International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 07 Issue: 09 | Sep 2020 www.irjet.net p-ISSN: 2395-0072

ASSESSMENT OF SMART CITY MISSION AND ITS IMPLEMENTATION ON CITIES

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Abstract - *The Government of India has taken a planned decision for the development of 100 Smart Cities. The Smart Cities Mission declaration and guidelines have not given a definite view of Smart Cities. The selection process of Smart Cities involves steps to succeed in the smart city challenge and the rating process is done by a panel of experts on such smart city proposals submitted by winning cities. The panel of experts allocates a rank and score. The city with the highest score and judgment of the Government of India announces the Smart Cities with submitted proposals for setting up special purpose vehicle (SPV) and other activities for implementation of the proposal.*

This study highlights the definition of smart cities, challenges, and opportunities from various case studies experiences for the Smart Cities its objectives. India is the second populist nation in the world after China. The growth in population, services management, clean energy, skill development, and advance in technologies shall become a challenge. The opportunities for India as the developing country with a young population shall be created through skill India, digital India initiatives with Smart Sustainable Cities will strengthen the socio-economy, better standard of living, and attract foreign investment to compete with the superpower of the world.

Key Words: **Smart city mission in India and its implementation**

1. INTRODUCTION

There is no universal meaning of Smart City. It means dissimilar things for singular people. It varies from city to city and from country to country, depending on your level of growth.

A smart city is a metropolitan part that uses electronic tools and technologies to capture various types of data to better serve urban dwellers and create a comfortable environment in urban areas. The divisions that have created smart city aptitudes incorporate taxpayer driven organizations, transportation, and traffic the executives, vitality, clinical consideration, water, innovative urban farming, and waste administration. Smart City applications are being established to advance the management of city flows and enable actual response to challenges.

1.1 Smart city mission in India

The Smart City strategic India was propelled by the Indian government on June 25, 2015. The service endorsed 98 billion rupees for the improvement of 100 brilliant urban communities the nation over. The principle goal of this crucial to create maintainable and comprehensive urban areas, with a focal foundation and a wonderful life for its residents. The smart city can be created for instance and can be utilized by different urban communities in different pieces of the nation. The savvy city will improve personal satisfaction, create occupations, and increment the wages all things considered.

The strategic shrewd urban areas of the administration are a striking and new activity. It will likely build up models that can be reproduced inside and outside the brilliant city, catalyzing the making of comparative savvy urban areas in numerous locales and districts of the nation.

1.2 Components of a smart city

The indispensable sections of neighborhood improvement in the Smart Cities crucial the improvement of the city (modernization), the reclamation of the city (redevelopment) and the extension of the city (Greenfield progression) just as a container city action in which savvy arrangements are applied covering bigger pieces of the city. Beneath you will locate the three city improvement models by area.

1. Retrofitting

2. Redevelopment

3. Greenfield development

1.3 Smart city mission features

Some normal highlights of extensive advancement in Smart Cities are showed underneath.

1. Promote diverse land use in planning - plan "unplanned areas" comprising a series of well-suited actions and land uses close to each other to make land use well-organized. States will allow elasticity in land use and the establishment of regulations to acclimate to changes.

2. Housing and inclusion - expansion of housing prospects for all.

3. Create communities accessible on foot - decrease blockage, air pollution, and asset consumption, animate the nearby economy, advance cooperation, and assurance of security. The street organize is made or recharged for automobiles and open vehicle, yet in addition for walkers and cyclists and the fundamental regulatory administrations are accessible by walking or by bike.

4. Protect and create open spaces - parks, play areas, and leisure territories to improve the individual fulfillment of residents, lessen the impacts of warmth in urban regions and for the most part advance biological equalization.

5. Promote various transportation choices: transit-oriented development (TOD), public transport and last-mile para-transport connectivity.

6. Make direction simple to utilize and moderate for residents - progressively depend on online administrations to guarantee duty and straightforwardness, specifically by utilizing cell phones to lessen administration costs and offer types of assistance without accepted to civil workplaces. Make electronic gatherings to tune in to individuals and get exhortation and utilize web based perceiving of projects and exercises through a visit to the digital website.

7. Giving the city a character - in light of its fundamental financial movement, for example, nearby food, wellbeing, training, creates, culture, outdoor supplies, materials, dairy items, etc.

8. Apply intelligent resolutions to infrastructure and local development facilities to improve them. For example, making regions less defenseless against catastrophes, utilizing fewer assets, and offering less expensive types of assistance.

2. CASE STUDY

2.1 SMART CITY SURAT

On December 15, 2015, the city of Surat presented a "Smart City Proposals" (SCP) for the city of Surat to the Department of urban development of the Government of India, with the requested approval of the Government of Gujarat and the legal authority of Surat Municipal Corporation. By the deadline for submissions, a total of 97 cities had submitted their smart city suggestion to the Indian government. According to the plan already defined, in the first round (current year), 20 cities would have been selected based on the merit of the submitted proposal. The Indian government had formed three teams of

experienced members of the World Bank, ADB, and other independent members to evaluate and evaluate all smart city proposals presented by 97 smart cities and choose the final list of the top 20 cities.

2.1.1 The smart city Surat proposals

1: - Redevelopment: -

• It covers an area of 8.77 km^2 on 326.52 km^2

• 7TPSchemes

• Proposed update: Rs. 1780 Cr.

2: -Pan city development: -

• For the whole city

• Orientation to transport - mobility - connectivity

• Total proposal: Rs. 817 crore

2.1.2 Development work on onsite

Surat Smart City focuses on developing a picky part that produces sustainable economic growth and high quality of life through intelligent intervention. The area is expected to be transformed into a planned urban space with sustainable and progressive economic activity and development. The chose territory speaks to 3% of the all-out zone of the city of Surat. In the populace, it speaks to about 10% of the number of inhabitants in the city, while the portion of GDP here speaks to around 16% of the city. The improvement of the territory for this region with savvy highlights will load the corporate environment and improve people's quality of life.

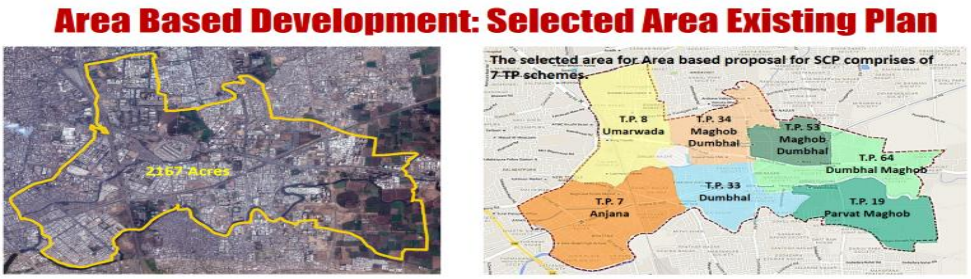

Fig: - figure show selected area for area-based development

As of now, four water treatment and dissemination focus and three water catchment territories in the chose territory to give 75 MLD of water. This foundation will be extended to give water supply twenty four hours every day, seven days per week. Keen water meters will be introduced for all associations. Water quality guidelines will be kept up and quality control will be guaranteed at the source and end-client locales. So as to save water, it is proposed to gather and energize water and revive it through a water seepage framework.

There are 2 STPs that gather and treat the wastewater gathered in the chose region. It is planned to restore the current STPs with SCADA and vitality creation and to reuse/reuse in any event half of the water treated by the chose region.

It takes an hour to make the most of renewable energy sources for sustainable development. According to the Smart Cities Directive, 10% of the overall electricity use of the area must be achieved through renewable energy sources.

This project has an indirect advantage for the citizens of Surat since the use of LED lighting would reduce the operating costs of street lights. These lamps have been tested for an optimal LUX level with minimal energy consumption. This will reduce Grid's overall energy demand, which will generate economic benefits for the Surat City Corporation, which in turn will reduce the burden on city taxpayers.

To get better quality of life for people in the slums, affordable housing projects are offered in the region. Planning of one thousand fifty EWS houses and one thousand nine hundred fifty LIG in Pradhan Mantri Aawas Yojana and Development of the area of slum improvement fifty seven hundred fifty houses based on the PPP model. The expected entire cost of Rs. Seven hundred crores. Include Rs four hundred sixty PPP crores.

Fig: - Figure show housing development on site

Fig:-Figure show water recycling plant

2.2 SMART CITY BHUBANESWAR

The notification from the Odisha government to establish a special purpose vehicle company (SPV) called "Bhubaneswar Smart City Limited" for the implementation of the Bhubaneswar Smart City proposal. Selected as part of the Smart City Mission program.

Bhubaneswar Smart City Limited (BSCL) is the leading agency for the planning, implementation, management, and management of smart city development projects in the city. As indicated by the Mission, the implementation will be carried out in the area of responsibility of the Bhubaneswar Municipal Corporation.

2.2.1 Bhubaneswar smart city vision

• Transit-oriented development: - A dense urban form that promotes active, linked and sustainable mobility choices

• Habitable city: - Offers various types of accommodation, education, and entertainment; attractive at the same time its tradition, arts, and traditional communities

• Child-friendly cities: - Provide nearby, safe, comprehensive and dynamic public spaces

• Eco-cities: - Coexist in coherence with nature to promote a resistant, clean, green and healthy environment

• Regional economic center: Attracting knowledge-based businesses and sustainable tourism activities by exploiting and strengthening its institutions, local businesses, and the informal workforce.

2.2.2 Development work on onsite

Implement a territorial strategy in which twenty-four essential aspects of the urban system and management must be developed, exploited, and managed holistically. Zone-based development will be implemented on a selection of the pilot area, which will be replicated at the city level in the subsequent implementation phases. Development area in an area of 985 acres selected as Bhubaneswar Downtown District (BTCD). Rental housing program for building labors and urban poor in Kharamela nagar, Bhubaneswar.

It is planned to develop the Social Equity Center as a 200-bed rental unit in Kharavel Nagar, as portion of the Smart City project.

Integrated Public Service Centre (IPSC) in Saheed Nagar has been conceived as an integrated structure for citizens with e-Seva, health care centers, libraries, and crèche. It will respond to the social and urban needs of instant neighborhoods and will provide the social space necessary for interaction with the community. Present Status of this project is to twenty-four isolated Footing completed out of thirty-two including a lift.

Integrated Infrastructure Improvement project was considered in the Bhubaneswar Downtown district (BTCD) as part of the Smart City Smart Area development proposal, which covers an area of 985 acres. The project aims to give efficient public services such as water supply, sanitation, energy, roads for solid waste management, and street lighting through an agency accountable for operations and effective maintenance through a management contract to guarantee and satisfy diverse service level standards (SLB). Present Status of this project is to project DPRs finalized by concerned departments and Investor consultation completed.

The redevelopment of Janpath Road includes the design of urban landscapes, the embellishment, the beautification of the landscape, the redesign of the intersection and the strengthening of infrastructures, with the construction of new roads, the restoration of the existing road, the construction and or the restoration of major and minor bridges, underground canals, crossings, exchanges, drains, etc. Present Status of this project is to constructions of a Storm water drain on the organized side (left-hand side) of the section from Sishu Bhawan Square to Raj Mahal Square have been commenced.

Shanti Nagar Awas Yojna was planned to remodel the houses of the existing slums in the Shantipalli shantytown in Mouza Satya Nagar inside the BTCD. On the entire surface, it is planned to in two parts:

(1)Construction of a slum restoration project and informal settlement for EPCs on an area of 4.50 acres.

(2)HPS SRRH project on ten acres of land.

Current Status of this project is to PPP Model: Development Agreement (DA) has been implemented by the private contractor. Now pre-construction actions are working on and EPC Model contract is to be tired with the agency.

The multi-story car park building in Raj Mahal Square consists of two basements, on the ground and above 7 km. construction plans. The parking lot must have a lower and upper basement as well as upper floors and floors that can accommodate at least 450 NSA. The equivalent of cars (ECS). All the above floors the parking plans must be commercial with an area of at least 57,000 m^2. Ft of saleable commercial space. Current Status of this project is to proposals and Drawings have been accepted by the Standing Team and Excavation of Earthwork is in progress.

Fig:-Figure show proposed stretch and present status of redevelopment of Jan path road

Fig:-Figure show conceptual image and present status of project multilevel car parking in unit 2

3. COMPARISON OF BOTH INDIAN CITY

Smart city Surat

- City selected in first round
- Surat has got Fourth rank
- Total area proposed for (ABD) 2167 acre.
- Total no. of proposed projects in (ABD)-39
- Projects in working(ABD)-36
- Completed projects-07
- City was selected on first rank for his implementation of projects in 2018.

Smart city Bhubaneswar:-

- City selected in first round
- Bhubaneswar has got first rank
- Total area proposed for (ABD) 985 acre.
- Total no. of proposed projects in (ABD)-10

- Projects in working(ABD)-05
- Completed projects-00
- City was selected on fifth rank for his implementation of projects in 2018.

4. ASSESSMENT

- Time management of the implementation of projects should be decided and worked as per the time schedule so that projects are completed on time inspire other areas within the city to follow suit.
- Citizen's advice and involvement are very necessary for the selection and development of any area.
- Projects study after its completion will be a key to implement that project in the next development phase.
- Follow their proposals on which the city was selected in the smart city mission.

5. CONCLUSIONS

Smart city mission as a solution for Indian cities that gives a solution to tackle these problems in an inclusive way. Like- Physical, Social, Economic sector. The Smart City is an innovative proposal of the Indian government aimed at educating the quality of life and appealing citizens and investments by setting in motion a good circle of growth and improvement. The growth of a smart city project can create enormous opportunities when we talk about the demand for affordable housing and Smart City projects are increasingly allocating land and housing to low-income groups and economically weaker sectors. The Smart City mission confers transparency and facilitates economic activities.

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