PEDESTRIANISATION NEED OF THE HOUR: A CASE STUDY OF FAZILKA TOWN

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1. ABSTRACT
Many people believe that nonmotorized modes (walking, cycling, and their variations) have an inferior right to use public roads compared with motor vehicles. This reflects the belief that motor vehicles are more important to society than nonmotorized modes, and that roads are funded by motorists. Pedestrians and cyclists are sometimes forbidden from using a particular public road to avoid delaying motorized traffic. That's the reason transportation planning practices are often unintentionally biased toward motorized travel. A city is a social structure and not merely a physical structure. To quantify the benefits of nonmotorized transportation facility, 300m long stretch of Fazilka city local road was converted into Pedestrian Street. Case study was performed to quantify the direct and indirect benefits of Nonmotorized facilities within the city. Fazilka has an estimated urban population of 67,424 (2001) and registered motor vehicles 45000 (Appox.) This paper highlights the results of statistical analysis performed amongst the selected visitor of Pedestrian Street through random sampling and importance of nonmotorized facilities for the sustainable development of city.

1. INTRODUCTION
Pedestrian Street in Fazilka (Food Art and Cultural Street and Car Free Zone) planned by Graduate Welfare Association Fazilka (GWAF) with the thought to generate more number of pedestrian and cycle trip and to create eco-friendly zone within the city. This pedestrian street is further linked to the culture and heritage of city and reflects by and large the various phases of city’s life. After the 1984’s blue star operation and abysmal era of militancy in Punjab, the city life closes between 7 to 8 PM. Pedestrian Street is aimed to reinstate the same nightlife and lost cultural glory of the city leading to enhanced bonhomie among people. This paper gives results of opinion survey conducted amongst the visitors of Pedestrian Street based upon the random sampling. These opinion survey results are the indicators, after studies results highlighting direct and indirect benefits of pedestrianisation like harmony amongst people, improved economy of the weaker section of the city like vendors and hawkers, law and order within the city and awareness about the culture and heritage amongst people of the city.

2. HISTORICAL BACKGROUND OF THE CITY FAZILKA
Fazilka, 162 year old historical town popularly also know as Bangla is located in southwestern Punjab (INDIA), about 325 kms west of Chandigarh, and 200 km south of Amritsar. Fazilka is on India-Pakistan border. Fazilka City Established in Year 1844 By Britisher Mr. Oliver After Purchasing Land from Mian Fazil Watoo (Lambardar) at the payment of Rs. 144/- and Anna Eight, and city being named after him. It is well connected by rail and road with major cities of India. The attraction of Fazilka is its living environment. Fazilka city is one among the rice growing and cotton rich belt of the Punjab. There are many rice factories in the city. The city is famous for its good quality of rice. It is one of the main city

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which exports rice. Fazilka is also a main exporter of wool and hand made famous Punjabi Jutti.

3. THE PRINCIPLE

According to Prof. Heman Knoflacher, “City is a thing that came from social contact, social relationships and economic relationships and city is a social structure and not just physical structure”. Behaviour exhibited by the citizens is directly related to social and physical structure of the city. To improve and preserve the value system and social behavioral data of the city like economy, harmony amongst the people, environment, culture and heritage etc; we need to address the demand of physical and social infrastructure for the sustainable development of a city. Figure 1 demonstrates the same.

![Diagram showing the relationship between data, behavior, and structure](image)

**Figure 1: Data, Behaviour and Structure Relationship**

We can correlate our data-behavior-structure principle to understand the transportation needs of a city. In most Indian cities, the same road space is used by modern cars, buses, three-wheelers, scooters and motorcycles, bicycles, rickshaws and animal- and human-driven carts which clearly demonstrate the presence of captive cum vulnerable users of these means of transport. Infrastructural demands of vulnerable users like pedestrians and cyclist has been ignored at various governmental and political levels at large, causing more than 3000 fatalities daily worldwide in car road crashes. The share of walking trips ranges from 37% in a city of 100,000 populations to 28% in mega cities with a population of 10 million. This pattern is not expected to change significantly in the near future. Thus we need to incorporate needs of nonmotorized road users in our transport planning process itself. Understanding the demands of vulnerable users will greatly reduce the number of road crashes and will intact social structure of a city.

4. GEOGRAPHY & DEMOGRAPHY OF THE CITY

Location: Latitude: 20.25N, Longitude: 74.04E, South West side of the Punjab almost 11 Km from International India-Pakistan border. 408km from National Capital of India, Delhi and last terminus station of National Highway No. 10

Urban Population: As per 2001 census, Fazilka had a population of 67,424. Males constitute 52% of the population and females 48%. Fazilka has an average literacy rate of 68%, higher than the national average of 59.5%; male literacy is 72%, and female literacy is 62%. In Fazilka, 13% of the population is under 6 years of age. Registered motor vehicles are 45000.

District: Ferozepur, State: Punjab, Country: India

Height above mean sea level : 177.185 m

Climate winter: 2°C (minimum)

Summer: 45°C (maximum)

Potable water: Deep tube wells

Average Rainfall: 15 cm (Annual)

5. METHODOLOGY

Selection of the Pedestrian Street (food, art and cultural street) was made by conducting reconnaissance survey and verbal interviews with the people. Final selection of the street was made on the basis of security of the pedestrians, especially females walking during late night hours, the most accessible destination for walking, size of the street to take care of the latent demand in pedestrian trips in future, minimum disturbance to the services like hospital, places of worships and educational institutes, land use pattern of the pedestrian street and nearest distance from residential zones of the city. 300m long corridor of Sadhu Ashram road were selected to convert as Pedestrian Street; Figure 2 shows the location of Pedestrian Street on Fazilka township map. To inaugurate the pedestrian street and to estimate its impact on city’s lifestyle, one week long cultural, art and food festival was organized and opinion survey was conducted with more than 500 people visiting Pedestrian Street through random mode. Next section of this paper highlights results of statistical analysis of the same.
Figure 2: Venue Map of Pedestrian Street
6. **BENEFITS OF THE WALKING STREET**

6.1 **Harmony amongst the People-Walking City**

In most cities around the world today, apart from in selected pedestrians or traffic calmed centres, we see an almost inexorable trend towards squeezing out non-motorised modes in favour of motorised modes. Urban life extends back some thousands of years and over this long period of time all cities were basically dependent on walking for their circulation needs (Kostof, 1991). This Pedestrian street (Food, art and cultural street) bring back the glory of city, this pedestrian street promoting and enhancing more pedestrians and cycle trips within the city which are the best modes of sustainable transportation. Pedestrian Street is helping the community to confiscate isolation within the society dwindle due to high speed of urban transportation and technology. Results of opinion survey in Figure 4, shows 77% of the people accepted the same.
6.2 Economy of the City
Results show that Pedestrian Street will improve the economy of unorganised and weaker sections of the society directly or indirectly related to art culture and heritage, craft, textile and street food industry. Special spaces for the hawkers and vendors have been provided on the pedestrian street to showcase and sell their products. Their non-polluting transportation modes of selling their products helping to create eco-friendly zones and low selling cost of products. Further, this street would act as a direct link between the manufacturer and buyer for the promotion of local handicraft products.

6.3 Environment and Air Pollution
This pedestrian street will promote walking trips from various residential zones of the city to Pedestrian Street. This will discourage the use of motorised vehicles within city limits and promoting the concept of CAR FREE ZONE; this further improving the air quality and will reduce air pollution in the region. Non-pollution modes of hawkers and vendors for selling their products are also plateful in the same way. Survey shows 64% people agreeing to it and observed improvement in their health due to walking.

6.4 Tourism
Pedestrian Street enhancing the tourism potential of the city. Media coverage is attracting the people from nearby districts and state like Rajasthan and Haryana to visit Fazilka. This helped to highlight the major places of tourist attraction of the city, like sulemanki border, hanuman mandir, Badha Lake and clock tower on a global platform. Figure 6 showing the results of opinion survey conducted; 70% people reported that this will help to enhance tourism potential for the city.

6.5 Culture and Heritage Promotion
Pedestrian street is acting as a promotional platform to create awareness of culture and heritage of the city amongst the mainly amongst the youth through food and music.
Pedestrian Street was inaugurated with one week long food, art and cultural festival. Around 10,000 people visited everyday after the opening of street at 7:30 PM daily till late night. No incident of eve-teasing, theft and road rages has been reported during this time, whilst daily such incidents are reported on Gaushala Road, Vaan Bazar and Wool Market, the fast moving traffic lanes within the city. Figure 8 indicate that 77% of the people visited Pedestrian Street with family and 19% with friends; more number of families during night hours from the various residential areas of the city to the pedestrian street helped to create self discipline amongst the citizen, reflecting better law and order in the city.

6.6 Basic Statistics of Walking Street

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>4%</td>
</tr>
<tr>
<td>Friends</td>
<td>19%</td>
</tr>
<tr>
<td>Family</td>
<td>77%</td>
</tr>
</tbody>
</table>

Figure 8: Percentage of people visited in various groups

Figure 9: Male-Female ratio visited the street

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>42%</td>
</tr>
</tbody>
</table>

Figure 10: Visitor’s rating for the pedestrian street

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>78%</td>
</tr>
<tr>
<td>V. Good</td>
<td>9%</td>
</tr>
<tr>
<td>Good</td>
<td>9%</td>
</tr>
<tr>
<td>Fair</td>
<td>4%</td>
</tr>
</tbody>
</table>

Figure 11: People’s opinion to have safe pedestrian streets in the city (slow moving traffic)

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91%</td>
</tr>
<tr>
<td>No</td>
<td>9%</td>
</tr>
</tbody>
</table>

7. CONCLUSIONS

Pedestrian Street has been found most sustainable solution to address the basic problems of the city like law and order, air pollution, economy and maintaining heritage and culture. Experiment of Pedestrian Street in Fazilka Township, reflects the same. Some more quantitative and qualitative studies are required as part of before and after studies like, reduction in road crashes in urban areas due to speed, crime rate graph in the city, and improvement in air pollution quality. Detailed study tasks are required to quantify the direct and indirect links of city’s
economy due to Pedestrian Street. Opinion survey results given in Figure 11 indicate 91% people wanted such safe walking pedestrian streets all over the city and it should be allowed for slow moving traffic. Special provision shall be made to avoid fast reduce the speed of fast moving motorizes vehicles mainly in the residential streets within the city. Figure 12 and Figure 13, shows the view comparing sadhu ashram road before and after converting it into Pedestrian Street

Figure 12: View of Sadhu Ashram road before converting into Pedestrian Street (Food, Art and Cultural Street)
8. REFERENCES


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