

Sustainable Solutions for Urban Issue of Vashisht Village, Manali

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Abstract—Manali, a very well-known tourist destination is known for its lush green landscape and scenic beauty of nature. It is located at a distance of 38 kilometers north from the Kullu town. This paper focuses on the identification of state of social and economic infrastructure on urban street namely The Mall at Manali by conducting the physical surveys and using the existing land use map of the town. The paper highlights the related infrastructure problems in the street also suggests the solutions to the identified problems.

1. INTRODUCTION

Vashisht village is located at the banks of river Ravi, in Manali. Natural springs and sandstone highlight the beauty of the small village. Located at a distance of 6 kilometers from Manali, the village is located on a steep hill. Vashisht village known for its historical background and importance has scenic beauty of majestic mountain ranges and lush green valley. The village is located near Manali. the small hamlet has a legend surrounding it that a Hindu sage, Rishi Vashisht distraught by having learnt that his children all have been killed by another sage rishi Vishwamitra tried to kill himself by jumping into the river. Unable to drown in the river, he was carried to nearby village by the river where he started a new life and hence the name of the village came into picture. The river was called Vipasha meaning freedom from bondage. This river after some distance of few kilometers ultimately gets shorten to form river Beas. The hot sulphur springs of the area are one of the major tourist attraction and have healing medical powers.

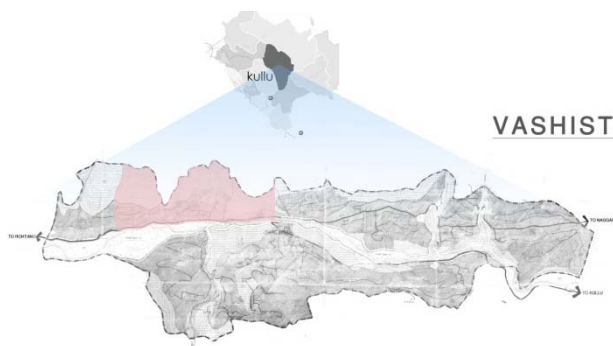


Figure 1: The location of Vashisht village, Manali

2. CLIMATE OF MANALI

The town Manali falls under the important tourist destination of Kullu valley. It has dominant winter months from October to April, the Kullu valley has an excellent climate. The summer season from March to June is pleasant with temperature not rising beyond 35°C, which results in attracting many tourist from the plains of the country and beyond. Rainy season is from July to September, having moderate rainfall and in winter season there is snowfall during January and February. Temperature falls down to 1° C in lower areas whereas it goes down to sub zero limits in the upper parts of the valley that includes Manali [2].

The climate of Manali is, therefore, termed as 'climate of recreation' as it is comfortable and pleasing in summer. Ideal weather comfort can be enjoyed at the heights ranging from 1200 metres to 1800 metres. At altitude more than 1800 metres, winters are not that tolerable as that of the rest of the year. Manali experiences more than one metre snowfall during winter. Average rainfall at Manali goes up to 127 cm during the rainy season primarily in the months of July and August [2].

3. EXISTING SCENARIO

The area has residential buildings with varying number of floors ranging from single storey to three or even four storied buildings. In land use maximum of the area is under agricultural land followed by residential and public and semipublic area as shown in the figure 2. Nearly 69% of the population comprise of local people and 31% comprise of migrants. Maximum of the people are engaged in agriculture followed by business and services.

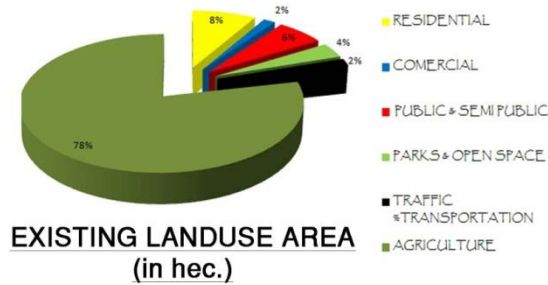


Figure 2. Existing land use of the area

The tiny hamlet comprise of maximum agriculturists population other than those engaged in temple and small section of commercial sector adjoining the temple complex (Figure 2). As per the survey it was found that out of the existing shops in the area maximum are of retail followed by seasonal, whole sale and services and miscellaneous shops as shown in Figure 3. Family size varies from 4 to 5 people per family.

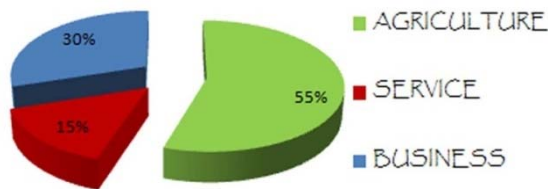


Figure 3: Occupation structure

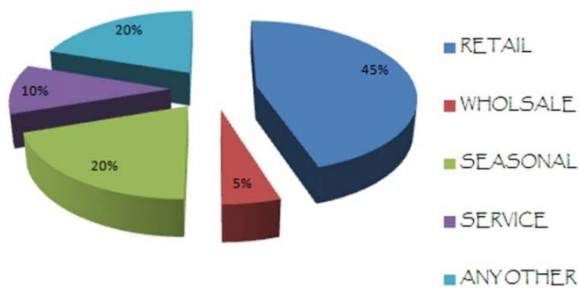


Figure 4: Type of shops

4. URBAN ISSUES

Different aspects of Physical, Social and Economic infrastructure have been studied and analyzed for problems using the existing landuse map [1] and based upon the guidelines given at [3] and recommendation of [4], the solutions have been suggested.

5. PHYSICAL INFRASTRUCTURE

1. **Parking:** Lack of Parking Space, heavy traffic and insufficient turning radii

Solutions: Redevelopment of parking spaces, parking for both 2 & 4 wheeler

2. **Road:** lesser width, Narrow Road, insufficient barrier, roadside parking

Solution: Increase the road width upto 15m, provide barrier and retaining wall

3. **Water supply:** exposed pipeline and laid on pedestrian

Solution: pipeline should be laid underground

4. **Electricity:** overhead connection, high risk due to exposed cable over head

Solution: cable line should be underground



Figure 5: Exposed water supply lines



Figure 6: open and insufficient drains

5. **Sewerage & Drainage Connection:** Lack in drainage, open drains, unplanned drains improper disposal system

Solution: provide proper cover to drains, drinking waterlines should be separated from sewerage lines.

6. **Solid Waste Disposal:** No proper waste disposal, No facilities for treatment

Solution: provide dustbins at necessary locations

7. Bus stop: improper and unsafe bus stoppage

Solution: proposal for bus stop at Vashisht chowk

8. Street Furniture: no relaxing and waiting area

Solution: provide resting space and benches along with dustbins for sitting and relaxing purpose

Social infrastructure

Based upon survey of people and social infrastructure in context of urban issues, problems faced by people residing in the area were found out and has been discussed below. as shown in the Figure 7, main problem in the area is of parking followed by problems of narrow size of streets, absence of public toilets, storage facilities for shops and miscellaneous.

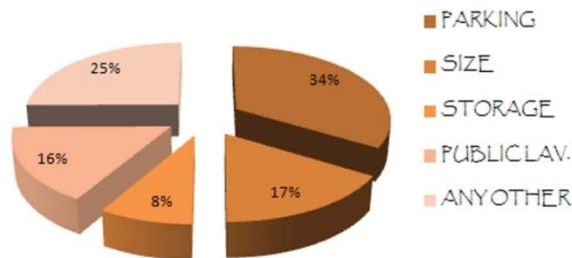


Figure 7. Problems identified using public opinion

1. School/institutions: improper accessibility, lack of proper classrooms, recreation and sports facility, lack of transportation

Solution: provide playground, increase size as well as number of classrooms, provide transportation facility and provision of roads and access to the buildings.

2. Healthcare: insufficient for local population, improper access, signage problems, health care facilities too congested in area requirements.

Solution: proposal for a new and big clinic /dispensary, provide proper signage and more open space near health care facility

3. Vashisht complex: width of road not sufficient, road used for parking space, overcrowded market space, no boundaries defined between road line and shop fronts, insufficient public amenities

Solution: proposal for sitting space, gathering space inside temple complex, provide for public amenities



Figure 8. Vashisht complex

4. Community space: lack of common gathering place, park or amusement space

Solution: proposal for proposed community hall, park and playground

5. Housing: not as per bye-laws, congested construction, no open space, narrow pedestrians, irregular settlements, violation of architecture principles

Solution: proposal for widening of pedestrians, construction as per bye laws, provide barrier free access, construction as per vernacular architecture

6. Hotel: not as per byelaws, insufficient parking, insufficient open space

Solution: planning of hotels as per bye-laws and provide sufficient parking space separately for hotels

7. Public amenities: insufficient maintaining of public toilets and drinking water facility

Solution: proposal for public amenities within Vashisht complex and along the spine /street in particular areas

6. DISCUSSION

Based upon the above stated discussion on urban issues identified and proposed solutions therein many problems faced by local residents and tourist can be sort out. Development of small villages like Vashisht largely depends upon tourism potential that generates from the very village itself therefore it is imperative that the village problems that may mar the tourism potential at some stage in future are looked and addressed more seriously and in practical way as above stated solutions. Based upon the study of social infrastructure in context to the urban issues of the area Vashisht complex, solution have been provided to the identified problems in the area. Urban issues in context of social infrastructure are important to be addressed since they mark the social life of the people and also impart a cultural identity to the region. Moreover if the social amenities are not up to the mark it will affect the daily life of the people which ultimately affects the tourism industry. Social recreation spaces, proper maintenance

of open spaces are very important since they act as breathing place for the local people and tourists alike.

7. CONCLUSION

Research study of Vashisht Village involves study of existing land use patterns and urban issues related with them. Identification of urban problems faced in day –to day life by people of the area as well as by tourists would also give boost to the tourism industry of overall Manali being Vashisht village a place of historical importance. Further since the study is based upon survey method it gives insight into practical problems faced by people and realistic solutions for the very problems. Survey based study of Vashisht complex involves study of existing social infrastructure patterns and urban issues related with them. Address of social urban problems faced by people of the area would give social rest and up gradation of the area which ultimately boost the tourism industry of overall Manali. The problems have been identified through exhaustive questionnaire based survey from people (local residents and tourists alike) therefore this method and approach would provide more holistic and realistic solution for exiting problems and upliftment of existing facilities.

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