |  |  |
|                          | Group 3                | 45 min   | 4                      | (combination of all types of vendors)    |  |  |
| Customers                | Group 4                | 45 min   | 5                      | Problem, pairwise matrix, and cause-     |  |  |
|                          |                        |          |                        | effect diagram of the Colony's residents |  |  |
|                          | Group 5                | 95 min   | 8                      | Problem, pairwise matrix, and cause-     |  |  |
|                          |                        |          |                        | effect diagram of outside residents      |  |  |
| Somaj Kallayan           | Group 6                | 35 min   | 3                      | Venn diagram and process map             |  |  |
| Samiti (SKS)             | _                      |          |                        | (Understanding roles and                 |  |  |
|                          |                        |          |                        | responsibilities of different            |  |  |
|                          |                        |          |                        | stakeholders)                            |  |  |

## 3.3 Data Processing and Analysis Techniques

## 3.3.1 Spatial Data Analysis

The collected data for the study were qualitative. At first, socio-economic data were collected from the FGDs. These were represented through mapping. Authors observed the area and collected detailed data on the distribution of different types of vendors, the materials and methods used to showcase their products, and the selling mechanism at different places of the market. Also, the 'transect walk' method was utilized to collect cross-sectional data of the market area covering both sides of the internal walkway. It is an organized walk along a designated path, or "transect," across a community or project area (Stanfield & Jones, 1998; Johnson et al., 2014) with local participant (Pratiwi et al., 2021) to explore physical arrangement, infrastructure, social interaction, setting, land use patterns, and other activities (De & Mérida, 2016). Compiling both types of data, an overview of the plan view and cross-sectional view was produced, which included all spatial characteristics of the informal market.

## 3.3.2 Temporal Data Analysis

Time-related dynamics of the vendors had been analyzed through seasonal, monthly, weekly, and daily variations. The data was analyzed by matching their daily schedule with weekly working hours and off days. Also, the seasonal variation of different important events mentioned by the vendors were included in the data acquisition process. The seasons were divided based on two religious holidays and major climatic variations.

## 3.3.3 Relational Data Analysis

Problems faced by the vendors were explored through a pairwise matrix. Afterwards, the cause and effects of the most severe problem were analyzed through a cause-effect diagram. From another focused group discussion, the Venn Diagram was prepared to represent the institutional combination, influence, and importance of different stakeholders in the informal market. Then, several processes and mechanisms about the market functionality were identified from the collected data and represented through a flow diagram. Administrative processes, legal processes, and other mechanisms were brought under flow diagrams. The maps and diagrams were analyzed to find out the interconnection among the stakeholders' claims. Also, the inherent information and conflict among the parties were identified. The performance of the market in sight of the vendors and consumers was evaluated compared to the data collected on spatial, temporal dimensions, and institutional relationships. Finally, the relative success of the market compared to any other informal market was identified from several perspectives, and the contribution of the formal characteristics of this market was evaluated for this success.

## 4. Findings and Discussions

# 4.1 Market Dynamics

## 4.1.1 Spatial Dynamics of the Market

The market was started between 1985 to 1990, with only vegetable and fish vendors. At that time, the market had a few mobile vendors. The 'Samaj Kallayan Samiti (SKS)' of the colony provided them

space and included poultry, meat and other types of sellers later on (Fig. 2). The committee accommodated a demand-based inclusion of different vendors to fulfill the need of the community. In usual practice, informal vendors rarely compose of such variation, unless the market is very large like Taipei Night Market (Chiu, 2013).

The sanitation facility was provided SKS by and designated for the vendors only. However, it was mostly used the customers attracting more buyers from the pedestrians. There were individual storage facilities managed by the vendors themselves, and some vendors used to leave their items after selling the period with tarpaulin cover. was possible considering the safety of the items in the

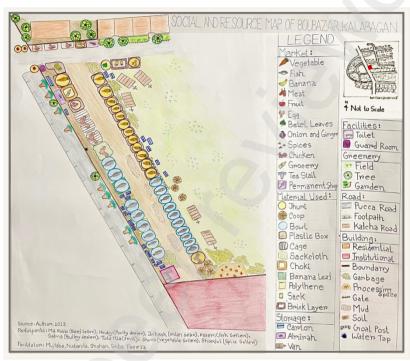


Fig. 2. Social and Recourse Map (Source: Author, 2024)

government quarter, though the informal street vendors cannot enjoy such an opportunity (Husain et al., 2015; L. Lata et al., 2019). They managed water facilities through the intervention of the authorities (SKS and PWD), though that was insufficient. The waste collection was conducted by the city corporation with a regular payment by the vendors. Still, this one disadvantage couldn't reduce the attractiveness of this place to vendors that resulted from the formal regularization of SKS.

The generation of waste was identified from the transect walk PRA tool, which demonstrated a variation in amount of waste for different (based on selling item) vendors (appendix – A2/A4). In many informal and formal markets around the world, this waste generation was found to be a problem, which required the attention of concerning authority to maintain a suitable environment for customers (Mthombeni et al., 2014; Ngusale & Oloko, 2018; Mamun et al., 2020; Marutha & Chelule, 2020; Mohan et al., 2018). But the formal management ensured a regular cleaning activity for the market in Bou Bazar by involving the city governance.

## 4.1.2 Temporal Dynamics of the Market

The temporal dynamics of the vendors have shown both daily and event-based variations. Almost all types of vendors had to wake up early and reach the wholesale market by 5 AM. They continued vending from 6-7 AM to 1-2 PM. This routine allowed them to incorporate sufficient sleeping hours and a sound family time, which raised their morale towards work. Despite some uniqueness in daily activities of different vendors (e.g., varying distance and schedule of wholesale buying, participation of female

vendors in specific vending jobs), this market provided a lot of flexibility for the vendors through a limited working hour. Riani et al. (2021) found that female sellers remained busier than males to complete their family chores that aligns with the female vendors of Bou Bazar. Sharma and Pradhan (2017) also found similar results in Nepal. Though the vendors commonly had an advantage of lower working time with sufficient income due to the formal administration, this management couldn't benefit the female vendors sufficiently. However, some vendors reported working in their own localities occasionally after finishing the working hour in this market. This action was motivated by a need for extra income or to reduce the loss from unsold materials.

Weekly variation was observed, where Sunday was the least busy day for all types of vendors. The meat vendors used to take the day off and their high sales on Saturday and Friday compensated for their one-day leave. For Poultry sellers, Thursday, Friday, Saturday, and Monday were comparatively busy, whereas Saturday and Sunday were the least busy days for vegetables. It should be noted here that Friday was the weekly holiday in Bangladesh. From a monthly perspective, the selling of products went very well during the first 15 days of a month. They assumed that the monthly income was already used by their customers during this time, causing a reduced number of buyers in the last few days of a month. These variations were fully cultural and the formal administration couldn't play any role in

changing these practices to benefit the vendors (Mair et al., 2012; Shafiuddin, 2021). Rather, the SKS allowed the vendors to take breaks on specific days and they didn't have to pay any service fee for those days. The customers became accustomed to this routine leading to a higher number of customers on Fridays and beginning weeks of a month.

Fig. 3 depicts that the market experienced different volumes of sales in different seasons. The selling amount of meat was higher on rainy days. However, this result contradicted the findings of Harrang et al. (2020), Idris et al. (2022) and Hsu and Chang, (2002). They found that the meat and poultry sections had lower sales

|                             | Season Based   |              |                 | Event Based   |                   |                  |               |
|-----------------------------|----------------|--------------|-----------------|---------------|-------------------|------------------|---------------|
| Factor                      | Vendon<br>Type | Summer       | Rainy Season    | Winter        | During<br>Ramadan | After<br>Ramadan | After         |
|                             | Meal           | ••           | ••••            | •••           | ••••              | ••               | •             |
| ae .                        | Poultry        | ••           | ••••            | •             | ••••              | ••               | •             |
| Sales Volume                | Fish           |              | ••••            | • •           | •••               | • •              | •             |
| Sales                       | Vegetable      | •••          | • •             | ••••          | •••               | •••              | ••••          |
| OW:                         | Onion          | •••          | •••             | •••           | ••••              | • • •            | •             |
| •                           | Meat           | • •          | ••••            | • •           | •••               | • •              | •             |
| pe                          | Poultry        | • •          | ••••            | • • •         | •••               | • • •            | •             |
| Work Load                   | Fish           | • •          | • • • •         | ••••          | • • •             | ••••             |               |
| Mon                         | Vegetable      | ••••         | ••••            | • •           |                   | • •              | • • •         |
| Low:                        | Onion          | • • • •      | ••••            | •             | •••               | • •              | • •           |
| 9                           | Meat           | <b>\$</b> \$ | \$\$\$\$\$      | <b>\$\$</b>   | <b>9\$\$</b> \$   | \$\$             | <b>⑤</b>      |
|                             | Poultray       | \$\$         | \$\$\$          | <b>\$</b>     | <b>9999</b>       | <b>9 9</b>       | <b>®</b>      |
| ÷                           | Fish           | <b>®®®</b>   | <b>\$\$\$\$</b> | <b>\$</b>     | <b>® \$</b>       | <b>® ⑤</b>       | <b>③</b>      |
| Prof<br>Low:<br>High:       | Vegetable      | <b>\$\$</b>  | <b>9 9</b>      | <b>\$\$\$</b> | 999               | <b>\$</b> \$     | <b>\$\$\$</b> |
|                             | Onion          | <b>\$\$</b>  | <b>\$\$</b>     | <b>\$\$\$</b> | \$9\$\$           | <b>\$\$\$</b>    | <b>\$</b>     |
|                             | Meat           | 000          | 00000           | 0000          | 000               | <b>99</b>        | 0             |
| Happiness Low: © High: ©©©© | Poultry        | <b>©</b>     | 999             | <b>00</b>     | 99                | 0                | <b>©</b>      |
|                             | Fish           | 00           | 000             | <b>00</b>     | <b>00</b>         | 0                | <b>0</b> ,    |
| Hap<br>Wo-                  | Vegetable      | 00           | 00              | 0000          | 00                | 0                | 000           |
| 7.4                         | Onion.         | 000          | <b>©</b>        | 000           | 00                | 00               | ©.            |

Panticipants: Rabbi (35), Selim(40), Rojina(30), Hnidoy (35), Alim(60), Kasem (30), Mostofa (49) Facilitators: Faeeza, Nabanita, Salba, Shohan, Mujtabe

\*\*\*+Orion includes onion, gantic, gingen: Higest sales volume: 15-20days before Qumbani
\*\*\* Gnoceny has no seasonal variation

Fig. 3. Seasonal variation of the vendors (Source: Author, 2024)

*Note:* Post-Qurbani means the period after Eid-ul-Adha. Eid al-Adha is one of the two most important Islamic holidays celebrated worldwide. It is also known as the "Feast of the Sacrifice" (Felemban et al., 2020)

during the rainy season due to reduced customer demand. According to Miranda and Helia (2018), Yusuf et al. (2014) and Chaudhary et al. (2019), the vegetable vendors of both developing and developed countries were found having higher sales during the rainy season in formal and informal markets. But this study found that the selling volume of vegetables was lower in this season. Rather, vegetable vendors were burdened with a higher workload and faced challenges for goods transportation. In the post-Qurbani period, vendors witnessed the lowest demand for animal proteins. This aligns with the findings of Neima et al. (2021), Rishelin and Ardi (2020), Omar and Rahman (2018), and Aslam et al. (2020). Onion, ginger, and garlic sellers had the highest sales during the 15-20 days before the Qurbani. During Ramadan, the profit was higher for all vendors as the number of customers and their buying volume increased. Noteworthily, the variable 'happiness' was higher for meat, poultry, and fish vendors during the rainy season. This positivity of mood could be a result of higher sales in this season, which indicated that the challenges they faced were a lesser concern compared to the income generated. All these issues were also relevant to cultural norms of the society. The SKS and other authorities could improve the spatial dimension for the vendors with the formalization of the market, but the strategy couldn't address temporal issues adequately to solve vendors problems faced through cultural and social barriers.

# 4.2 Problems and Prospects of Such Dynamics

#### 4.2.1 Problems

Problems of the market were discovered by doing a transect walk. The identified challenges were affecting the well-being and operations of the vendors. The range of issues included inadequate facilities and limitations in infrastructure. For example, one washroom without gender consideration, lack of garbage disposal area, the waterlogged surface during heavy rainfall making it difficult for people to move and so on. Some common challenges included the absence of permanent roofing, impure piped water, and boundary walls being obstacles to attract customers.

Through focus group discussions, it was highlighted that informal vendors at Bou Bazar faced seven key problems, such as, wholesale transportation difficulties, water quality concerns, lack of security, problems in water draining out, lack of hygienic sanitation, lack of storage facilities, and waste management issues. Grwambi (2020), Gui et al. (2018), Roseline et al. (2023), Vilakazi (2018), and Keen and Ride (2019) also identified transportation issues as a major concern for informal market vendors in their study. They also explored that the vendors often purchased their goods from wholesale markets located far away. This created challenges in transporting the goods to their selling points. Vilakazi (2018), and Keen and Ride (2019) showed that the poor condition of roads and lack of reliable transport options posed significant obstacles in this regard. Sarkar (2020), Mapunda et al. (2018), and Wijaksono et al. (2022) found that water quality and drainage facilities were poor in such informal markets. Stagnant water around the market area due to inadequate drainage systems also posed health risks (Mulyatna et al., 2021; Rane, 2011). They often had no access to storage facilities that led to wastage of foods and incurred them financial losses (Rane, 2011; Sepadi & Nkosi, 2023; Johnson et al.,

2020). Moreover, previous studies also align with the multi-dimensional problems of informal vendors. Some authors demonstrated that they often had to operate in unsafe environments, vulnerable to theft, harassment, and even physical violence to earn a minimum living (Meki et al., 2021; Arthur & Imoro, 2021; Alam et al., 2016; Grwambi, 2021; Amin et al., 2019; Sepadi & Nkosi, 2023).

A pairwise ranking of these problems revealed draining water as the primary concern, particularly during the rainy season when clay becomes a discouraging factor for pedestrians and thus, for the customers. Transportation of wholesale goods and theft incidents were identified as the next two important challenges which used to intensify in the rainy season and winter respectively. Poultry was susceptible to extreme heat, resulting in many of those dying during the summer season whereas other products were more vulnerable in the rainy season.

While understanding problems from customers' perspective, the residents of the quarter and who come from the outside exhibited differing opinions. The problems residents were facing included improper waste management, hygiene issues with toilets, stagnant water after rain, problems because of parked cars, and high demand from outside customers resulting in a price hike. Because of affecting their overall market experience, waste management emerged as the top concern for residents. Sekhani et al. (2019), Karthikeyan and Mangaleswaran (2014), and Satori et al. (2020) also identified waste management as the most concerning issue for informal markets around the globe. Similarly, outside customers considered waste management as their primary challenge, followed by hygiene issues of toilets, stagnant water after rain, and the market's early closure. The causes of waste management issues were traced back to originate from a lack of awareness among vendors and insufficient supervision by officials as the market was on government land. The customers mentioned some effects of waste management problems, which included health risks due to open waste disposal, reduced mobility, and environmental pollution.

# 4.2.2 Prospects

Vendors had diverse aspirations to solve their problems and enhance their working conditions. From a social perspective, they aimed at inclusive participation in community activities and strongly desired not to relocate from the site. Temporarily, they seek extended market hours in the evening and during national events and festivals. Spatially, they had some high-priority desires including a transparent wall replacing the solid wall to attract more customers, better drainage to address water stagnation issues, a tin shade for protection from rain, and upgraded toilet facilities. However, they prioritized improvements that would maintain their current position in the market and resist any chance of relocation (eviction) or replacement (by wealthier vendors).

SWOT analysis of the market revealed that the strengths of this market lie in its social structure and management mechanism, where vendors were not burdened with initial deposits and had a voice in decision-making through the 'Bazar Samiti'. However, the identified weaknesses of the market were muddy roads, inadequate washroom facilities, and lack of storage. The adjacent footpath provided them an alternate place to shift if any disruptions might cause the market to be closed. The influx of customers

due to construction of high-income residential areas like Dhanmondi and Kalabagan might raise their sales in the coming future. There were some threats that needed to be considered also. Basically, the formal regulating body of the market provided some benefits to the informal market sellers and customers. A lot more could be done by the SKS and Bazar Samiti with proper intervention and community activism, as it occurred in Bangkok (Batréau & Bonnet, 2016). The administrative entities might have developed the required infrastructures and solved many of the issues mentioned above considering their control on this land and the demand of the community. But their activities appeared quite disjoint, as the authorities didn't demonstrate a proper coordination on this market. Despite these deficiencies, the administration was able to create a much better standard for informal business in Bou Bazar Market that was almost absent in other informal markets in the developing countries.

## 4.3 Administrative Structure of The Market

Bou Bazar market was established within a government quarter by the initiative of a local institution called Samaj Kalyan Samiti (a community welfare organization). So, the internal structure, functions, and mechanisms of this market were built on the interest of this organization. It made the stakeholder relations in the market a lot different than other informal markets of Dhaka.

#### 4.3.1 Role and Influence of Institutions

Including the Somaj Kalyan Samiti, twelve different stakeholder groups were identified from the Focused Group Discussions (Fig. 4). Then, stakeholders were categorized into three groups as per their role and interaction with the vendors (Table 2) (Crane, 2020). Because of purchasing and selling acts, stakeholders in operational groups communicate more frequently and more strongly (Fig. 4).

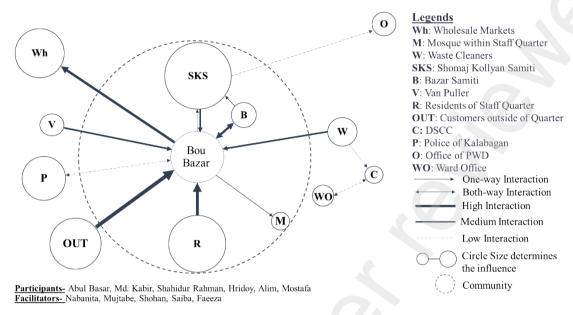
 Table 2

 Classification of Stakeholders in terms of Interaction with Vendors

| Interaction Type              | Stakeholders  |  |  |
|-------------------------------|---|--|--|
| Administrative and Regulatory | Shomaj Kollyan Samiti, Bazar Samiti, Office of PWD, Police of Kalabagan, Dhaka South City Corporation |  |  |
| Operational (Buy and Sell)    | Wholesale Markets, Van Puller, Residents of Staff quarter,<br>Customers outside of the quarter        |  |  |
| Social                        | Mosque within the Staff quarter, Residents of the Staff quarter,<br>Customers outside of the quarter  |  |  |

However, the influence of Administrative and Regulatory groups was greater than other stakeholders (Fig. 4). The 'Somaj Kallayn Samiti' collected daily fees and conducted occasional meetings with the vendors. Vendors might visit them for some requirement, application, or request. The Samiti controlled the vendor's permission to sit in the market, fix the place for setting up shop, and also make them involved in political activities as per their wish. 'Bazar Samiti' (a community organization by vendors) had some influence on them. But as the organization was formed by themselves, it couldn't do much benefit for them. Again, the police played an indirect role in this stakeholder relationship. The vendors respected and admired the police for their assistance and sent them daily fees. However, the police were

never seen in the market by the authors during their several visits. From the data collected, the Administrative and Regulatory stakeholders were found to be the most important stakeholders to the vendors (Fig. 4). The 'Somaj Kollyan Samiti' had the most influence on the vendors, and their level of



**Fig. 4**. Institutional Influence and Interaction between different parties and Bou Bazar market vendors (Source: Author, 2024)

interaction was only next to the Bazar Samiti. 'Bazar Samiti' was a community organization of the vendors themselves. It had the highest level of interaction with the vendors daily. However, the influence of 'Bazar Samiti' on vendors was the third highest among these five stakeholders. The perceived reason behind the high influence of 'Somaj Kollyan Samiti' and the low influence of 'Bazar Samiti' might be the ability of the administrative body to control the market. The reason appeared to be more correct when the Police had shown very little interaction (Fig. 4), but still it was considered the second most influential stakeholder for the vendors (Table 3). Also, the PWD (Public Works Department) had an influence because of having ownership of the colony (quarter) where the market was established. Any important change in the facilities required the permission from higher authority of PWD. Finally, the DSCC (Dhaka South City Corporation) was involved in the waste collection process. However, as they leased this duty to some private companies, they were not directly involved in the process. Social groups comprised the local communities and the mosque, as it acted as a place of relief for the religious vendors. But they visited the mosque occasionally. Rather, social interaction with the local colony residents, who roamed around to meet their friends and spend their time, was a major cause of interaction for this group. And the influence of the social groups was the least on the vendors.

Table 3
Ranking of Administrative Stakeholders from Venn-diagram

| Administrative and Regulatory<br>Stakeholders | Interaction rank  | Influence Rank  |
|---|-------------------|-----------------|
| Somaj Kollyan Samiti                          | $2^{\mathrm{nd}}$ | 1 <sup>st</sup> |

| Bazar Samiti                 | 1 <sup>st</sup>   | 3 <sup>rd</sup>   |
|------------------------------|-------------------|-------------------|
| Office of PWD                | 4 <sup>th</sup>   | 4 <sup>th</sup>   |
| Police of Kalabagan Station  | $3^{\mathrm{rd}}$ | $2^{\mathrm{nd}}$ |
| Dhaka South City corporation | 5 <sup>th</sup>   | 5 <sup>th</sup>   |

The common type of conflict in an informal market is a clash between vendors and city authorities (Boonjubun, 2017; Daka, 2022; Varcin, 2007). But in this market, there was a lack of community bonding and disagreement between customer groups as major conflicting issues. Vendors had always claimed to have a very good relationship among themselves. It was also obvious through their conversations, dealings with each other, playing and gossiping with each other in off-peak hours. But there was some type of segregation among them. Their seating arrangements were based on their types of vending and many times there were five to six vendors sitting side by side who arrived from the same area (e.g., Rayer Bazar, Keraniganj). Despite such community feeling among the vendors, they had shown reluctance in helping each other in some dire situations. It might be a flaw of the vendors' community which couldn't create a sense of trust and reliability in each other. This contradiction can be clearly understood from the conversation with a vegetable vendor, who described, "... My mother was very sick a few months back and her treatment required a huge amount of money. I didn't have that much amount, but I also didn't ask anyone in this market to help me. So, I had to arrange the money from other sources....". However, the organizational trustworthiness of Bazar Samiti to all vendors was hampered due to lack of transparency among the 'Bazar Samiti' members and creating smaller groups among the vendors. Lack of transparency in such informal management structures (e.g. Bazar Samiti) could be found in many literatures worldwide, which might be a reason for reduced functionality in informal markets (Crane, 2020; Greenwood & Van Buren III, 2010; Jahansoozi, 2006). Among other stakeholders, there were the conflicting interests of PWD quarter residents, who perceived the customers from outside as a problem. They mentioned that the higher-income, car owner customers increased the demand for different goods in the market. The vendors could sell their goods at a higher price to those customers than the residents. They claimed that the sole purpose of establishing the market was to benefit the PWD quarter residents, but it is now serving outside interest. The administrative structure running this market had some level of control over these vendors. The preliminary conflicts among the vendors were sustained within the 'Bazar Samiti' to solve by their own leaders. Afterwards, the 'Somaj Kalyan Samiti' could take on the task of resolving any particular issue. Specially, the requests from the vendors for any particular facility, managing the security guard, controlling their vending time and allowing different stakeholders to participate in the market were decided by this committee. The quarter residents also presented their interest in the market through this committee. Only the police were a particular group who didn't require the permit of this committee for entering the market. The city authorities didn't interfere in this market directly, but the police force engaged themselves separately.

A major involvement of different government institutions was apparent for the Bou Bazar market like other informal markets in the Global South (Chiu, 2013; Grossman, 2020; Peña, 1999; Rachmawati, 2014; Vermaak, 2014). The contribution of police as an informal government service provider was highlighted in many pieces of literature on Dhaka (Arefin, 2023; Hasan & Rahman, 2021; Lata, 2023; Nayam, 2021). However, an informal market controlled by a local organization was rarely seen instead of direct control by formal institutions (Grossman, 2020; Hossain et al., 2022).

#### 4.3.2 Market Mechanism

Administrative stakeholders had a higher influence on the vendors, which is clear from <u>Table 3</u>. The reasons for this high influence may be understood from different administrative mechanisms and mechanisms of other stakeholder interactions.

## 4.3.2.1 Vendor Selection

The selection process shows that a vendor had to depend fully on the Somaj Kalyan Samiti (SKS) for permission to start vending in this market (Fig. 5). The vendors had to submit their identification documents (e.g., NID, birth certificate) to this authority. Similarly, the authority claimed in an FGD that they used to check whether there was any space left for accommodating the newly applied vendor, then they took the decision collectively. When a vendor gets permission to start vending, copies of their documents are preserved with the SKS, a spot is determined for the vendor by SKS. In these senses this market is more formal than the regular informal market. However, like all other informal markets, the vendors pay regular charges to different authorities everyday if they open their shop. In other informal markets of developing countries, the selection process was found to be more of a control process executed by local police or gangs (Chiu, 2013; Navarrete-Hernández et al., 2023). Taipei Night Market was found using an extralegal strategy involving police force to ensure limited control on the vendors. Still, the market operates with the schedule prepared by their own social alliance (Chiu, 2013).

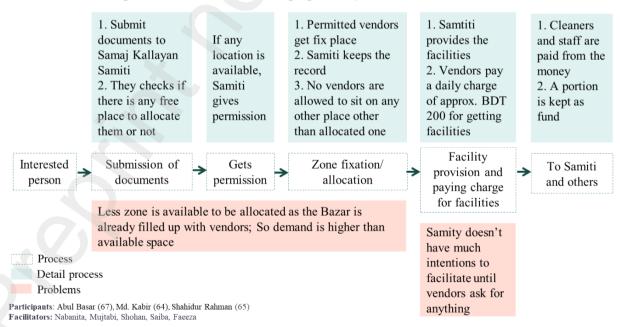


Fig. 5. Process Diagram of Administrative Management (Vending Permission and Service Charge)

Similarly, in Mexico City, the street vendors organization regulates the selection or accommodation of different individuals to sell in their market. And unlike Taipei, the organization holds a stronger control over the vendors than the authority (Peña, 1999). But this system in Mexico favors the family members, relatives and community members to ensure access to a particular place, which might promote nepotism. Rather, in Bou Bazar Market, the formal selection process could be maintained without nepotism as the administrative committee didn't consist of the vendor themselves and still, the vendors could enjoy a level of protection mentioned in availing in Taipei or Mexico.

## 4.3.2.2 Service Provision

When vendors require any new utility service or facility, they could manage the service through their community organization (Bazar Samiti) from their funding. Then, they could also apply for the services to the SKS through Bazar Samiti, and SKS might try to provide the facility from the fund that was initially made from the vendors' contribution as a daily charge. Sometimes SKS applies to the PWD office when the service is related to any construction or change in the PWD quarter. Normally, the vendors managed the low-cost services by themselves and approached the authority for the higher-cost facilities. However, vendors' lack of interest in approaching authority was visible in FGD, as the authority (SKS) didn't have any interest in initiating a service provision until the vendors asked for it and there was a possibility of rejection. Moreover, service provision by the government (PWD) could be delayed for a long time. It was a common practice in informal markets around the globe that the services were always scarce for the vendors. From earlier research, vendors in developing countries were found using the utility services available near the streets informally. Sometimes, they had to pay for the services, but they couldn't ask for additional services (e.g. need for a toilet or a water supply line) like Bou Bazar (Kjellén & McGranahan, 2006; Kumari, 2015; Munro & Kweka, 2021). In the Philippines, the vendors could be relocated by the government order from any place without any compensation or assistance from the authority. This temporary status didn't allow them to avail any services either by themselves or by the authority (Bayatan & Palic, 2020). The vendors of Dakar (in Senegal) had the opportunity to use public facilities available in their surroundings, but they were required to pay much higher price than their affordability (Mizes, 2023). Such examples demonstrate how the service provision by SKS or the Bazar Samiti could be a blessing for the vendor community. They didn't have to pay a high rent, and didn't need to reserve themselves from managing the services by self-funding, as they didn't have to bear the constant fear of relocation.

#### 4.3.2.3 Transaction with Vendors

In many countries, street vendors had to pay one charge directly to the government and avail the permission of vending at once (Kumari, 2015; Roever & Skinner, 2016; Sekhani et al., 2019). Here, vendors had to pay different amounts to different administrative and regulatory authorities (Table 4). SKS had imposed a daily charge of BDT 80 on each fishmonger, BDT 50 on each vegetable vendor, and BDT 150 on each meat vendor. From earlier sections, it was evident that these three vendor groups had a medium, low, and high range of monthly income respectively. The same type of charge imposition

was observed by police (Nayam, 2021). Therefore, both of these authorities equitably collected daily charges. The waste collection authority (e.g., SKS, DSCC through tendering) had specified their charges considering the amount of waste produced by types of vendors. As a result, vegetable vendors had to pay a higher amount of money for waste collection than meat vendors, as vegetable unloading and selling produced a lot more waste. However, waste collection charges were comparatively low, if compared among the three types of charges. Collectively, the total daily transaction cost per vendor was almost unaffected and still had an equitable distribution. In some cases, the charge was too high for the vendors in other informal markets of developing countries, unlike the case of Bou Bazar (Saha, 2011; Sekhani et al., 2019). Equitable costing with unaffordable charges wouldn't be a good solution for the low-income vendors. On the contrary, the total charge collected per month by both authorities, SKS and police, was over BDT (local currency) one lakh. SKS made very little development or contribution to the market or vendors from this huge amount. Despite the huge amount of collection, the police didn't have any visual implication to that collected amount for the market. For this loss, many countries had formulated strict law restrictions on unlicensed vending (Austin, 1994).

**Table 4**Different Administrative Transactions with Vendors

| Vendors<br>Type            | Number | Charge<br>(SKS) | Charge<br>(Police) | Charge<br>(Waste) | Per Vendor<br>(Daily) | Per Vendor<br>(Monthly) |
|----------------------------|--------|-----------------|--------------------|-------------------|-----------------------|-------------------------|
| Fishmonger                 | 18     | 80              | 80                 | 30                | 190                   | 5,700                   |
| Vegetable                  | 12     | 50              | 60                 | 40                | 150                   | 4,500                   |
| Chicken                    | 4      | 150             | 100                | 50                | 300                   | 9,000                   |
| Meat                       | 3      | 150             | 100                | 20                | 270                   | 7,020                   |
| Grocery                    | 4      | 50              | 70                 | 40                | 160                   | 4,800                   |
| Fruits                     | 5      | 40              | 60                 | 20                | 120                   | 3,600                   |
| Egg, Betel<br>Leaf, Spices | 3      | 40              | 60                 | 20                | 120                   | 3,600                   |
| Total (daily)              | 49     | 3,610           | 3,620              | 1,600             | -                     | -                       |
| Total (monthly)            |        | 106,500         | 107,400            | 47,760            | -                     | -                       |

## 4.3.2.4 Wholesale

The process of wholesale buying relates to the vendor's interaction with the operational stakeholders (Table 2). According to the operation or wholesale buying mechanism, two broad categories were found. The 'meat seller' group used to visit the *Gabtoli hat* (wholesale market) in the evening, buy their animal which would be marked by the wholesale seller, and the 'meat seller' came back to his residence after payment. The animals were sent to their respective homes at night. So, sometimes they get worried about theft or financial loss by losing their animal while transporting. But their wholesale buying was based on trust (Greenwood & Van Buren III, 2010; Jahansoozi, 2006; Munro & Kweka, 2021). Other

vendors didn't face this problem as they used to visit the wholesale market, buy their goods, and return with their goods on a van, rickshaw, or CNG (S. B. Islam & Habib, 2013; Khaleda & Murayama, 2013; Rahman & Saha, 2023; Shafiuddin, 2021).

## 4.3.3 Comparison with Informal Market Mechanism

The characteristics identified from the earlier discussions can be summarized to understand the condition of the Bou Bazar market (Table 5). Informal markets have temporary structures or vehicles, set up in a public or community space, remaining for temporary duration, and existence of price bargaining characteristics, which were also present in the Bou Bazar market. However, the management framework of the Bou Bazar market was almost similar to a formal market management, which includes organizing and controlling regular vending activities by an institution or authority, registration of all vendors (or a vending permission process), zone allocation or fixing an area for every vendor, and so on. Different authors have described these characteristics of formal markets in many developing and developed countries (Anbarci et al., 2012; Baland et al., 2020; Hartati et al., 2015; Lauermann, 2013; Raj, 2017; Roever, 2016).

**Table 5**Comparison with characteristics of Bou Bazar

| comparison with characteristics of Both Bullan           |                    |               |
|--|--------------------|---------------|
| Characteristics of Bou Bazar                             | Informal<br>Market | Formal Market |
| Each seller has a fixed location or zone                 | Not Similar        | Similar       |
| Vendors can bargain the price                            | Similar            | Not Similar   |
| Organized and controlled by some institutions (SKS)      | Not Similar        | Similar       |
| No permanent built-up structure                          | Similar            | Not Similar   |
| Occupy a public space or a playfield                     | Similar            | Not Similar   |
| Use temporary structures like minivans, boxes, etc.      | Similar            | Not Similar   |
| Temporary Market (Sells at a particular time of the day) | Similar            | Not Similar   |

Formal management of informal trading activities of the Bou Bazar market had some comparative benefits compared to other informal markets. Though the vendors didn't have the flexibility of moving to different places or selling at different hours of the day due to fixed vending locations and time, they still obtain some benefits like, attraction of vendors from distant places (e.g., Airport, *Keraniganj*, and *Jatrabari*). A special contributing factor for attracting these distant customers was their subsequent activities around this place or the flexibility of parking their own vehicle in the adjacent field. Formal management of this informal market ensured a better functioning of the market. The influence of an authority (Samaj Kalyan Samiti) provided some kind of protection on vending permission for the vendors of Bou Bazar. The registration of all existing vendors helped to keep track of informal vendors in the market, and the variation in their selling items as per the requirement of the quarter residents. Zone allocation or fixing an area for every vendor was also important to properly design and manage the internal layout of the site and stalls. The permanent allotment of vendors ensured a functioning

'Bazar Samiti' which could help them to take community decisions (e.g. availing some facility by all vendors' contribution). When they weren't able to afford something by themselves, they could also apply for the services to the 'SKS' through 'Bazar Samiti'. Many researches have shown that informal vendors were using the utility services available near the streets illegally (Roever & Skinner, 2016; Saha, 2011). Sometimes, they had to pay for the services, but there was no opportunity to ask an authority for additional services that were available in Bou Bazar.

#### 5. Conclusion and Policy Recommendations

## 5.1 Policy Recommendations

The results suggest that local market authorities of any informal market should build a more flexible scheduling system for vendors instead of making them vacate the market by noon or any fixed schedule, considering the variations in demand throughout the week and seasons. Building a transparent wall around the market area can ensure it. Moreover, assistance in managing the seasonal challenges is essential, such as providing covered transport facilities and improved storage options to prevent spoilage, financial losses and ease their workload. Installing cold storage units for fish and poultry sections and introducing shared storage spaces for vegetable and fruit sellers help to address the storage challenges. This could be coupled with better roofing and shading infrastructure to protect the vendors and their goods.

In a megacity like Dhaka, it is crucial for any intervention to take into account the diverse circumstances of street vendors. While some vendors of this city might have enough capital to pay rent for using public space, others struggle to meet their basic needs (Husain et al., 2015; Uddin, 2021; Rayhan et al., 2019; Lata et al., 2018; Mondal, 2017). The government should prioritize those who are most vulnerable and provide enough opportunity to earn their livelihood in a decent way (Kumari, 2015; Bhattarai & Pathak, 2020; Ullah, 2021; Peimani & Kamalipour, 2022). Additionally, organizations or institutions must represent the interests of street vendors and respond accordingly with a formal management structure, which was apparent from the role of 'Somaj Kalyan Samiti' in this study. If these policy reforms are effectively implemented, the market space can be transformed into a prime example of a successful informal market area by establishing a better framework for market management.

#### **5.2 Conclusion**

Informal markets are not as chaotic as often portrayed (Nunbogu et al., 2018; Bouwmeestera and Hartmann, 2021). This research has explored such an informal market from multiple perspectives considering space, time, and management structure that is administered by a formal management mechanism. This study has used PRA tools in this regard. The results indicate that the market was being continued there for a long time. Over time, the number and types of vendors increased. The market activities temporarily occupied the space in the early morning only. Although daily activities changed according to seasons, weeks, months, and events, vendors were generally used to beginning vending early in the morning and continuing till mid-day. Finding also shows that vendors are often not

interested to leave the market unless they sell all their products, even if the guard forces them. Therefore, expanding market hours in the evening during special events could address the aspirations of the vendors and leverage the high demand during festivals. From a spatial viewpoint, a market of this kind should not be entirely enclosed that isolates it from the surroundings and reduces its visibility (Noegroho et al., 2021; Mangarengi et al., 2020; Ridha et al., 2021). The field was used for other purposes once the market concluded. The time-staggered aspect of the utilization of space facilitates social equity by allowing various classes to use the same space in a non-competitive manner (Allen & Farber, 2020). Urban planners must consider a non-competitive and integrated use of spaces in this regard, which is made possible by space utilization (Li et al., 2018; Sekhani et al., 2019; Sasu et al., 2024).

However, the Bou bazar market faced multi-faced challenges affecting both vendors and customers, ranging from inadequate infrastructure to seasonal difficulties and security concerns. These challenges offered valuable insights for targeted interventions, including addressing waste management issues, providing storage and drinking water facilities, improving sanitation facilities, especially genderspecific sanitation facilities for female vendors, enhancing security measures, and providing effective drainage systems for the disposal of wastewater. The pricing mechanism of controlling the generation of waste is one of the bones of contention between vendors and power players. The collection of fees from the Police and the 'Somaj Kalyan Samiti' needed proper justification and transparency. The relevant authority could intervene in this issue and reorganize the pricing mechanism in a justified manner considering the income of each type of vendor. Moreover, setting up designated waste collection points and encouraging vendors to sort different types of wastes may reduce the accumulation of waste (Merlinda & Widjaja, 2020). Additionally, a better drainage system with slope adjustments and water pumps, and the provision of proper, hygienic, and gender-segregated sanitation facilities are necessary for such markets to manage stagnant water, reduce the reliance on open defecation, ensure easy access for women, and maintain a healthy environment. This management structure along with the spatial security that the vendors experienced, played a vital role in capturing the vendor's interest in the market. The vendors had to execute their activities similar to any other informal markets, but they didn't have to remain vulnerable to eviction, lack of facility, and repeated disturbance of open streets. Some vendors were found taking regular or irregular breaks to spend time with their families, which was rare in usual informal markets. But the payment system and market attraction of the site generated enough income for those vendors on other days, allowing them for such vacations without disrupting their lifestyle.

The involvement of a local organization in setting up the market determined most of the administrative processes of the market. The vendors could undertake development work themselves, but on a limited scale. Rather they needed to request the higher authorities to get the facility or utility. They had limited freedom in case of vending time and space. They could conduct other processes (e.g., wholesale buying and transportation) normally. However, their satisfaction with the market was connected to the overall benefit and reduced harassment faced in the market premises. The continuing opportunity of the selected

vendors to sell in the same place developed a sense of comfort among the neighboring vendors. Also, social connectivity among some vendor groups might be strong, but some vendors were found lacking in trust in other vendors or the 'Bazar Samiti' to ask for immediate help. The stakeholder relationship in the current market setting benefitted the vendors in an informal context, but it could be further improved through community connectivity. Formal management of informal trading activities like the Bou Bazar market has some extra benefits compared to other informal markets and ensures better functioning of the market. So, this market structure or framework can be applied to other informal markets to ensure better market management and functioning leading to higher satisfaction among the vendors.

**Appendix** 

# A1. Materials used by vendors



Steel racks in meat markets



Jhuri and plastic box are common in vegetable markets



Cage common in poultry markets



Bowls common in fish markets

# A2. Different types of existing facilities



Security guard's room



Poultry and fish processing facility (high amount of waste)



Storage facility of fish market



Sanitation facility (toilet)

# A3. Road and Footpath



Pucca road (Infront of meat market and residential building)



Katcha road (along the main route)



Tea stall (outside the boundary wall, on the footpath)

#### A4. Issues/ risks



selling area
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Waste in vegetable



Muddy road during heavy rain

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# Formal Management Structure of Informal Market: A Case Study of Bou Bazar, Dhaka

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