

# PERCEPTION OF PEOPLE ABOUT SHIMLA SMART CITY

<sup>1</sup> Dr. Rajneesh Kumar, <sup>2</sup> Sanjeev Kumar

<sup>1</sup> Assistant Professor Govt. Degree College Rakkar Teh. Rakkar Distt. Kangra (H.P.) India

<sup>2</sup> Govt. Primary School Teacher, Balh Teh. Nadaun, Distt. Hamirpur (HP), India

Email - <sup>1</sup> rajneesh.ndn@gmail.com, <sup>2</sup> sanjeevmnature@gmail.com

**Abstract:** *With the advent of “smart-phones”, technology has helped mankind to solve some of its difficulties. On a similar note, “smart city” is a futuristic approach to alleviate obstacles triggered by ever-increasing population and fast urbanization which is going to benefit the governments as well as the masses. The modern day cities are deprived of vital elements like quality of life and socio-economic development which can be delivered by the smart cities. The smart cities are an endeavour to make cities more efficient, sustainable and liveable. In other words, a smart city is a city that can monitor and integrate functionality of all the critical infrastructure like roads, tunnels, airways, waterways, railways, communication power supply, etc., control maintenance activities and can help in optimizing the resources while keeping an eye on the security issues as well.*

**Keywords:** *Smart city, water supply, technology and information, Government, power supply.*

## 1. INTRODUCTION:

A smart city is defined as the ability to integrate multiple technological solutions in a secure fashion to manage the city's assets. The goal of building a smart city is to improve the quality of life by using technology to improve the efficiency of services and meet residents' needs. Technology can be used as an enabler to tell what is happening in the city, how the city is evolving, and how to enable a better quality of life. A smart city uses information and communication technologies (ICT) to enhance quality, performance and interactivity of urban services, to reduce costs and resource consumption and to improve contact between citizens and government. Sectors that have been developing smart city technology include government services, transport and traffic management, energy, health care, water, innovative urban agriculture and waste management. A smart city may therefore be more prepared to respond to challenges than one with a simple 'transactional' relationship with its citizens.

The concerted measures are necessary for India to meet the demands of its ever-growing urban population. Indeed, the country's urban-policymakers have been making efforts to adapt their strategies to the growing challenges of urbanisation. The period before the enactment of the Constitution (74th amendment) Act, 1992 emphasised on the creation of housing stock and provision of basic urban amenities to the poor. The 1992 Act sought to empower urban local bodies. Subsequently, in 2005, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched to improve urban infrastructure and strengthen urban governance. The most recent initiative by the Government of India, launched in 2015, is the Smart Cities Mission. Under the mission, the Centre is supporting state governments in the creation of 100 'smart cities'.

Himachal Pradesh is a hill state located in the northern part of the country. It is the least urbanised state in India, with just 10.4 percent of its population residing in urban areas. Its annual exponential growth, too, is recorded to be the lowest amongst all states and Union Territories (UT), at 1.45 percent. The reason behind the low rate of urbanisation is that the urban centres are not able to fulfil the defined criterion of accommodating population density of at least 400 persons per sq. km. Many places have lesser population density and fail to qualify due to the hilly terrain. The challenges to sustain even this level of urbanisation in Himachal Pradesh are manifold due to its mountainous ecosystem that makes it extremely fragile. Development efforts are constrained due to issues like higher vulnerability of the state to natural disasters, and less availability of built up space. Yet the same physiographic conditions that serve as obstacles to development also make the state an important tourist destination.

### 1.1 Shimla City: An Overview

Shimla is connected to the city of Kalka a foothill town situated in the adjoining state of Haryana by one of the longest narrow-gauge railway in India. It is also connected by road and airline services. The city is approximately 100

km from Panchkula, the nearest major city, and 365 km from New Delhi. Shimla's population has been constantly growing from about 55,000 in 1971 to 186,000 in 2016. As per the 2011 Census, Shimla had a population of 169,578. It is the only Class-I urban centre (population over 100,000) in the state, with about 25 percent of the state's urban population living in the city.

The city is governed by a municipal corporation and has an area of around 35.34 sq. km. The density of population is 47.98 persons per sq. km. The city is built on top of seven hill ranges and has 25 percent of land under forests and 41 natural springs that gives it a unique natural setting. The city has 82 listed heritage sites, six demarcated heritage zones, one ASI protected monument, and a museum. The Kalka–Shimla railway line built by the British is a UNESCO world heritage site. Shimla's urban development issues may not seem very different from those in other cities of the country mobility, congestion and land management, spatial growth and management, infrastructure, and service inadequacy. However, the context as discussed in the subsequent sections must be understood with specific reference to Shimla.

In smart city mission (SCM), Shimla city has dived into two parts of implementation that is i) Area based development ii) Pan city development. The Area based development is fully based on voting by people, meeting conference. The need of smart city is done by modelling and aspects are involved in smart city development.

## **2. LITERATURE REVIEW :**

**Somayya Madakam and R. Ramaswamy** (2013) have observed that in India, administration in the cities are often confronted with a multitude of key problems, like unplanned development, informal real estate markets, inevitable population growth, lack of infrastructure, inadequate transport facilities, traffic congestion, poor power supply, in competent health services, and lack of basic services both within the city and in the suburban areas, poor natural hazards management in overpopulated areas, crime, water, soil and air pollution leading to environmental degradation, climate change and poor governance arrangements are leading the urban citizen life in unhappy.

**O. Parishwad and T. Singh** (2014) have revealed that the smart city development is more concerned with making progress as concerns the smart indicators rather than rating a city, which inevitably is a snapshot in time.

**Manar Jaradat et al.** (2015) have observed that Internet of Things (IoT) technology is being developed along with the smart power grid to make our daily life smarter and easier. The study also discussed applications of IoT technology in the power grid along with integrating renewable energy sources to achieve sustainable energy and prevent climate change.

**Jashandeep Singh Arora and Navneet Singh** (2016) have concluded the need of the hour is to transform modern cities into smart cities to avoid problems of unemployment, pollution, transportation etc. The smart cities can lead to sustainable development of the society.

**Yogesh Meena et al.** (2017) have analysed over the approach of smart city centers to an action of line for implication of urban planning serving to the sectors of infrastructure, significantly impacts the other factors such as social environmental & structural economy, focusing into improvements for future scenarios. An urban moment where India heads for a modernity globalization and power of economic movement

**K. Kalaivendhan et al.** (2019) have suggested that parking issues in Chennai should be solved first because according to people of Chennai parking is the biggest problem faced by them. Fellows of Chennai city are facing traffic issue due to which their daily routine work gets affected thereby affecting a smart life, thus wide roads with proper and regular maintenance should be brought up.

## **3. Objectives of the Study :**

The main objectives of the study are as under;

1. To know the perception of the people about Smart City.
2. To find the suggestions to make Shimla a Smart City.

### 3. Perception of Respondents about the Smart City :

The responses about perception of people about the smart city is investigated and the data is presented in the following Table

**Table: Response towards the Perception about the Smart City (in %)**

Statement	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total
Smart cities have free wi-fi	0.00	11.70	18.09	48.94	21.28	100.00
Smart city have adequate water supply	0.00	4.26	2.13	34.04	59.57	100.00
Smart city assures uninterrupted electricity to all	0.00	6.38	6.38	44.68	42.55	100.00
Smart city have proper sanitation and waste management system	0.00	7.45	4.26	24.47	63.83	100.00
Smart city have affordable housing for poor people	4.26	8.51	4.26	46.81	36.17	100.00
Smart city promote use of technology and information	0.00	2.13	8.51	27.66	61.70	100.00
It makes government services accessible to people	0.00	2.13	8.51	48.94	40.43	100.00
Smart cities will provide free education	4.26	34.04	12.77	27.66	21.28	100.00
Smart cities will provide Free Health Facilities	4.26	27.66	10.64	34.04	23.40	100.00

Source: Field Survey

It is evident from the table that 48.94 percent of the total respondent agree with the statement that smart cities have free Wi-Fi facilities followed by 21.20 percent of the respondents strongly agreed about the same. 18.09 percent respondent could not know whether smart cities have free Wi-Fi or not. Whereas, 11.70 per cent of the respondents disagreed with the statement. As far as the water supply is concerned the study indicates that 59.57 percent strongly agreed followed by 34.04 percent agreed that Shimla city have adequate water supply.

Coming to the supply of electricity it is observed that 44.68 percent of the respondent agreed and 42.55 percent strongly agree that smart city assures uninterrupted water supply to all. with respect to sanitation and waste management it is seen that 63.83 percent of the respondent strongly agreed followed by 24.47 percent agreed that smart cities have proper sanitation and waste management system.

In case of housing it is observed that 46.81 percent of the respondent agreed and 36.17 percent strongly agree that smart cities have affordable housing to the poor. However, 8.51 percent disagreed and 4.26 percent strongly disagreed with this statement. 61.70 percent of the respondents strongly agreed followed by 27.66 percent agree with the view that development of smart cities makes government services accessible to the people. Further, 34.04 percent of the respondents disagree and 4.26 percent strongly disagree with the statement that free education is available in smart city. 12.77 percent respondents could not say whether education is free or not. However 27.66 percent respondents agreed and 21.28 percent strongly agreed with the statement. Finely, as far as health services are concerned 34.04 percent and 23.40 percent of the respondents agreed and strongly agree with that smart cities have provision of free health services.

### 4. CONCLUSION & SUGGESTIONS:

Based on the findings of the study concludes that the Majority of the respondents have award about the facilities that a smart city should have.

The main suggestions are given by the respondents during the survey which are as follow:

1. Proper sanitation, sewage and waste management system should be developed.
2. Availability of free Wi-Fi facility and use of ICT in various fields.
3. Playgrounds, indoor stadium and parks facility should be created.
4. Improvement of water distribution system and supply of adequate water.
5. Technology driven traffic system, police control and surveillances.

6. Proper tourism policy to attract the tourists.
7. Rain shelters and easily accessible commercial toilets.
8. Alternate garbage disposal tank should be placed in locality.
9. Proper parking facility should be available.
10. Overhead electricity cables should be properly managed.
11. Well planned buildings keeping in mind seismic zone.
12. Suggestions from the various sections of people should be taken.
13. Better health facilities and skill based education system should be available.
14. Various problems should be taken seriously and planning should be done accordingly.
15. Preservation of heritage, green areas, and open areas.
16. Directions on every intersection in roads.

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