

Integrating Street Vendors In Industrial Area Planning Of Ludhiana City: A Societal Enhancement Through Infrastructure Reform

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Abstract

Street vending is a prominent and visible informal economic activity in industrial areas of developing countries like India. Street vendors provide convenience to consumers by being available at doorstep and selling products of immediate need at cheaper price. Street vendor's activities also noticed in industrial areas of Ludhiana. It is important to address the utilization of streets by street vendors in industrial estates and its associated risk, to integrate them in the planning of industrial estates. Objective of the study was to assess street vendors, their location and space utilization in industrial areas of Ludhiana. The variables of the study were types of street vendors, their consumers, their location in industrial areas and spaces utilized by the street vendors. The study found that presence of street vendors selling food items were more in the industrial area. Consumers of the street vendor's were mostly ancillary workers of the industrial area. Activities of street vendors were prominent at the transportation zones and main roads. Within the roads of industrial area, street vendors choose to place their shops at unusable and risky utility spaces to evade the chances of competition and eviction.

Key words: street vendors, industrial area, location choice, planning approach;

Introduction

Most of the urban poor in India survive by working in the informal sector. Street vending is one of the prominent informal economic activities of developing countries [10]. Street vending has become significant source of employment because it requires low skills and very less financial input. Street vending provides affordable goods and services for many urban residents and workers [1]. Government of India defined street vendor as a person who offers goods or services for sale to the public without having a permanently built structure but with a temporary static structure or mobile stall (or head-load). Town planner thinks that unregulated land use, informal housing and informal sector as problems that need to be solved [3]. Government laws and municipal regulations in India are

consistently formulating ways to fight urban space battles with street vendors [2].

Street vendors cluster more where there is higher population density [8]. In a study conducted by CEPT University found that street vendors mostly locate themselves near transportation nodes and residential areas. The concentration of street vendors in other land uses is almost one third of that of the transportation nodes. The study also found that there is availability of street vendors in the industrial areas [5].

Industrial areas are important part of economy of a region. After agriculture, industries have the highest concentration of employment. The planning of industrial areas concentrates on the need of industrial units. Regularization of spaces by planning and allocation of plots in industrial areas have reduced the chance of growth of low cost services like food shops and repair shops.

These services are vital for industrial workers as well as ancillary workers in the industrial area. Therefore, street vendors try to fill such demand gaps.

Previous studies of street vendors did not focus on types of street vendors their consumers, location and space utilization of street vendors particularly in the industrial areas of developing countries. The lack of the study may result in the non-inclusion of very important services that are provided by street vendors to a larger section of working group in the industrial area. The planners and policy makers responsible for industrial areas planning need researches those describes street vending particularly in the industrial areas of developing countries.

Objective and Methodology

Objective of the study was to assess street vendors, their location and space utilization in industrial areas of Ludhiana. The variables of the study were types of street vendors, their consumers, their location in industrial areas and spaces utilized by the street vendors. A reconnaissance survey conducted to map the location of street vendors in industrial area of Ludhiana. Through fish bowl method of random sampling three roads selected from the three categories of roads in the industrial areas, which are, Sub-arterial roads, Collector's roads and Local roads. Detailed studies conducted in the selected roads to understand street vendor's location in industrial area with respect to hierarchy of roads. Further the road spaces utilized by street vendors documented and segregated in broad categories and weighed with respect to risk associated with the spaces utilized by the street vendors in industrial area. At the end, recommendations framed for, more inclusive industrial area planning.

Study Area

India is a developing country and rapidly industrializing. Punjab is one of the most industrialized and prosperous states in India. There are number of towns and cities that have emerged as major hubs for manufacturing and trade. Ludhiana district is in Punjab province of

India. The district is one of the prime industrial centers in North India especially for small-scale industries. The city is famous for its hosiery goods, woollen garments and leather items. Machine parts, dyes, cycle parts, sewing machines and motor parts are exported from Ludhiana. Workers from all over north India have migrated to Ludhiana for work. Existing Industrial Areas in the Ludhiana are Focal Point, Phase I to VIII, Industrial Area –A, Industrial Area –B, Industrial Estate and Giaspura, Out of these, Focal Point is the biggest industrial area in Ludhiana. Focal Point is a planned industrial area in Ludhiana. Department of Industries set up industrial area Focal Points in Ludhiana way back in sixties. Keeping in view larger demand for industrial plots, Phases I to VIII gradually planned in the industrial area. In Focal point phase I to Phase VIII there are approximately 2000 industries.

By the time this research conducted in 2020, Ludhiana Municipality area had approximately 25,000 street vendors. There were some well-known street vendor's zones near Chaura Bazar, Railway Station and under the Jagraon Pull. However, most of the street vendors in Ludhiana are roadside vendors and spread all over Ludhiana. Similarly, activity of street vendors noticed in the industrial areas of Ludhiana, especially in Focal Point area.

Street Vendors and Their Consumers in Industrial Area

This part of study highlighted the types of street vendors and their consumers in the industrial area. Types of street vendors present at industrial area were traditional Fast food seller, Fruit and juice seller, Barber, Cycle repairer, Vehicular tire repairer, packed snacks drinks and cigarettes, Mobile SIM seller, Cobbler, Clothes, Vegetable seller Table 1. Among the street vendors 67% were those who sell some item of food, like fast food sellers, packed snacks sellers and fruit sellers. Street vendors fulfil immediate needs. So the products they sell can be considered important. There was no shop to sell such item in the whole industrial area.

Table 1: Types of street vendors

| Types of street vendors | Percentage of total surveyed |
|-------------------------------------|------------------------------|
| Traditional Fast food | 36 |
| Fruit and juice | 13 |
| Packed snacks drinks and cigarettes | 19 |
| Vehicular tire repair | 9 |
| Cycle repair | 7 |
| Cobbler | 6 |
| Barber | 3 |
| Clothes | 3 |
| Mobile sim seller | 2 |
| Vegetable | 2 |

To study, who were in immediate need of services provided by street vendors, a survey of the types of consumers were done and presented in Table 2. Consumers who came to street vendors and purchased goods considered in the survey. The consumers of street vendors in industrial area broadly categorized in four categories such as factory workers employed by factory, daily wage labours hired for labour works on requirement

basis, the drivers of small or large goods trucks and local residents. The observation indicates that daily wage labours and drivers constitute 81% of the consumers of street vendors. Factory workers were only 12% of the consumers of street vendors. This shows that the street vendors at focal point are the need of workers who are daily wagers and does not have any designated workplace.

Table 2: Types of consumers of street vendors.

| Types of Consumers | Percentage of total surveyed |
|--------------------|------------------------------|
| Drivers | 44 |
| Daily wage labors | 37 |
| Factory workers | 12 |
| Local residents | 7 |

Location of Street Vendors in Industrial Area

Detailed mapping of street vendors is crucial, because official planning processes do not consider informal economic activities. Therefore, there is no documented information on the scale and size of vending activities. For mapping, help of local worker was taken to trace the locations of street vendors in the area. Google map timeline

and Google map save feature used to take references for mapping of exact location of vendors. The industrial area has three categories of roads, Sub-arterial, Collector's roads and Local roads. Mapping done on randomly selected Sub-arterial road section, Collector's roads and Local roads of the industrial area focal point Ludhiana. The selected road sections for the study highlighted in figure 1.

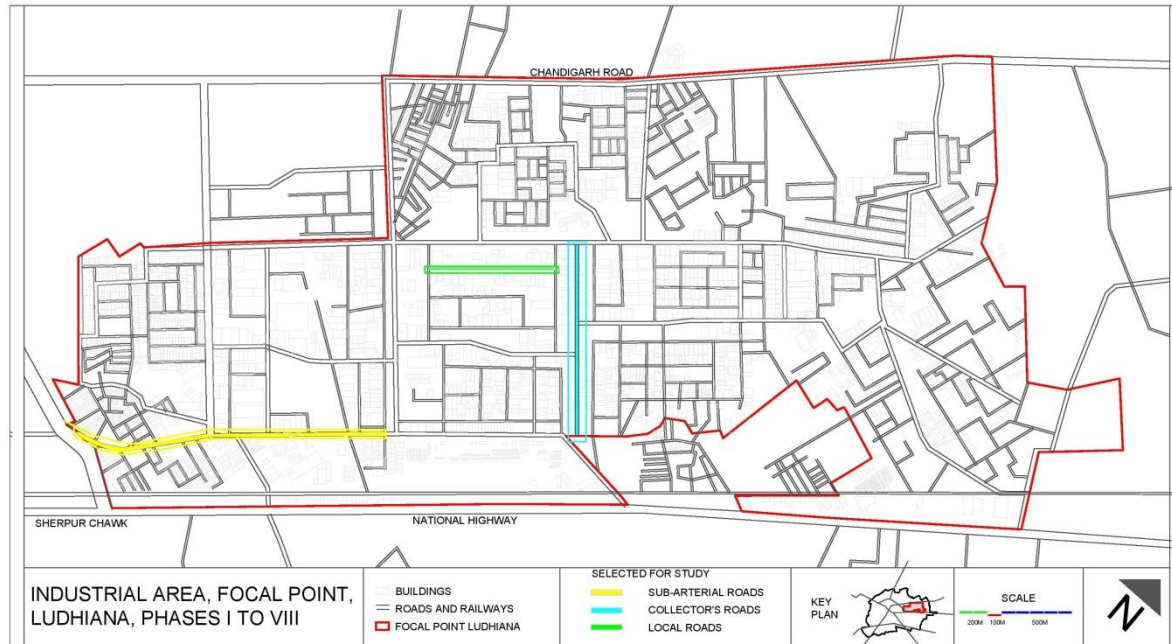


Fig. 1: Map of industrial area, focal point, Ludhiana and highlighted roads for study of street vendors. (Author, 2020)

Sub-arterial roads in the industrial area remain mostly active due to heavy truck movements and other goods and transport related activities. These activities are somehow common for the all the industries in the area and huge number of vehicle

and workers involved in the movement of goods. No market place observed along the sub-arterial roads of the industrial area. However, researchers noticed huge number of street vendors, mostly food and drinks related. The street vendors activities showed in red in the map of sub-arterial road in figure 2. At a time, there were 40 to 50 street vendors present per kilometer length of the sub-arterial road of the industrial area (Table 3).

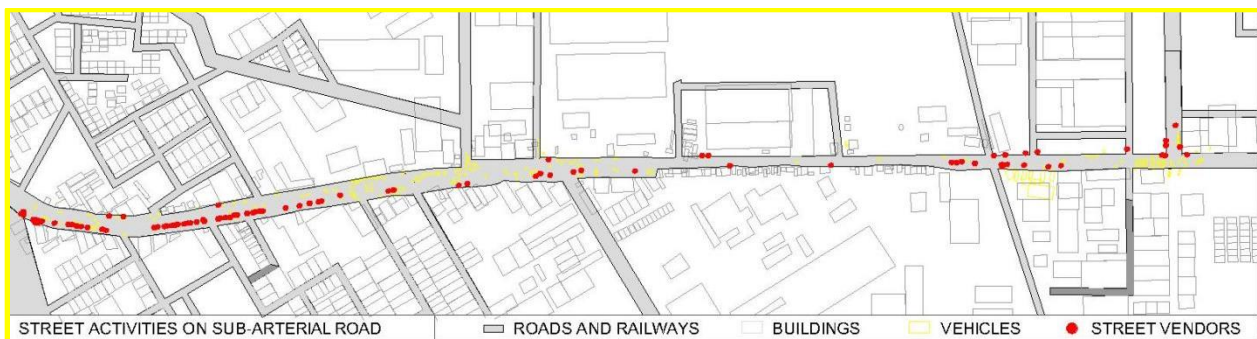


Fig. 2: Street vendors' activities on the Sub-arterial roads. (Author, 2020)

Collector roads and local roads were comparatively less active than the sub-arterial roads of the industrial area. Few truck parking zones observed in the collector roads however, no such common activities seen in the Local roads. Primary observations indicated that 20 to 25

street vendors per kilometre length of collector roads were present at a time. Further, only 2 to 5 street vendors were present at a time in case of per kilometre length of local roads. Vendors' activities are highlighted by red dots in figure 3 for collector roads and figure 4 for local roads.

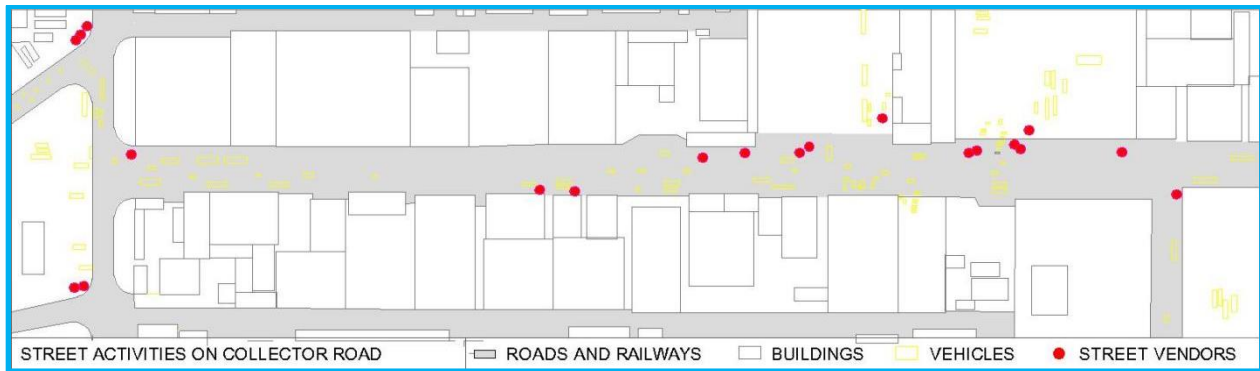


Fig. 3: Street vendors’ activities on the collector roads. (Author, 2020)

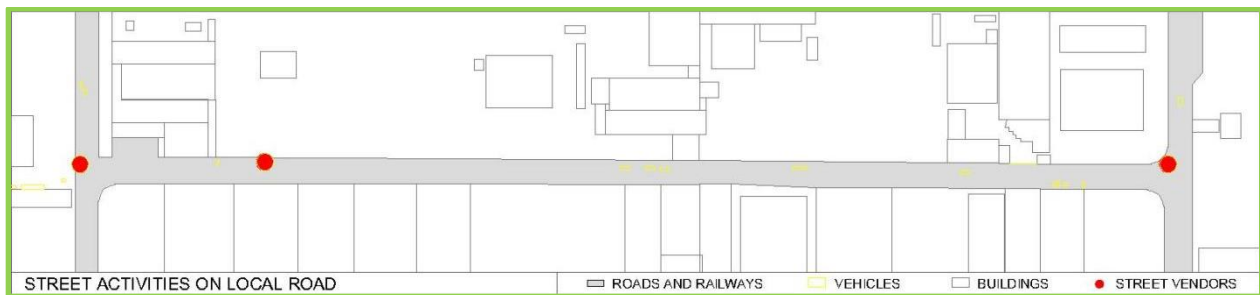


Fig. 4: Street vendors’ activities on the local roads. (Author, 2020)

Observations from the study of street vendors on various types of roads of the industrial area indicated that the activities of street vendors mostly related to availability of common activity

zones in the area. However, no market like concentration of street vendors noticed in the industrial area.

Table 3: Street vendors on different types of roads

| Types of roads | Number of street vendors per km length of road. |
|--------------------|---|
| Sub-arterial roads | 40 to 50 |
| Collector’s roads | 20 to 25 |
| Local roads | 2 to 5 |

Spaces Utilized by Street Vendors in Industrial Area

Detailed mapping of the vendors on roads of industrial area showed that, three prominent categories of spaces regularly used by street vendors. Some of the street vendors used the edge of road (Fig.5), some used utility spaces along the road (Fig.6) and some used front connecting spaces of vacant plots and roads (Fig.7). At the time of survey edge of the roads in industrial areas were used for keeping waste materials, raw materials, parking and street vendors. Nearly 55% of the surveyed street vendors have placed their shops at the edge of roads.

Utility spaces along the roads are drains and the electrical poles or transformers. About 32% of the

surveyed street vendors have placed their shops under the electric poles and transformers. Vacant plots frontages are no activity zones in a particular stretch of road. Street vendors who have placed their shops at the vacant plots are 13% of the total surveyed street vendors (Table 4).

The number of street vendors on the edge of the road was high but the street vendors using utility spaces needed special attention because during site study it was observed that nearly all the transformers and electric pole space were being utilized by street vendors. Utility spaces are more stable locations for street vendors, was outcome of personal interview with some of the street vendors.

Table 4: Spaces utilized by street vendors.

| Road spaces | Percentage of Total Surveyed |
|--------------------------|------------------------------|
| Edge of road | 55 |
| Utility space | 32 |
| Adjacent to vacant plots | 13 |



Fig 5: Street vendors on edge of roads (Author, 2020)



Fig 6: Street vendors on utility spaces (Author, 2020)



Fig 7: Street vendors on vacant plots (Author, 2020)

Risk Associated with the Spaces Utilised by Street Vendors in Industrial Area

The hazardous working conditions of street vendors result in considerable burden of ill health and injuries [11]. Study also indicates that the pattern of subsistence in the daily market were not comfortable for street vendors [4] Studies in developing countries have found the street vendors faces risk of eviction and accidents.

Among the street vendors, 25% have faced some or other kind of accident on the road and 49% have faced eviction [7].

Street vendors in industrial area Ludhiana placed their shops at vulnerable places. Both the street vendors and the consumers may face serious hazard and accidents in the forms of air pollution, noise pollution, dust, road accident and electrocution. Physical spaces can expose people

to toxins or pollutants and influence lifestyles that contribute to diabetes, coronary vascular disease, and asthma [9]. Among the three categories of vending places in the industrial area, the utility spaces are highly risky than the edge of roads and least risky are the vacant plots (Table 5). However, large number of street vendors placed their shops at very risky places along the roads

(Table 4). Personal interaction with the street vendors revealed that they deliberately chose to stay near vulnerable places because chances of ejection in these spaces are less. Studies have also identified that Street vendors conduct their business with insecurity. Whenever eviction drives are conducted, their wares are confiscated or destroyed [6].

Table 5: Risk associated with street vending

| Spaces utilized | Factors of risk at the space utilized | Risk level |
|-----------------|--|------------|
| Edge of road | Noise, air pollution, dust, road accident | High |
| Utility space | Electrocution, Noise, air pollution, dust, road accident | Very high |
| Vacant plots | Dust air pollution | Low |

Findings and Conclusion

Other than the industrial workers, huge numbers of ancillary workers work in the industrial areas like mason, plumber, driver, cleaning staff, coolie, etc. The ancillary workers are daily wage labours and do not have any designated workspace. Regularization of spaces by planning and allocation of plots in industrial areas have reduced the chance of growth of low cost services like food shops and repair shops. Therefore, unorganized start-ups try to fill the demand gap. One such unorganized startup in the industrial area of Ludhiana is the street vendors. Observations indicate that 81% of the consumers of street vendors were daily wage labours and drivers. Street vendors were more active on sub-arterial roads (40-50 street vendors/km) than collector roads (20-25 street vendors/km) and local roads (2-5 street vendors/km). Activities of street vendors are directly dependent on the common activities of industrial areas like transportation zones and main roads. Detailed study of each type of roads in the industrial area showed that 55% of the total street vendors surveyed used edge of the road, 32% used the utility spaces like transformers and electric poles and 13% used vacant plots as spaces for street vending. Street vendors who placed their display at utility spaces of the roads in industrial area were at high risk of accident and health hazards. Within the roads of industrial area, street vendors choose to place their shops at unusable and risky

spaces to evade the chances of competition and eviction.

Recommendations

On the basis of the above studies, policies and planning intervention are recommended for industrial area planning in developing countries like India. The policies related to land use division of industrial townships or industrial estates shall take care of allocation of non-saleable, non-rentable open spaces for street vendors. Spaces should be allocated in the industrial areas for food related street vendors proportionately along main and subsidiary roads. Special attention to be given to the areas where transport related activities would be allocated. Utility spaces along the roads like transformers shall be caged or raised on platform so that those spaces cannot be utilized for other uses. Planning of services consume large amount of space in industrial areas. Proper care shall be taken to design such spaces so that those spaces remains manageable and not ill utilised.

Way Forward

Researchers noticed that street vendors were one of many kind of informal or unregulated activities happening in the industrial areas of Ludhiana. Further studies shall highlight all the informal and unregulated activities in industrial areas so that those activities can be integrated in the process of industrial area planning.

References

- [1] Ambati, N.R., George, A.G. & Shah, A.M. (2015). National Journal of Social Science & Interdisciplinary Research, 4 (12), 20-31.
- [2] Bhatt, B.V. & Jariwala, A.D. (2018). A Study of Street Vending Activities in the Southeast Zone of Surat. International Journal of Civil Engineering, 7(3), 1-10.
- [3] Boonjubun, C. (2017). Conflicts Over Streets: The Eviction of Bangkok Street Vendors. Elsevier, 70, 22-31. <https://doi.org/10.1016/j.cities.2017.06.007>
- [4] Chakraborty, P. & Koley, S. (2018). Socio-Economic View on Street Vendors: A Study of a Daily Market at Jamshedpur. Journal of Advanced Research in Humanities and Social Science, 5(1), 14-20, <https://doi.org/10.24321/2349.2872.201804>
- [5] Dalwadi, S. (2004). Integrating Street Vendors in City Planning Vadodara, Ahmadabad, School of Planning, CEPT University, Ahmedabad, 1-40.
- [6] Indira, D. (2014). A Study on the Organizing of Street Hawking Business. International Journal of Management and Commerce Innovations, 2(1), 280-288.
- [7] Olurinola, I., Fadayomi, T., Amoo, O. E. & David, O. O. (2014). Occupational Health and Safety Among Street Traders in Nigeria. International Journal of Economics and Finance, 6(4), 59-68. <https://doi.org/10.5539/ijef.v6n4p59>
- [8] Mukim, M. (2011). Industry and the Urge to Cluster: A Study of the Informal Sector in India. Discussion paper 72, Department of International Development, London School of Economics, 1-60.
- [9] Perdue, W. C., Lesley, A. S. & Gostin, L. O. (2003). The Built Environment and Its Relationship to the Public's Health: The Legal Framework. American Journal of Public Health, 93(9), 1390-94. <https://doi.org/10.2105/AJPH.93.9.1390>
- [10] Sekhania, R., Mohan, D. & Medipally, S. (2019). Street Vending in Urban 'Informal' Markets: Reflections From Case-Studies of Street Vendors in Delhi (India) and Phnom Penh City (Cambodia), Elsevier, 89, 120-129, <https://doi.org/10.1016/j.cities.2019.01.010>
- [11] Smridhi, S. & Anitha, C.T. (2018). Occupational health and Safety of Street Vendors of Delhi and Hyderabad: A Case for Universal Health Coverage. Poster on Occupational Health, University of Hyderabad, 1-1. <https://www.researchgate.net/publication/330158488>