

Economic Existence of Street Vendors and their Role in Urban Economy : A Cost Benefit Approach

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ABSTRACT

Roadside Encroachment is an illegal activities for any purpose, e.g. residence, commercial unit, political meeting, religious places etc. Street Vendors are Commercial Encroachers who offers goods for sale to the public without having a permanent built up structure from which to sell. Stationary Street Vendors occupy space on the pavements or other public and private spaces and Mobile Street Vendors move from place to place by carrying goods on pull carts or in baskets on their heads. In the urban area Street Vending is considered as one of the common source of income for the poor segment who faces continuous harassment by civic authorities (Sen and Gupta, 2017). In spite of being the important informal service sector in urban area, Street vending have a negative public image, being associated with accidents, congestion, environmental degradation etc, although a large segment of local inhabitants and daily commuters of urban area prefer them as their goods are very cheap . This paper highlighted the role of street vendors in urban area by cost benefit analysis.

Keywords: Encroachment, Street vendors, Informal sectors, Cost Benefit.

INTRODUCTION:

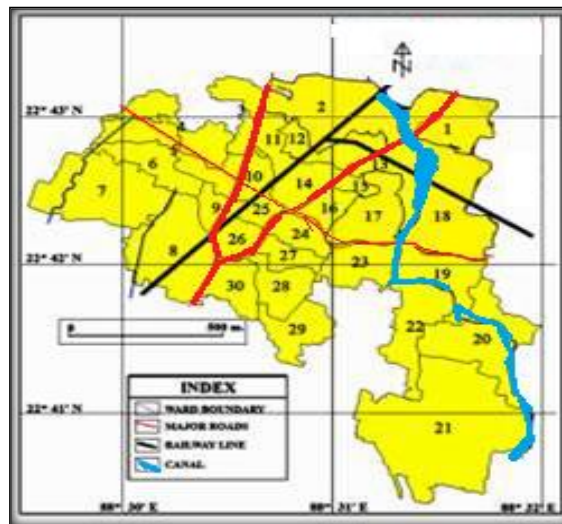
Street vendors are the most visible section of the informal economy (Nidan, 2010). In this paper the term street vendor includes stationary as well as mobile vendors. The complaint against the street vendors is that they are illegal trader on pavements. Their goods are often forfeited and they have to bribe the authorities to restart their business. Encroachment by street vendors can be on: a) Footpath b) Fringe of the road c) Under the flyover, over-bridge etc. Problems due to encroachment can be :a) roads getting narrow due to congestion b) Road accidents c) Traffic jam and time loss d) Car parking problem Encroachment has too many dimensions-1) Socio-Economic Dimension: Hawkers choose to encroach because it has economic benefit like costless sale due to free space for vending. Urban consumers prefer street goods because middleclass buyers save money by buying from hawkers. But there are economic costs, e.g. street vendors have to pay bribe to police and local political leaders by hawkers. Encroachment have some social costs like Congestions, Accidents, Delay and free space gone without any rent .The private benefit of removal of encroachment is better placement, compensation, free land etc for street vendors and social benefit of that are congestion free and smooth flow of traffic and pedestrian. 2. Political Dimension: political economic views on encroachment is interesting because several groups of people appropriate spaces for encroachment and each group has a different political manifestation .While the poor encroach because of survival/livelihood reasons where the state does not provide

or facilitate otherwise and simultaneously it(state)allow them to encroach. It is a kind of Vote bank politics. Political parties gain votes of the street vendors in name of humanitarian acts. Due to inconvenience, many withdraw votes from the political party. 3. Spatial Dimension: The spaces that are encroached by the vendors are marginal spaces. Lot of urban space is lost due to encroachment by street vendors. The logic behind choice of the pavement is accessibility as well as lack of governance. 4. Environmental Dimension: The solid waste due to encroachment vitiates the air, soil and water, thus causing environmental degradation. Any kind of infectious disease can spread fast.

STUDY AREA:

There is substantial increase in the number of street vendors (based on primary and secondary data) in Barasat Municipality (Latitude: 88°48'E, Longitude: 22°50'N), the headquarter of North 24 Parganas, West Bengal. The population of Barasat was 283,443 according to 2011 census. This town is within the area of Kolkata Metropolitan Development Authority (KMDA). Narrowness and mobility problem caused by street vendors on several significant roads like National Highway 34 &35, Taki road (leading to Basirhat), Barrackpur Road etc. cross through the town.

Fig: 1: Map of the study area



Source: Barasat Municipality

OBJECTIVES:

The objective of the study may be presented as the following: 1) To ascertain the role of street vendors on urban economy. 2) To identify and measures the cost and benefit of encroachment by street vendors.

METHODOLOGY:

This research was mainly based on primary data, collected through personal interview by questionnaire survey based on the objectives of the study and performed by random sampling. The interview of 1574 vendors and 1200 local people as well as commuters are being taken .The analysis has been made on the basis of simple statistical method include ordinary least –squares(OLS),correlation co-efficient, cost- benefit index and simple cartographic tools.

REVIEW OF LITERATURE:

Street Vendors occupy one of the largest and most visible occupational groups in the informal economy which is found in the public space ‘street’. (Sharma & Konwar, 2014). Most of the spaces occupied by the street vendors considered as illegal since the spaces have not been set aside for trade(Sen and Gupta,2017). Dimas (2008) paper highlighted on the troubles faced by city managers in developing countries. But in the developing countries street vending is one of vital source of employment for large number of non -worker. The paper by Roy & Daspatanayak (2016) traces on the process motivated the rural people to come to the cities for finding job. So street vendors play vital role in urban economy .They perform both positive and negative role.

FINDINGS AND DISCUSSION:

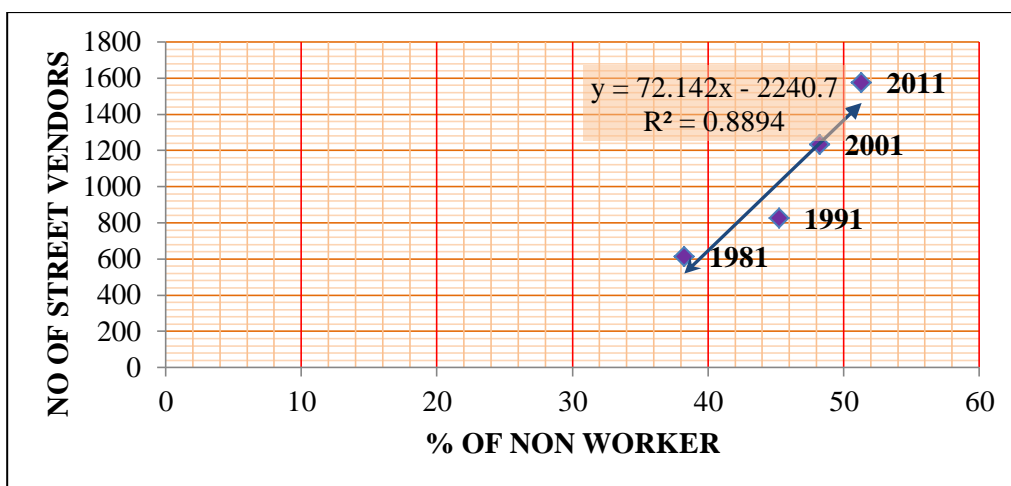
Roll of Street Vendors:

The growth of Urban Poor and socio-economic insecurity are growing with uneven and unplanned urbanization(Sen and Gupta,2017).Due to job security street vending is growing rapidly in the urban area day after day .Although street vending is an informal and illegal occupation but the street vendors play vital role in urban economy .

Positive Role:1) To create employment:

The fickleness in employment indicate insecurity and instability of the economic growth processes in any urban area .The trend of employment is the outcome of the changing combinations of Treasury, Technology and trade. Changes in employment scenario of urban West Bengal as well as urban India over time is very awful. According to economic census “ aggregate employment increased in the rural areas while it decreased in urban West Bengal(1980 to 1990) but between 1989 to 1995, employment both rural and urban area decreased, mainly rural area as well as 1999 to 2000 the level of employment in informal manufacturing in urban area increased.” (West Bengal Development Report2010). While national employment in public sector grew by nearly 10.06% over the period of analysis in West Bengal it declined by about 30.96%.The growth of employee of organized private sectors in India is five time faster than that of public sectors on all India level whereas West Bengal is still suffering from negative growth in the same field . (West Bengal Development Report2010). In this circumstance, street vending is considered as most significant sector to solve unemployment problem in urban area.

Fig 2: Relationship between unemployment and street vending in the study area



Source: Census of India, Barasat Municipality and Primary data

Cheap Goods and Service for Lower & Middle class income group:

Maximum lower and middleclass consumers prefer street goods as it is cheap. Mainly street foods,vegetables, fruits,fishes, garments and ornaments are preferred by a large portion of the consumers as .those goods are cheaper than shopping mall and normal shops. The prices of goods may differ due to different price determining factors .The minimum price of goods determined by the following formula: $P = (R + E + Re + B / Py + T + Tc + Lc + \Pi)$ Where, P=Selling price, R=Economic rent of shop, E= Electric bill, Re = Cost of goods B=Bribe,Py=Payola=Tax for business, Tc=Transport Cost, Lc=Labour cost, Π =profit. R, Re,T & Lc is “0” for street goods, a few no. of vendors are to pay Electric bill (E) . So those commodities are cheap .The comparative cost of goods of different market of the study area given below:

Table 1: Comparative price level of different commodities

Name of Markets	Products	Price			Date
		Shopping Mall	Shops	Street vendors	
Helabattala	Fish(Labio Rohita)	-----	210/kg	180/kg	12/10/2017
Helabattala	Fish(Telapia)	-----	190/kg	145/kg	12/10/2017

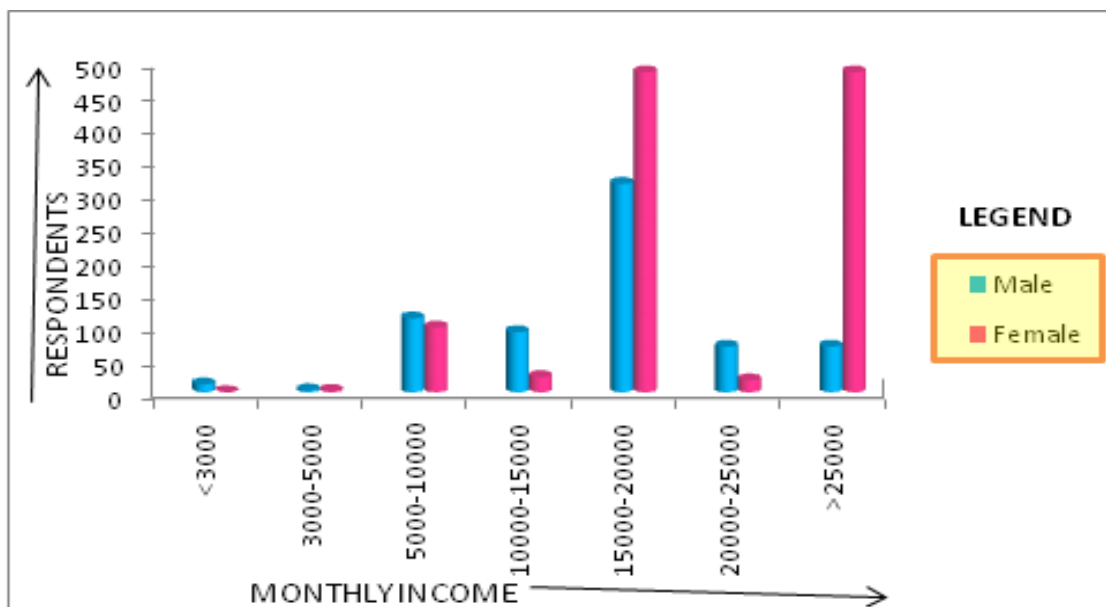
Name of Markets	Products	Price			Date
		Shopping Mall	Shops	Street vendors	
Helabattala	Potato	25/kg	22/kg	18/kg	12/10/2017
Helabattala	Chili	15/g	9/g	08/g	12/10/2017
Helabattala	Chicken	170/kg	150/kg	145/kg	12/10/2017
Helabattala	Apple	120/kg	100/kg	90/kg	12/10/2017
Chhotobazar	Fish(Labio Rohita)	-----	200/kg	180/kg	12/10/2017
Chhotobazar	Fish(Telapia)	-----	180/kg	150/kg	12/10/2017
Chhotobazar	Potato	25/kg	20/kg	18/kg	12/10/2017
Chhotobazar	Chili	15/g	8/g	08/g	12/10/2017
Chhotobazar	Chicken	160/kg	140/kg	130/kg	12/10/2017
Chhotobazar	Apple	140/kg	120/kg	100/kg	12/10/2017
Borobazar	Fish(Labio Rohita)	-----	190/kg	160/kg	12/10/2017
Borobazar	Fish(Telapia)	-----	150/kg	130/kg	12/10/2017
Borobazar	Potato	25/kg	20/kg	17/kg	12/10/2017
Borobazar	Chili	12/g	7/g	06/g	12/10/2017
Borobazar	Chicken	150/kg	140/kg	130/kg	12/10/2017
Borobazar	Apple	130/kg	110/kg	90/kg	12/10/2017

Source: Primary data

Control market price level by demand- supply relationship:

To analysis the consumers behaviors different income group are selected on the basis of their monthly family income. Street Vendors supply the cheap goods for not only the middle (10000 to 25000) and lower income group (below 10000) but also higher income group of urban areas prefer street goods. The price level of market is controlled by surplus goods supply. Mainly female consumers are the largest segment of street goods. Higher income group (>25000) female customers prefer variety ornaments and jewelry, daily commodities, kitchen utensils etc. But lower and middle class cusomers prefers all types of goods. Although very high income group do not prefer street goods anyhow.

Fig3: Preference of street goods by different income group



Source: Primary Data

To supply the fresh & cheap goods to the consumers:

Mainly fresh vegetables, fishes, local fruits etc are attractive to the customers .For estimate the demand of street goods the “ Linear Probability Model (LPM)” is used. Here .The method is applied routinely of ordinary least –

squares(OLS) to determine the consuming behavior in relation to income, age, education and price of goods .That is, we use the following model: Consuming Behavior(C_i)= B_1+B_2 Income+ B_3 Age+ B_4 Education+ B_5 Price of goods + u_i

Table 2: OLS model of to choose or not to choose street goods

	Co-efficient	Std. Error	t-Statistic	Probability
C	-2.09	1.13	-1.85	0.06
Lower Income Group(<25000)	0.20	0.26	0.75	0.44
Education	0.10	0.21	0.49	0.62
Age	0.37	0.14	2.64	0.01
Price of goods in the Shopping Malls and Shops	0.84	0.11	7.53	0.00
Higher Income Group(.25000)	-0.09	0.05	-1.61	0.10
R-Squared=0.76 Adjusted R-Squared=0.73 F-Statistic=26.41 Prob(F-Statistic)=0.00000 S.E. of regression=0.68				

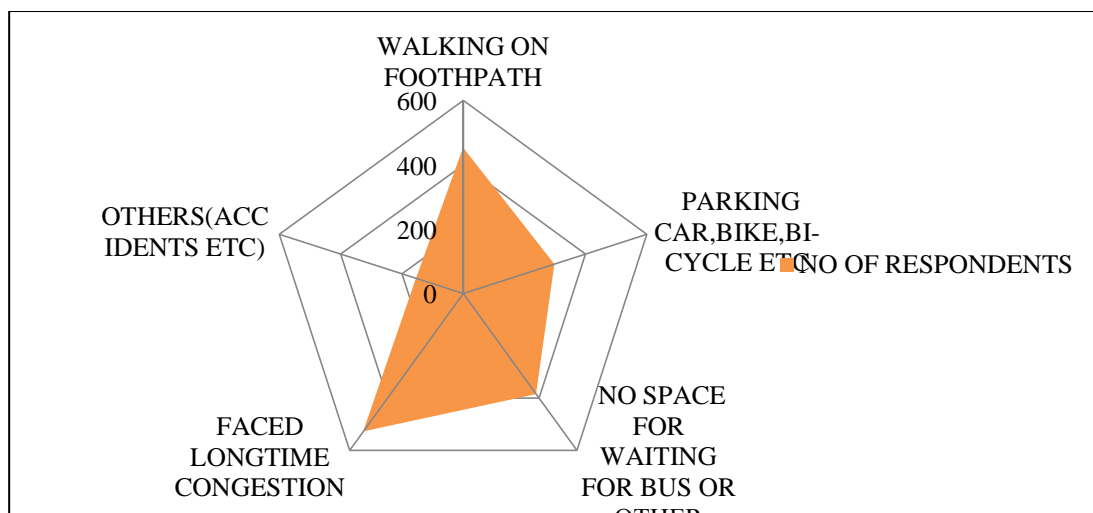
Source: Primary data and computed by authors

The above computation table(Table-2) show that, Low and moderate Income, Age and Price of goods in the Shopping Malls and Shops have significant positive impact on Consumers of street goods and High income has negative but statistically insignificant effect on the customers. Surprisingly, Education has positive and significant impact on customers. So there is no denying the fact that other than high income group more or less maximum people prefer street goods.

Negative Role :1) Mobility Problem:

Mobility problem due to street vending is the burning contemporary problem in any town . From the fig-4 it is clearly depicted that street vending is an important factors to create congestions, accidents, pedestrian and parking problem .It is very interesting that all of the respondents, faced these problems are the consumers of street goods.

Fig 4: Different types of mobility problem faced due to roadside encroachment by street vendors



Source: Primary Data

Loss of Municipal Income:

Public places used by street vendors are free of cost. Because street vendors use free land which has no tax and no rent . Municipality loss a huge amount of tax due to license free and tax free business system .There is no proper plan for tax collection .It may be called Public Place Politics . Because the street vendors are to pay party fund but they are not bound any legal system.

Supply of low quality food:

Street food vending is a distinctive part of a large informal sector in any town in West Bengal. Commuters and others working people take their meals outside the home and are exposed to food borne illnesses.

Most of them prefer eating foods from street vendors. There are different types of food vending sites in the study area. Our investigation shows that street food consumers come from different socio –economic levels of the town. Even school children are the large segment of customers of street food .Chop, Pakora, Fuchhka etc are most popular street food in the study area. But quality and safety of those product are not trusted. Although no quality control or testing method is followed. Several food-borne disease to be associated with poor personal hygiene of food stuff handlers.

COST-BENEFIT ANALYSIS (CBA)OF STREET VENDING:

To determine the role of street vendors in urban economy the cost- benefit analysis have been done with the help of simple econometrics. Cost-benefit analysis is a process for evaluating the merits and demerits of a particular problem in a systematic and rigorous way. The cost and benefits related to goods and services have a simple measure in a convenient unit (e.g. their price in money).But in the social science it emphasize not only measure a convenient unit but should be construed in their widest sense, measuring changes in individual utility and social welfare. For the analysis of Private and Social cost benefit of street vending a simple index have been applied .For computing cost index the following formulas are used to determine different indices of CBA.:

$C.I./B.I = \frac{X_i}{\sum x}$ Where, $\sum x$ = Total no. of sample of the study area, X_i = no of samples of ‘i’ parameter. Each individual index has been normalized and $\frac{1}{\sum x}$ is assigned as the weights. Finally the following formulas are used to determine the Cost/Benefit Index:

$\sqrt[x]{(C.I_1 \times C.I_2 \times \dots \times C.I_{x_p})}$ Where C.I.=individual cost index, x = no of C.I, 1,2... x_p =value of C.I., $CI_1 \dots CI_{x_p}$

$\sqrt[x]{(B.I_1 \times B.I_2 \times \dots \times B.I_{x_p})}$ Where B.I.=individual benefit index, x = no of B.I, 1,2... x_p =value of B.I., $BI_1 \dots BI_{x_p}$

Table 4: Computation of Cost of Encroachment by street vendors:

Private cost		Cost Index	Private Cost Index(P.C.I.)	Social Cost		Cost Index	Social Cost Index(S.C.I.)
Cost of public place	Bribe to political party	0.964	0.805	Congestions	During peak period	0.861	0.642
	Rent to market committee	1.000		Accidents & Staccato flow of traffic and pedestrian	Due to parking bi-cycle, bike etc for shopping from the street vendors	0.505	
	Trade union fees	0.890		Public Space for walking (mainly footpath) gone without any rent		0.804	
Tax	Municipal tax	N/A		Low quality of food	Unhygienic chop,fuchka, eggroll, chawmin etc	0.362	
	Service tax			Environmental cost	The solid waste due to encroachment vitiates the air,soil and water	0.862	
	Income tax						
Loan/Credit		0.487					
Cost of Encroachment :0.741							

Source: Computed by Authors based on primary data

Table 5: Computation of Benefit of Encroachment by street vendors:

Private Benefit		Benefit Index	Private Benefit Index (P.B.I.)	Social Benefit		Benefit Index	Social Benefit Index(S.B.I.)
Benefit of public place	Bribe free shops	0.036	0.397	Cheap goods and service	VAT/GST etc free	0.836	0.368
	Rent free shops	N/A			No marginal or hidden cost on goods price	0.042	
	No union fees	0.109			Lower service fees (e.g. hair cutting, shoe polish etc)	0.057	
Self Employment		1.000		Control price level by demand supply relationship	0.861		
				One of the main source of goods & services to middle and lower class buyers	0.989		
Tax	No municipal tax	1.000		Fresh & cheap Foods supply	Vegetables	0.734	
	No service tax	1.000			Tea & fast food	0.921	
	No income tax file	1.000			Eggs, Meat & Fishes	0.183	
					Fruits & Flowers	0.584	
Benefit of Encroachment : 0.382							

Source: Computed by Authors based on primary data

From the above table-5, it is depicted that cost of encroachment by street vendors is too high. Private Cost(for the street vendors) is greater than Social Cost (for public).Table no-6 shows that Private Benefit is slight higher than social Benefit and total Benefit is lower than total Cost . It is very interesting that all Private Benefits create private or social costs.

CONCLUSION:

By analyzing the data and CBA it can be said that the street vendors play vital role in urban area. They play both positive and negative role. Street vendors are the large sectors of informal workers .Vending is an easy way to create new employment with very low investment. OLS model proved that Lower and moderate even sometimes higher income group prefer street goods but the residents,commuters and pedestrians also face congestion, mobility problem, parking problem, accidents etc due to encroachment by street vendors.CBA shows that total cost is too higher than total benefit .There is a conflict to the residents and commuters about street vendors .They prefer street vendors for the cheap and attractive products but they also dislike the problems created by the vendors .To solve this problem municipality may take some steps:1)To create separate vending zone, 2)National Highway must be vending free zone 3)Renewable licenses and identity card may be provided only the vendors of vending zone,4) Vending time should be determined by expert committee of the municipality.5) Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 could be followed by the municipal authority.6)Administration and local government should be ensure to protect street vendors from political harassment, illegal bribe collection etc .By the proper plan implementation, smooth street vending will be hopeful both vendors and consumers.

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