CENTRE FOR CIVIL SOCIETY

Spatial Management of Vending Markets

Ananya Goyal

Researching Reality Summer Internship 2014
Working paper: 309

Table of Contents

Abstract

This research studies the best models for identification of potential spaces for a vendors' market and proposes a guideline for TVCs, local authorities and vendor organizations to structure and operate them. This guideline is proposed for better implementation of the provisions of the Street Vendors Act, 2014. The approach is to identify as many potential vendor market spaces as possible through planning and design innovations. This information will empower community-led design to come up with efficient natural markets. The aim of the research is to come up with the most efficient models for maximising the holding capacity of the vendor zone, based on existing literature as well as new designs. The needs of other street users like pedestrians, motorists and consumers have also been taken into account.

Introduction

Broadly defined, a street vendor is a person who offers goods or services for sale to the public without having a permanent built-up structure but with a temporary static structure or mobile stall or head-load (Wiego.a). The Street Vendors Act, 2014 has used the term 'street vendors' as inclusive of traders, hawkers and service providers, stationary as well as mobile. It is estimated that there are around 10 million vendors in India and the total number employed in the industry becomes even larger if we consider the small- scale enterprises sustained through hawking by providing an outlet for the goods (Bhowmik, 2010).

Street vending is an important source of livelihood for the urban poor and is one of the entry-level occupations for the migrants from the rural areas, as both the skill requirement and the investments are low in street vending (Bhowmik, 2001). The street vendors provide inexpensive products at convenient locations for the consumers and also increase the vibrancy of the market. The vendors thus attract customers to a market resulting in higher footfall at the retail stores as well[1]. Street vendors act as 'eyes on the street', discouraging crime in the area (Jane Jacobs, 1961).

Despite being such an integral part of the urban economy, the vendors were seen as a 'nuisance'. They were considered illegal if found operating without licenses, which were not issued. They were also constantly harassed by the Municipal officials and the police. Hence regularisation of vendors becomes very important. Bhowmik (2001) has pointed out that 'regulation would imply many things,

1. Hawkers will not be forced to bribe the police or the municipal authorities in order to ply their trade.
2. Street vendors can be made to maintain the cleanliness of the areas they operate in.
3. The municipalities will increase their revenues through the fees collected from the hawkers.
4. The hawkers will not be compelled to take protection from local anti-social elements- goons and mafia -for carrying out their activities. This will in fact decrease the hold of such elements on the street vendors.'
5. Formalisation of vendors market reduces spill-over onto pedestrian space and carriageway.
6. It also gives the vendors a sense of employment security and increases the sales (Randhir Kumar et al, 2009).

[1] **This was found in interviews of shopkeepers by the author, in the Hauz Khas market, Delhi. They unanimously tagged a sudden drop in footfall and sales on the displacement of vendors from the market about two years ago.**

The Street Vendors Act, 2014, enforced on May 1, 2014, is an attempt to recognise and regularise all the street vendors in India. This makes the profession of street vending legal and brings relief from the continued threat of evictions by the Local Authority. The Act calls for registration of the street vendors instead of their licensing. This is significant and a marked difference from the previous legislations, because it places the onus of the registration on the Local Government and not on the vendors to obtain the license.

This study looks into the 'determination of spatial planning norms for street vending' as called for by the Plan for Street Vending (First Schedule) in the Act. Also, the Plan has to

1. Ensure that all the existing vendors are accommodated.
2. Ensure that provision of space or area for street vending is reasonable and consistent with existing natural markets.

Section 13 of the Act says that every street vendor shall be entitled for new site or area in case of relocation. Also, under the Schedule-2, matters to be decided by the appropriate government are:

- Principles of categorizing vending zones.
- Terms and conditions for street vending.
- The manner of carrying out vending activities on time sharing basis.

A review of the existing literature shows that a few aspects of these provisions have been systematically studied. Jonathan Shapiro Anjaria (2006) has given a compelling argument for providing for vendors markets at par with other street uses in urban space planning. There have been various practices recommended for formalisation of vendors' market, from the collaborative approach on the line of cities like Bhubaneshwar (National Institute of Urban Affairs, 2012; Randhir Kumar et al, 2009 and 2012) and Warwick (Skinner, 2009), to the identification and establishment of vending zones by a Hawking Committee as in Chennai (Transparent Chennai, 2009). Market models in terms of structure as well as operations have been discussed of Surat (Ray and Mishra, 2011), Vadodara (Shreya Dalwadi, 2004), Ahmedabad (Mahadevia, Brown et al, 2013), Patna, Indore, Bengaluru, Patna, Chennai, Lucknow, Mumbai, Jaipur, Delhi, Hyderabad and Imphal (Bhowmik, 2001 and 2012). A detailed demographic study of vendors has been done in Mumbai (TISS and YUVA, 1998) and an overview of Phnom Penh, Bangkok, Mongolia (Kusakabe, 2006) and Indonesia (Dimas, 2008).

Planning and urban design innovations for vendor markets have also been put forward for urban India (ITDP, 2011) with case studies of Ahmedabad (CEPT and Cardiff University, 2014) and of Kanpur (Felixx, 2011).

Hence, while there has been a substantial amount of data collected on street markets and designs proposed, there hasn't been any defined guideline for identifying a potential space and developing a vendors market.

This research aims to fill this gap by proposing a guideline for TVC/ local authority and for vendors' organisations to identify the potential spaces for vendors' markets and also, the ways to structure and operate them in accordance with the Street Vendors Act, 2014. The aim is to identify as many potential vendor market spaces as possible and empower community-led design. Then, the research attempts to come up with the most efficient models for maximising the holding capacity of the vendor zone, based on existing literature as well as new designs. The needs of other street users like pedestrians, motorists and consumers have been taken into account.

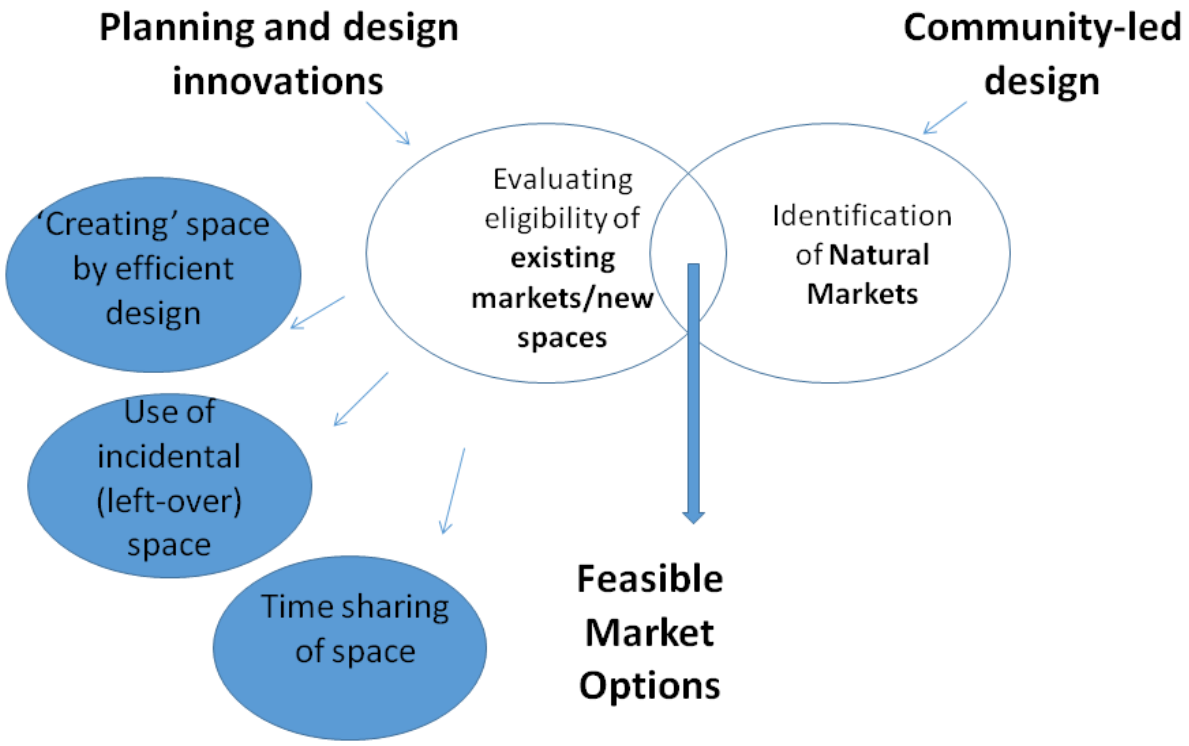
This study is relevant because the Act has just been enforced. It now requires TVCs to identify the vending zones and their terms and conditions. This is thus an opportune moment for these guidelines, whose importance can be overlooked only at the peril of the authorities. Lack of due thought to the site and the reasons for relocation results in a loss of livelihood for the vendors when they find themselves suddenly displaced. There have even been instances of drastic measures like self-immolation by the vendor leaders to get the attention of the authorities (Bhowmik, 2012). Hence, adequate and suitable relocation of vendors is a serious issue and needs to be addressed systematically.

Research Methodology

1. The study began by identifying innovative vendors' market model, especially in the Indian context. This helped to identify best practices for coming up with potential spaces for vendors' market. This was done by studying market models documented in prior studies, reported in newspaper articles and interviews with around 30 vendor leaders and vendors, from Delhi, Indore and Bhopal. Author's observations of the markets in Delhi, Indore and Bhopal and field survey of Sarojini Nagar Market, Connaught Place, Pallika Bazaar, Tagore Road Market in Delhi were included.
2. Then the spatial management of the identified markets was studied by best practices (included as case studies in the paper) and design proposals. Interviews with specialists like architects, urban planners and researchers of vendor markets were the primary research involved at this stage.
3. New designs have also been proposed in the paper based on designs researched and inputs from specialists.

   The primary research included semi-structured interviews with stakeholders including vendors, vendor leaders, pedestrians, motorists and planners. Qualitative research was chosen over quantitative as first, the responses were not quantifiable and second, the scope of the research could not allow a sample large enough to represent 10 million vendors in India.

Outline of the Guideline Proposed



The research proposes a guideline to identify spaces in an existing city where street markets can be developed. This would help the local authority, the Town Vending Committee and the vendor organizations to come up with a list of potential vendor markets. The list could include existing vendor markets as well as new spaces identified by suggested planning and design innovations.

However, identification of spaces is not adequate; these markets will have to be evaluated for feasibility. While this could be ascertained by the above authorities or other commissioned agencies too, this kind of Top-down approach has its own contentions. The major problems with the central planning concept are:

1. They may not have suitable information or insight into which market locations work best, from the demand side. The patterns of urban movement also affect the time of the day when the respective markets work the best.
2. Their incentive to work and find out the maximum possible markets for vendors' shall remain less than the vendors' themselves.

These concerns can be addressed by natural and spontaneous markets, as identified by the vendors. The Act (2014) defines natural market 'as a market where sellers and buyers have

traditionally congregated for the sale and purchase of products or services'. YUVA (2005) defines Natural Markets as 'a phenomenon in which the growth of a commercial activity especially street vending happens naturally around the planned/unplanned areas of public congregation' like schools, railway stations etc.
Hence, it's more desirable to have vendors suggesting all possible natural markets and then eliminating those which can cause traffic congestions, health and hygiene problems, security issues etc in consultation with experts like City Management Group. It should be kept in mind here that the Street Vendors Act, 2014 states that 'sanitary concerns shall not be the basis for declaring any area as a no-vending zone unless such concerns can be solely attributed to street vendors and cannot be resolved through appropriate civic action by the local authority' (Schedule 1).
Hence, this community-led design is an appropriate way to identify Natural Markets, as illustrated in Bhubaneshwar, one of the few instances of regularizing and formalizing all vending zones.

Approach: Community-led design

Case Study: Bhubaneshwar: [2]
52 Vending Zones with a total of 2178 shops were developed in Bhubaneshwar by a unique model of Public, Private and Community Partnership. The Bhubaneshwar Municipal Corporation and the Government Authority (State govt. Of Orissa) were the Public partners. Street Vendors and advertising companies were Private and vendors' organisations like NASVI were Community Partners.

Potential Spaces for markets were identified by BMC and vendors' organisation in consultation with the City Management Group, which has representatives from Planning, Police etc. These locations were then approved by GA. Obtaining the approval required several rounds of negotiations and advocacy by the vendors' organisations.
This model included street vendors in the process right from the identification of vending markets, which ensured that only feasible markets are regularised and even prime locations were allotted. This sort of Bottom-up approach has a good potential of replicability and several Municipal Corporations including that of Kolkata, Guwahati and Patna have approached BMC to learn more about the strategy.

Space Management: Only temporary structures of 6x6 or 8x6 ft are permitted in the vending zones. After identification of vending zones, BMC built bamboo structures for the vendors for a trial period of 6 months. Then, iron sheet structures were permitted. These structures were paid in part by companies who wished to advertise on the stalls and in part by the vendors themselves.
Regulations:

- The vendors cannot claim ownership to the land on which they operate.

[2] **Empowering street Vendors of Bhubaneshwar, Randhir Kumar et al, 2009**

- An annual fee of Rs. 500 per shop is charged from the vendors by BMC.
- Only CFL bulbs are allowed in the vending zone, to reduce the carbon footprint.
- BMC collects advertisement fees for advertising on top of the vendor stalls.

Similar approach had been used in Durban, South Africa to accommodate 8000 vendors at the Warwick Junction (Participedia.net, 2010).

Thus, a combination of planning innovations and community-led design would help in coming up with feasible market options.

1. Creating space for vendors' market within existing infrastructure by efficient design:

Existing infrastructure like roads and sidewalks may be underutilized by design. Redesigning them efficiently would allow us to see potential for not only street markets on these roads, but also for other necessary amenities like sidewalks, parking space, street furniture etc.

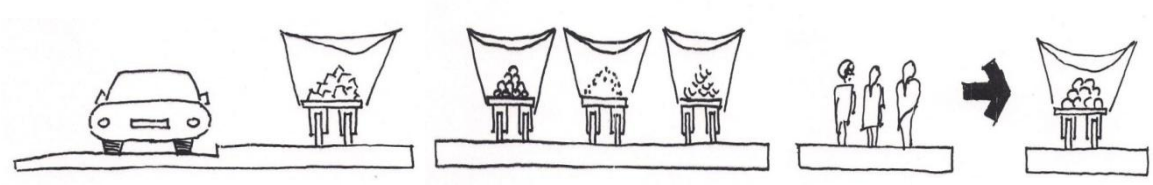
This approach increases the utility of existing infrastructure and thus, it is strongly recommended. Cost incurred in revamping it, is much less than building a new space for the vendors. There is also a limited space for developing new markets in any city; redesigning existing spaces greatly increases the scope for street markets.

Some models for redesigning existing space to create vendors' markets are discussed here-on. This section lists and analyses the models for structuring and designing a market; further sections would look more into how such spaces can be identified.

1.1 Felixx Model

This model was suggested for Kanpur markets by Netherlands-based company Felixx. The strategy of the suggested model was to categorize markets into three broad categories and to then give design proposals for each. The Markets are categorized into:

a. Markets along the Street
b. Organised Vendors' Markets, which have a separate, designated space for vendors to operate. This space is taken to be off-street.
c. Flexible Vending Zones which are used for different purposes at different times of the day.



Street Markets | Organised Markets | Flexible Markets

1.1.1 Markets along the street:

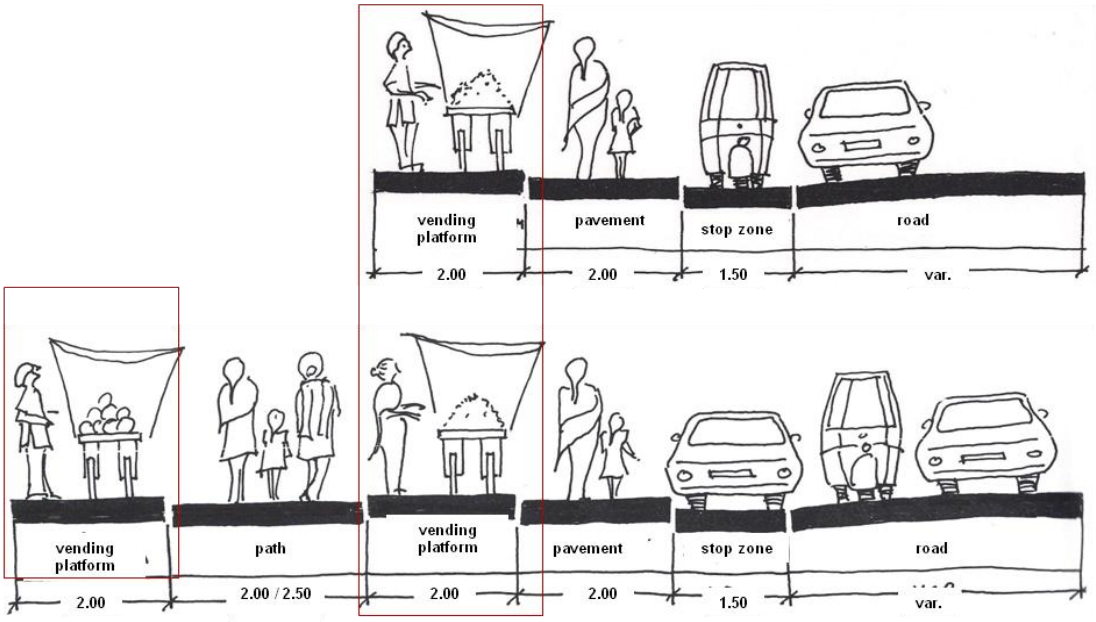


Fig1. **Toolbox : MARKETS ALONG THE STREET**

This toolbox for street markets divides the pavement into an elevated vending platform of 2m width, a 2m path for pedestrians and a 1.50m stop zone for the cars to pause or park for shopping.

Analysis of the proposal

a. Challenges Identified

- This model requires at least 13 ft. wide pavement. If stop zones are also required, the figure rises to about 18ft. This severely limits the application of the proposal as such wide roads are not very common; in fact, 40% of Delhi roads don't have any pavements at all (RITES Study, 2008).
- This model also lacks a provision for Street Furniture. A place which would expect a lot of crowd should ideally have common open spaces (having sitting space and green cover) in between along these vendor platform. This gives people the opportunity to 'pause' or 'rest', and the ability of the market to attract and retain people in the market is actually contingent to this factor.

b. Recommended Modifications in Spatial Management

The recommendations of this paper to overcome the identified challenges are:

- Vending Platform- The model suggests a 2m, slightly elevated vending platform at the edge of the pavement opposite to the road, but it can be taken to be

around 1-1.5m if space is a constraint. There is no standard for required vending space; it depends on the type of commodity being traded.

- Pedestrian Path: Circulation path is taken to be 2-2.5m which is enough for 3-4 people and two wheelchairs to pass at once. This can be adjusted depending upon pedestrian flow, keeping in mind the standard of 0.8m for one person.
- Stop Zone: For vehicles to either halt for a short while or park to visit the vendors' stalls, a Stop Zone of 1.50m is taken here. However, the standard for 0° parking, as in this case, is 2m.
- Street Furniture: The fig2 (CEPT, 2014) addresses the concern of street furniture; it has provisions for seating at the edge of the street market. The street furniture can be developed as an extension of the vendor stalls or as stand-alone benches within the market. This would depend on the size and plan of the market itself; the furniture would have to recur for bigger markets.

Fig2. Street Furniture

c. Potential Spaces:

- Where the pavement is 3m (10ft.) at the least, with an adjacent 1.5m available for stop zone, the model can be applied by adjusting each section individually as suggested, according to available space.
- Where the target consumers are non motor-vehicle users, i.e. commute by public transport or walk up to the market, the stop zone is not required. Street markets next to Metro stations, bus stops, train stations, neighbourhood markets in close proximity to residential colonies etc. can be developed thus.

  Also, if adequate parking space is available in close vicinity, the stop zones are not required. Formal markets, office complexes, shopping malls have such a parking. Often, street vendors set up nearby to provide low per-unit-cost items. Thus, streets with 3-4m wide pavement can also be developed under this proposal.

Conclusion: These suggestions would bring the required width of the pavement down to 3m or 9-10ft. and hence increase the applicability of the proposal. Overall, Felixx'

model is a good suggestion for developing markets along the street as it covers all the pivotal requirements of a street market; the Vendors' Platforms, path for pedestrians and parking.

1.1.2 Organised Markets:

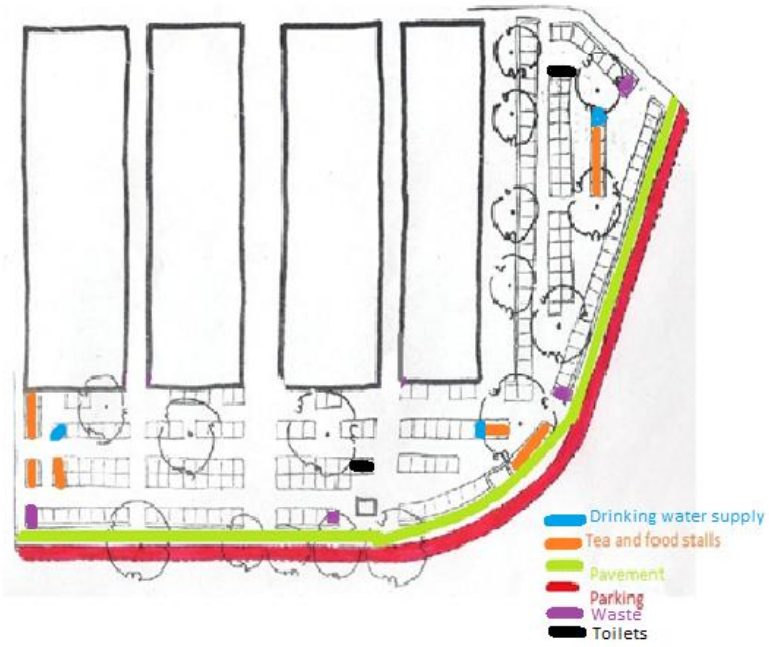


Fig3. Design proposal: CTI MARKET, Kanpur

The market along CTI road in Kanpur hosted around 150 vendors, who were considered illegal and were asked to move by the Municipal Corporation. The KMC itself suggested a new place for an alternate vendors' market. This place is quite close to the original market and could also accommodate all the 150 vendors; the vendors, thus, agreed to move to this spot.

Spatial Management:

The layout of the market has been built on the lines of the street market model above. Provisions for parking/ stop zones and outer pavement have been made at the edge of the market. Amenities like Drinking water supply, Toilets, waste disposal are also provided for, keeping in mind their relative positions for convenience. For instance, Drinking water is supplied right next to tea and food stalls and toilets are towards the centre of the market for accessibility.

The vendor stalls in this model have the dimensions 2x2m, and the circulation path is 2-2.5m. There is a provision of around 150 vendor stalls. There is also a 1m high wall around the market, parallel to the outer pavement.
The vendors in this model are given an open space on elevated platforms to operate. The elevation serves a two-fold purpose; the rain-water can drain out without spoiling vendors' wares and also, the vendors cannot extend and encroach on the pedestrian path.

Analysis of the proposal

- The 1m high wall around the market is an attempt to 'segregate' the market from the street and to prevent the vendors from using the sidewalk for street pedestrians. A concern with the presence of the wall is that it blocks the view of the market from the street. The essence of a vendors' market is impulse buying, and a wall will fail the attempt to attract the pedestrians and motorists passing by. Although a short wall would not be a hindrance, due care should be taken for markets where vendors are required to spread their wares on the ground. Alternate arrangements to a solid wall like a fence with gaps or a row of trees, can be provided depending on available space.
- The market had to accommodate at least the present 150 vendors. However, narrow lanes or small vendor stalls to host more vendors would choke the market in peak hours and reduce accessibility. But the existing vendors couldn't be denied space either. Thus, the design evolved by balancing the number to be accommodated and the minimum space requirement for each component.[3] This illustrates a different design approach wherein the holding capacity of the market is first decided and then the design is proposed accordingly. This differs from the usual approach of suggesting a design based on certain norms (required circulation path and size of each platform etc.) and then deciding the holding capacity of the limited space.
  This approach is suitable for a market with a minimum number of vendors to be accommodated, like in case of rehabilitation of another market in the space.

[3] **This design approach was revealed in a telephonic interview with the designer of the project, Deborah Lambert, Felixx.**

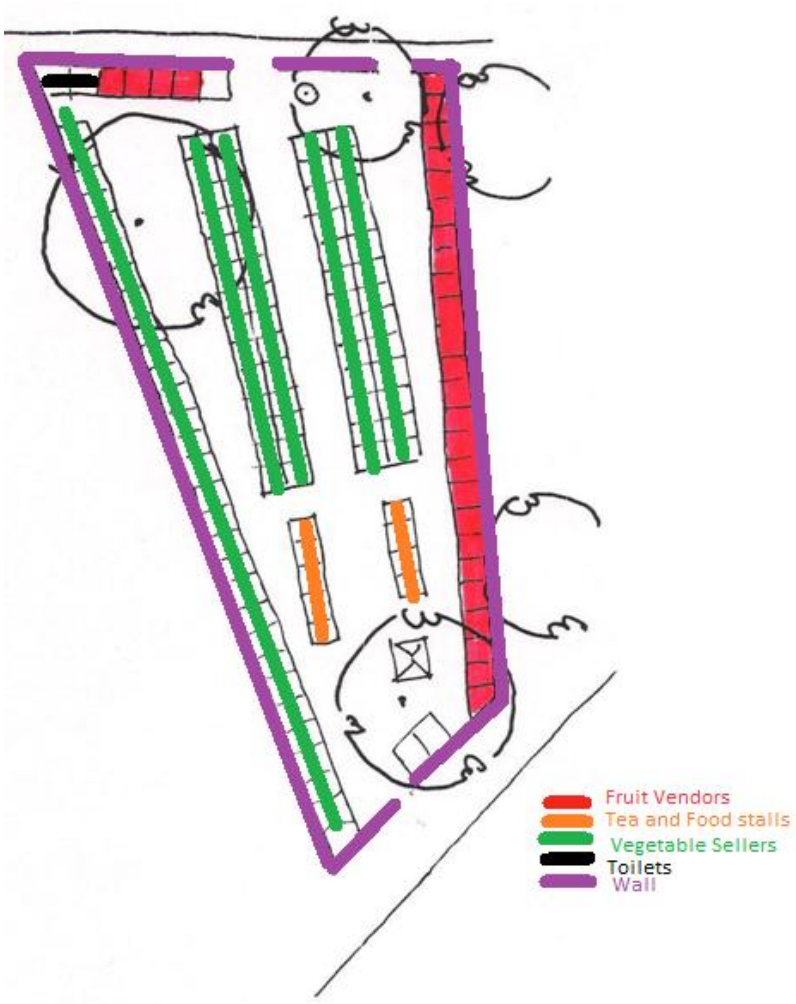


Fig3. Design Proposal: Ayar Nagar Market

Fig 3 illustrates a design proposal for another Kanpur market, Ayar Nagar Market. It earmarks the vendor platforms for specific use. They are divided into food stalls, fruit and vegetable vendors.

Analysis of the proposal: The division of stalls by use creates a systematic structure and is easier to operate, but it also severely limits the nature of use of the space.

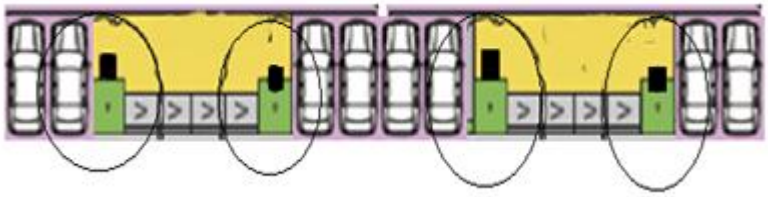
- Stalls demarcated for a particular use leaves no room for the vendors to respond to the changing demand. For instance, if there is more demand for fruits in the market than for tea and even if the tea vendor wishes to switch his business, he will have to continue selling tea or lose his spot to one who would.
- Other fruit vendors will also not find a place in the market as their number is capped and those already present will become rent-seekers.

- No new goods or services can enter the market in this case. Hence, the market will not evolve, or it will take a complete overhaul of the structure with all the conflicts of interest and a cumbersome process to revise the norms.

Hence, the concept of earmarking stalls for specific purposes is questionable because of the 'knowledge problem'; no urban planner or government authority can gather sufficient information to accurately determine what should be sold where and by how many people. It is best to leave it to the judgment of individual vendors to determine what sells and to allow them to adapt when the demand changes.

Conclusion: The design proposals by Felixx for organized markets are structurally replicable for other markets too. But the demarcation of vending stalls by use is a clause that should be revisited.

1.2 Proposed design for Street Market



This study has a design proposal for markets along the street, as shown in the Fig. The sidewalk along the street has been sectioned into vendors market and the parking. This design differs from the one in 1.1.1 by providing for the parking in line with the vendor stalls to save extra space required for the stop zone on the road.

Space Management:

- Vendor Stalls are of variable sizes, placed on elevated platforms. The size of the stall depends on the commodity traded; the space available and the number of vendors to be accommodated in the market (See section 1.1.2).
- Pedestrian Space: The circulation path for pedestrians should confirm with the norm of 2/ 2.5m as discussed in 1.1.2.
- Parking space is in the same line as the vendor stalls. Such parking, at 90° angle, has the standard of 8ft. for compact parking. The turning radius of a car will have to be taken into account. Also, a buffer of at least 2ft. should be left for the movement of pedestrians as it is a part of the sidewalk.
- There is also a provision for Street Furniture at the edges, in case of an extended street market.

This model brings down the space requirement on sides of a road to 10ft. (min). This increases the applicability of the proposal by bringing roads with less than 18ft pavement (Section 1.1.1)

within its purview. It also provides for other street users and street furniture. Hence, this design could be used for narrow pavements.

1.3 Vendor complex Model

A multi-storey shopping complex hosting vendors is built on the same lines as the more common shopping malls with retail outlets. This model has been tried out in many cities around India like Imphal, Chennai, Indore etc.
Generally the vendor market, which occupies a large outspread area, is shifted to a multi-storey building. These buildings have a ramp to facilitate the movement of goods across the floors. The complex is a good design model in the sense that it maximises per unit utilisation of space by accommodating more vendors and 'spreading them vertically' across the floors.
However, these complexes have met with a lot of agitation from the vendors, and some of them have never even been occupied. This is because consumers don't want to climb up multiple floors for vendor products; 55% of the respondents interviewed in Chennai said they wouldn't climb up flights of stairs just to buy fruits and flowers (Transparent Chennai, 2012). This is because consumers buy from vendors because of their accessibility. Their presence in streets, markets and near public transport hubs etc. makes it more convenient for people to buy from them than municipal markets (Bhowmik, 2012 and Transparent Chennai, 2012) Thus, the vendors lose their competitive edge if they become less accessible.

Case Studies of vendor complexes built in Indore and Chennai are discussed to judge the practicality of the concept.

1. Nandlalpura Market, Indore

   Nandlalpura Market is based at a busy intersection in Rajwada in Indore. This market has been a traditional fruits and vegetable market and a wholesale hub.

   Space Management: The civic authorities constructed a three-storey Vendors' market for the vendors. This met with a lot of agitation from the side of vendors as they do not expect customers to climb up several floors for small purchases like fruits and vegetables and this would result in a disadvantage to the vendors at higher floors. Hence, they refused to occupy the building and only a few wholesalers sit there now. The vendors still occupy the road and the intersection.

2. Lily Pond Complex, Chennai

   This vendors' complex is based near Moore Market in Chennai. The original Moore Market was built in 1898 to house the vendors who occupied the public space near the Madras High Court. However, a fire destroyed it in 1985. In 1992, the city constructed the Lily Pond complex on a nearby pond that had been filled with the

Moore Market's demolition rubble. Vendors, who were out on the street again, were resettled in the new building.

Space Management: It is a four-storey building with 5x5ft concrete units with roll-down doors. Each of these is connected to ramps for easy transportation of goods. The tenants pay about Rs.1200 per month as rent. There are 857 shop units, out of which only 593 were taken when first auctioned.

'During several recent visits, only a handful of shops on the ground and first floors were open, and on the second and third floors, inconvenient for potential customers to reach, even fewer were occupied'(Nextcity, 2013). In contrast, the market out on the sidewalks is flourishing. In fact, the 'tenants (of the complex) lobbied the Corporation of Chennai to allow street vendors to set up temporary stalls outside the complex amid the heavy foot traffic' (Nextcity, 2013) as they get business from these vendors.

Hence, the shopping complex is an instance of an inefficient model, as it leads to a waste of investment and space. The problem is not only the design of the structure, but also the fact that ground inputs were not considered while designing. The problem could have been easily avoided if vendors had been consulted at the inception of the proposal. Hence, a careful survey into consumer behaviour and vendors' inputs will help create an efficient design and discard an inefficient one.

2. Time-sharing of Space:

Very few cities in India are planned cities like Chandigarh and Bhubaneshwar; some have planned sections, typically near government bodies like Courts, Offices etc. Most cities keep expanding and spreading out from the contours in an unplanned way.

In such cases, public space is not easily available for developing a vendors market. They may be developed by efficient design (as in the previous section) or by using Incidental space (next section) but these toolkits have their own limitations like space constraint. As mentioned earlier, 40% of Delhi roads have no pavements at all. Thus, there is no scope for a street market on roads which have no or narrow pavements.

An interesting solution for this problem has come up in the form of time-sharing of the same space. These are a flexible form of vending zones whereby different stakeholders can use the same space at different times. For instance, a street may function as a carriageway in office hours and cordoned off to host vendors market at night and early morning. Depending on factors like the space available, the traffic flow per unit time, availability of alternate routes for motorists, proximity and ease of connectivity to other vendor markets in the area, population density, pedestrian flow etc., the time-sharing market may be developed as Daily, Weekly or Festival markets.

The Daily and Weekly markets are discussed below with potential spaces to be developed, space management and a set of regulations for each. This list is not exhaustive by any

standard, but can be used as a guideline to structure such markets as area-specific factors differ a lot.
Festival markets, which cater to the specific demands at the time of the festivals, can be structured on similar lines as these. In most Indian cities, the local government also hosts fairs on public land, like Diwali Mela, and rents out space to vendors.

2.1 Daily Time-sharing markets:

The Daily Time-sharing markets are allotted a public space for a fixed time in the day. They can be used to cater to daily requirements like fruits and vegetables, cooked food etc. where a permanent and fixed market can't be developed.
Besides the aforementioned factors, the type of area has an important bearing on the kind of daily market that can be developed.

The business hours for the different types of markets found in a city are (CEPT,2014):

Type of Market	Operation Time
City/ Specialist Markets	All Day
Neighborhood Market	Evening
Street Market	Evening
Tourist Hub/Public Garden	Evening, night

Hence, we can look at a type of market and develop the time-sharing market accordingly. For example, a tourist area can be closed for vehicular traffic in evening when the area is crowded.

Case study: Night Chat Market, Sarrafa Bazaar, Indore[4]
The Sarrafa Bazaar (Jewellery Market) in Indore hosts a Chaat Market at night when the jewellery shops shut down for the day. The market is from 8pm to around 3-4am. The vendors set up the stalls right outside the jewellery stores on the street.

[4] **Based on telephonic interview with a vendor leader and personal observations of the author.**

The vendors have an informal arrangement with the shopkeepers and pay them a daily rent.

Potential Spaces:

- Streets with heavy to moderate traffic flow in office hours, where regular vendors markets would cause traffic congestions even if required space is available on pavements as discussed in the previous section. The carriageway can be cordoned off for motorists for a fixed time a day when the traffic can be managed through alternative routes.
- Roads with narrow pavements which can't support the previous models, i.e. pavements less than 5m wide. The pavements can be used when there is light pedestrian and traffic flow, or a section or whole of the carriageway can be used.
- Existing organized market space in non-business hours or other mutually agreed time-sharing conditions.
- Public spaces like Playgrounds and parks can be easily made available for vendors market, owing to their relatively limited use at a few, fixed hours in a day.

Regulations: This system could act as a model for other night markets too, once it is formalised. For instance, the shopkeepers in Indore have no right to the land in front of the shop and hence, the rent too. Thus, the local government can recognize markets like these and register the vendors and then collect fee from them.
The vendors also need to be provided with water and electricity connections and waste disposal arrangements, which can be arranged privately or through the local government.

Space Management: The structure and the design of the market would, conceivably, depend on the design of the existing market or space.
An obvious but important divergence of time-sharing markets from other markets lies in the fact that only temporary structure can be built. Various models for temporary structures have been suggested (see CEPT, 2014 and ITDP, 2011), but the problem of storage is significant. Bhowmik's (2012) data from ten Indian cities shows that majority of the vendors live more than two km from their residence and store the goods at the vending area. This makes storage a concern if they can't be stored at the vending area and transporting them from home every day is an issue. Solutions in design innovations of the storage space can be further studied in this case, like underground or wall storage which minimise spatial requirements.

2.2 Weekly Markets:

Weekly Markets, set up a fixed time every week, generally function as specialised markets. They become popular in the area for the respective specialty and make it possible for the buyers and sellers from even neighbouring areas to come together in large numbers on a fixed day, typically in a farmers' market.

Potential Spaces:

- **Markets on the day the retail outlets are closed:** Different organised markets are closed on different days of the week. Vendors market can be set up right in front of the shops if the spatial requirements are met. The advantage that an established market space presents is that it already has its customer base and presumably, supporting infrastructure like parking space.
- **Open public spaces like Playgrounds/ Parks**, especially near tourist hubs, can also be developed as tourist attractions. They can also become tourist attractions in themselves, like the Goa Flea Market at Anjuna Beach on Wednesdays.
- **Government Buildings' parking lots and open spaces** can be used on Weekends when the offices are closed, especially those that are in the central locations.
- **School playgrounds**, of government as well as private schools, can be used as a vendors market on Sundays. They provide a suitable open space as the Right to Education Act, 2009 mandates the school playground size as for every school in India. However, this proposition would be in violation of the current law as RTE allows the school building to be used only for educational or skill-training purposes. Hence, a revision of this provision of the law would go a long way in securing a fixed space for weekly markets as schools have been established within accessible distance of each neighbourhood.

Space Management:

The structure of the weekly market depends, perceivably, on the place it is being held on. But the basic norms like circulation path being minimum 2.5m remain constant. The size of vendor stalls is subject to space available, but spatial management should account for the optimal holding capacity of the space as discussed in 1.1.2.1

Also, no permanent structures can be built and hence, temporary structures from the previous section should be referred.

Regulations:

- The vending fee can be collected on a per-day basis as in the case of '10 Number Market' in Bhopal which is held on Monday, Tuesday and Saturday, which collects Rs. 20 per day.[4]
- Entry Norms: Although the allocation of space within a market is beyond the scope of this research, weekly markets present an interesting case of first-come, first-serve basis for allocation. Vendors in other markets, like Sunday Market, Bhopal have secured a fixed space by an informal agreement through a vendors' organization set up by them.[5]
- Electricity and water connections can be provided by the government or made privately. For instance, Private contractors provide electricity at Rs.20 per day at Sunday and Bitten Market in Bhopal (CEPT, 2014)
- Garbage disposal facility has to be arranged responsibly, as the vendors have a lower incentive to clean up after themselves in weekly markets than in permanent markets. This is because they would not come back to vend the next day and hence, the uncleanliness would not affect their sales.

Conclusion: The time-sharing concept can ease the problem of space constraint by sharing the same space between different stakeholders. This would increase the availability of space for developing new vendors markets and also allow existing natural markets to be formalised if permanent, 'full-time' markets can't be set up there.

3. 'Left-over' or Incidental Space:

Incidental space in existing infrastructure can be used for vending when the primary function of the infrastructure is not affected by the secondary function of vending.

Three such spaces have been identified by this research for illustration. Flyovers have been selected to represent an existing use of incidental space and medians on road to represent a suggested use.

Other spaces like subways and skywalks, which are in use for markets in some cities like Mumbai, also illustrate this concept.

3.1 Space under the Flyovers:

Flyovers are built in highly congested or densely populated parts of a city to ease the pressure on the space. It's important to consider the space under an over-bridge or flyover as option for vending markets as:

[5] **Source: Telephonic interview with a SEWA leader in Bhopal.**

d. It provides a good business opportunity in terms of outreach that the location provides.
e. It can be used for rehabilitation of the vendors displaced by construction of the over-bridge. As per the Street Vendors Act, 2014, 'livelihood opportunities created by new infrastructure development projects shall accommodate the displaced vendors so that they can make use of the livelihood opportunities created by the new infrastructure'.

But the space is often underutilised as there is no formal and planned use of the space. Informal parking comes up or the space is occupied by beggars and encroachments or is even cordoned off by municipal authorities.

A case study from Ahmedabad illustrates better spatial management in such cases.

Case Study: Jamalpur Market, Ahmedabad

Jamalpur Market in Ahmedabad is a vegetable market hosting 675 vendors. Many among these vendors were displaced for the construction of a flyover in 2008. SEWA, which has a strong membership among the market, prepared a design proposal in 2011 for the rehabilitation of 249 vendors under the flyover and 'negotiated with AMC for approval..Rest of the vendors will be given space nearby' (CEPT, 2014)

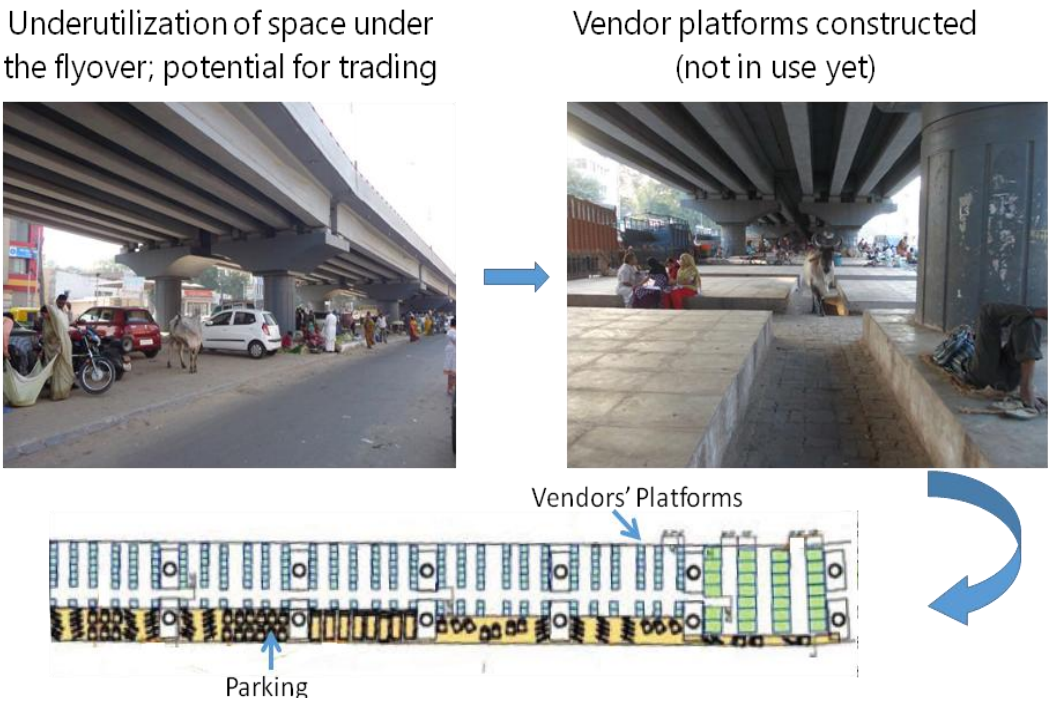


Fig6. Jamalpur Market, Ahmedabad

Figure 6 shows the design of the Jamalpur market under the flyover. It accommodates 42 temporary, 180 small and 27 large vendor stalls. It also has space for parking for vendors/ customers.

Analysis of the model suggests that it has good potential for replicability on the following accounts:

- The design proposal provides a parking space beneath the flyover itself, which would avoid traffic congestions in the area on account of the market. But this will have to be accompanied by strict enforcement of no-parking or stoppage outside of the designated area, since there is already a traffic management problem.
- The design proposal has different provisions for large and small vending spaces. While the basis for their allotment in Jamalpur Market is not clear, it is prudent to have separate provisions for commodities that require more space for display, like vegetables than other say, a paan-shop.

3.2 Median Pedestrian Island on Roads

Median Pedestrian islands or 'Dividers' on roads are used as traffic calming elements, pedestrian refuges and for landscaping on roads. But they provide a lot of incidental space which can be used for developing a vendors market.

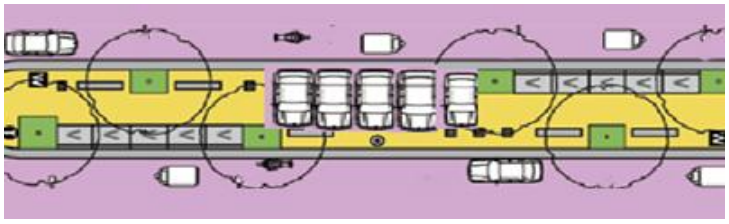


Fig7. Vendors market on Median

Suggested Design:

The design proposal of this paper for market on medians is represented in Fig7.[6] Here the space on the median is sectioned into parking and vendor stalls. Also, there are provisions for street furniture, tree line, toilets and garbage disposal in the market.

Potential Space:

Medians of minimum 16-17ft. width can be used, because the standard for compact parking is 15ft. for 90° parking and 1-2ft. buffer space.

[6] **Adapted design from a pedestrian island design in ITDP, 2011.**

The presence of the market would certainly lead to some degree of pause in the traffic flow. Thus, it is not suitable for areas like expressways where such a traffic-calming element is not desirable.

Space Management:

The market is sectioned into alternate strips of vending stalls and parking spots. The vendors' stalls are placed on either side of the median in alternating strips so that the stall fronts are visible from both sides of the street. As discussed earlier, visibility is important for the success of a vendors market as its essence is impulse-buying.

- Vendor Stalls may have varying area subject to the space available and the type of market. They should be placed on an elevated platform to protect from rain-water runoff.
- Pedestrian path is min. 2.5m without any obstacles on the way, like trees, dustbins, street furniture etc.
- Street Furniture should be placed at regular intervals, preferably under and around the trees. This allows them be used under the sun and also reduces the space requirement.
- Parking area required for one car is about 80 sq.ft. The total available parking space would be subject to the number of vendor stalls created. The parking is designed to allow for entry from one side and exit from the other side. This would minimise traffic halt on account of the entry and exit of vehicles from the parking.
- Ideally, toilets and drinking water facility should be provided especially if it is a food market.
- A median fence is required to prevent spill-over of vending on the carriageway but it should be surmountable by pedestrians. 'Gaurdrails and high curbs are discouraged because they hinder pedestrian and cycle movements' (ITDP, 2011)

Conclusion: This model accommodates the street market elements identified so far. However, challenges like space constraint remain because the length of the median is limited because there need to be breaks in the medians to allow for U-turns and crossings. Also, the traffic management may become an issue on the street. But the model has the potential for an alternate street market, whether new or rehabilitated, if other options are not as viable.

Further Areas for Research

Private Street Vending Markets

An interesting model in terms of operation is of the Flea and Farmers' Markets in the U.S, where some flea markets operate on private property. They are owned and managed by private entities. The property owners (or leasers) invite applications from vendors to set up a stall and have a published rent list for spots. They provide electricity/ water connections for some or all stalls. Some flea markets also provide other attractions like auctions, entertainment etc.[7]

Private Vendors' Markets have the following advantages:

1. Bringing in private property for vendors' market has the potential of increasing the land availability for vendors' market and easing the pressure on public land. Properties which may be perfect for market, in terms of footfall, location, amenities etc., may not be under consideration right now.
1. It allows price differentiation in the market for vendor stalls. The prices may differ for weekdays and weekends, for electricity connection, for stalls with extendable space etc. Thus, more rent can be charged from those who can afford to pay for better location/ amenities. This can be used to 'cross-subsidise' rent of the poorer vendors by charging them lesser.
2. Competition among the private property owners will raise the quality of the vendors market and would keep the rents low.
3. The vendors would have to deal with only one entity instead of the multiple government bodies like the police, the local government, the local mafia (for 'protection') etc. It would make

The legality of this proposal under the current laws is not yet certain. Although there is no permission needed for constructing temporary structures on residential property, other legislations like zoning laws, Shops and Establishment Act etc. would need to be further studied to see if operating a market out of commercial and residential properties is permitted. Also, factors like availability of parking space, electricity and water connections etc come into picture.

Disputed Land (pending court case) can be an interesting, though debatable, case study for Private Vendors' Market. There are prime location properties lying unoccupied and can be used as vendors' market until the dispute is resolved. This could bring a lot of land into consideration for vendors' market. Also it's been reported that there is no municipal tax levied on such property; this is also a way to make up for the loss of potential revenue to the government by the tax exemption. On the other hand, such takeover of private property by the government is infringement on personal rights of the individual. Hence, this study doesn't make a case for either side; it suggests disputed land as an area of further research.

[7] Gordyvillusa.com, Milehighfleamarkets.com

The concerns with private vendors' market are that first, exorbitant rents may be charged. The competition (provided markets remain sufficiently free) should take care of that. But would there be enough incentives for property owners to engage in all the hassle with the vendors? Also exit from the arrangement may prove difficult in face of agitations from vendors for the loss of livelihood.
Thus, despite the challenges, this is a model worth exploring for the opportunities it offers. The private markets are not suggested as an alternative to public vendors' markets, but for expansion of vendors market in the city.

Mobile Vendors do not need a fixed space to vend and hence, could even be studied as an alternative to stationary vendors in case of space constraint. Author's interviews with mobile vendors have revealed that they do not vend at a fixed place because they find the demand at any one place is not enough to sustain. These 'vendors rotate among two or more sites, taking advantage of different types of clientele and different patterns of urban movement over the course of the day' (Wiego. b). They need to be further looked into to determine ways to structure models as per their requirements too.

Conclusion

The best models for identification of potential spaces for a vendors' market and their spatial management in the study will empower community-led design to come up with efficient natural markets. It is now required of the TVCs to identify the vending zones and their terms and conditions. Lack of due thought to the site and the principles for relocation results in a loss of livelihood for the vendors when they find themselves suddenly displaced. Hence, a combination of planning innovations and community-led design would help in coming up with feasible market options.

References

2010. *Indian Road Congress: Pedestrian Facilities Norms*. Accessed on 4th July at http://indiairf.blogspot.in/2010/02/indian-road-congress-pedestrian.html.

Dalwadi, Shreya. 2004. *Integrating Street Vendors in City Planning—Vadodara*. Accessed on 2nd July at http://harmonyarchitect.com/info/street_vendors.pdf.

Jacobs, Jane. 1961. *The Death and life of Great American Cities*.

RITES. 2008. Transport Demand Forecast Study.

Das, Prafulla. 2013. *Vending zones the way forward?* THE HINDU. Accessed on 2nd July at http://www.thehindu.com/news/cities/chennai/vending-zones-the-way-forward/article4874376.ece.

Pena, Sergio. 1999. *Informal Markets: Street Vendors in Mexico City*. HABIT AT INTL. 23, no. 3: 363-372.

Institute for Transportation & Development Policy. *Footpath Basics*. Accessed on 4th July at https://go.itdp.org/display/live/Footpath+Basics.

Raj, Anand, Baby, Irene, Sudheesh, R.C., Narayan, Uttara, Prasad, Vishnu. *Integrating Street Hawkers into the urban ecology—The Case of T. Nagar, Chennai*. Accessed on 27th June at http://webcache.googleusercontent.com/search?q=cache:http://transformurbanindia.com/wp-content/uploads/2012/10/Taramani.pdf.

Sung, Courtney. 2011. *Drawing the Line: Spatial Street Vendor Management in Ho Chi Minh City*. Accessed on 24th June at http://dspace.mit.edu/bitstream/handle/1721.1/67241/759124561.pdf?sequence=1.

Transparent Chennai. 2012. *Street Vending In Chennai*. Accessed on 28th June at http://www.transparentchennai.com/wp-content/uploads/downloads/2013/07/Street%20vending%20in%20Chennai.pdf.

Warrier, Nitin. 2012. *Better Streets, Better Cities*. Presentation. Accessed on 22nd June at http://www.scribd.com/doc/120593002/Better-Streets-Better-Cities-presentation-Nitin-Warrier-2012.

Women in Informal Employment: Globalizing and Organizing (a) *Street Vendors*. Accessed on 27th June at http://wiego.org/informal_economy_law/street-vendors-india.

Women in Informal Employment: Globalizing and Organizing (b) *Street Vendors*. Accessed on 27th June at http://wiego.org/informal-economy/occupational-groups/street-vendors.

Bhowmik, Sharit K. 2005. *Street Vendors in Asia: A Review*. ECONOMIC AND POLITICAL WEEKLY. Accessed on 3rd July at http://wiego.org/sites/wiego.org/files/publications/files/Bhowmik-Street-Vendors-Asia.pdf.

Bhowmik, Sharit K., & Saha, Debdulal. 2012. *Street Vending in Ten Cities in India*. Accessed on 4th July at http://nasvinet.org/upload/NASVI_FINAL%20REPORT.pdf.

Bhowmik, Sharit K., & Saha, Debdulal. 2001. *Hawkers and the urban informal sector: Street Vending in Seven Cities in India*.

Bromley, Ray. 2000. *Street vending and public policy: a global review*. INTERNATIONAL JOURNAL OF SOCIOLOGY AND SOCIAL POLICY 20, no. ½: 1-28.

Pushkarna, Neha, & O'Keeffe, Hayley. 2013. *Is this the end of 'Delhi belly'? Capital to get eight 'safe zones' where street food vendors are trained in food hygiene*. MAIL ONLINE. Accessed on 25th June at http://www.dailymail.co.uk/news/article-2464122/Delhi-8-safe-zones-street-food-vendors-trained-food-hygiene.html.

Schneider, A., & Ingram, H. 1993. *Social Construction of Target Populations: Implications for Politics and Policy*. AMERICAN POLITICAL SCIENCE REVIEW 87, no. 2: 334-347.