Indian Smart Cities Programme it's Challenges & Solutions

[1]Mr.K.K.JAIN FIE (PhD), [2] Dr D.P.KOTHARI, [3] Dr J.PRAVEEN

[1]Kiran Kumar Jain MTech ,FIE,(PhD) Prof&Hod EEE Department
[2]Dr.D.P.Kothari ,Director (Research)
[3]Dr.J.Praveen PhD,Prof&Hod ,EEE Department
Email-ID:[1]kkj9502162631@gmail.com, [3]praveen_jugge @yahoo.co.in

Abstract:- Smart city mission in India is of several major development program focused on Indian rapid growth and its challenges & opportunities. The aim is to promote economic growth, stronger governance to improve quality of life. Government of India recently pledged to create 100 new smart cities in India phased wise. On the basis of an international slandered ISO 37120. Smart cities councils of India are prime consultants for this work. There are many challenges ahead in implementation and there innovative solutions. Smart Cities Challenge is competition designed to inspire to support municipal offices as they develop smart proposals to improve resident's lives in year 2015 JULY. 97 cities competed in 1st round with best proposals receiving funds from ministry of Urban Development. .FOR funding. Out of 97 cities 20 were selected for best proposals. They will be receiving funds remaining cities entered in fast track program to up great their proposals. And will compete in next cycle. In June –July 2016. Currently 31% Indian populations are residing in cities. And expected that it would be 50 % by 2030. Here we shall discuss the international standards and how it would be implemented?. Many countries including U.K. have expressed their desire to help India financially and technically. Bristol University is talking leading role in this matter. They are going to drive innovation *we are creating an environment. So world will look towards Bristol for future of smart cities.*.

Keywords - Smart Cities, International Standard ISO 37120, Ministry of Urban Development

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SMART CITY CHALLENGE

At Given the challenges involved in developing 100 smart cities, only the capable cities will be chosen under the Smart Cities Mission through a two-stage competition. This was indicated in the Operation Guidelines for Smart Cities Mission released by Prime Minister Narendra Modi. The selection criteria used in both the stages of competition was elaborated in the Guidelines.

In the Stage-1 of City Challenge Competition, each State and Union Territory scored all their cities based on a set of criteria and nominated the top scorers as per the indicated number of potential smart cities for participation in the Stage-2 of competition.

Stage 1 of Selection

The list of nomination marked the first stage in the selection process of smart cities, in which the state governments nominated potential cities and the Centre shortlisted 100.

The evaluation criteria for Stage1 of competition within the State/UT were as below:

1. Existing Service Levels (25 points): This includes Increase in service levels over Census 2011, an

operational Online Grievance Redressed System, Publication of least first monthly newsletter and online publication of municipal budget expenditure details for the last two financial years on website.

2. Institutional Systems and Capacities (15 points): This covers imposition of penalties for delays in service delivery and improvement in internal resource generation over the last three years;

3. Self-financing (30 points): This would be reflected in payment of salaries by urban local bodies up to last month, Auditing of accounts up to FY 201213, Contribution of internal revenues to the Budget for 201415 and Percentage of establishment and maintenance cost of water supply met through user charges during 201415.

4. Past track record (30 points): Percentage of JNNURM projects completed which was sanctioned till 2012, Percentage of City level reforms achieved under JNNURM and extent of capital expenditure met from internal resources.

Stage 2 of Selection

The Government on 27 August 2015 released the list of nominees for the ambitious smart city project. The list comprises 98 cities, including many state capitals.[5]

Proposal Level Evaluation (70 points)

1. Impact of proposal: To what extent the proposal is inclusive in terms of benefits to the poor and disadvantaged, Extent of employment

2. Cost effectiveness of the proposal, firming up of resources required from various sources, Provision for Operation & Maintenance Costs, IT interventions to improve public service delivery.

3. Innovation and Scalability: Extent of adoption of best practices in consultation with citizens, Applicability of project to the entire city, Adoption of smart solutions and Pan City developments

4. Processes generation, Articulation of quantifiable outcomes based on citizen consultations, Impact on environment etc.

Cost effectiveness of Smart City Plan:

Application of smart solutions for doing more with less of resources, Alternatives considered enhancing List of Smart Cities by State

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98 projected smart cities by state.[6][7][8]

S. No.	Name of State/UT	Names of Cities Shortlisted
1	Maharashtra	Greater Mumbai, Thane, Kalyan-Dombivali, Navi Mumbai, Nashik, Amravati, Solapur, Nagpur, Pune, Aurangabad
2	West Bengal	New Town Kolkata, Bidhannagar, Durgapur, Haldia
3	Gujarat	Gandhinagar, Ahmedabad, Surat, Vadodara, Rajkot, Dahod,
4	Madhya Pradesh	Bhopal, Indore, Gwalior, Jabalpur, Satna, Ujjain, Sagar
5	Tamil Nadu	Coimbatore, Chennai, Madurai, Tiruchirapalli, Vellore, Salem, Erode, Tiruppur, Thanjavur, Tirunelveli, Dindigul, Thoothuk

		udi,
6	Karnataka	Mangaluru, Belagavi, Shivamogga, Hubbali-Dharwad, Tumakuru, Davanagere
7	Kerala	Kochi
8	Telangana	Warangal, Karimnagar
9	Andhra Pradesh	Vishakhapatnam, Tirupati, Kakinada
10	Uttar Pradesh	Moradabad, Aligarh, Saharanpur, Bareilly, Jhansi, Kanpur, Allahabad, Lucknow, Varanasi, Ghaziabad, Agra, Rampur
11	Rajasthan	Jaipur, Udaipur, Kota, Ajmer
12	Punjab	Ludhiana, Jalandhar, Amritsar
13	Bihar	Muzaffarpur, Bhagalpur, Biharsharif

14	Haryana	Karnal, Faridabad
15	Assam	Guwahati
16	Odisha	Bhubaneshwar, Rourkela
17	Himachal Pradesh	Dharamshala
18	Uttarakhand	Dehradun
19	Jharkhand	Ranchi
20	Sikkim	Namchi
21	Manipur	Imphal
22	Andaman and Nicobar Islands	Port Blair
23	Arunachal Pradesh	Pasighat
24	Chandigarh	Chandigarh

25	Chhattisgarh	Raipur, Bilaspur
26	Dadra and Nagar Haveli	Silvassa
27	Daman and Diu	Diu
28	Delhi	Delhi
29	Goa	Panaji
30	Lakshadweep	Kavaratti
31	Meghalaya	Shillong
32	Mizoram	Aizawl
33	Nagaland	Kohima
34	Puducherry	Oulgaret
35	Tripura	Agartala

- Jammu and Kashmir have asked for more time to decide on the potential smart city.
- 12 cities have been shortlisted from Uttar

Pradesh against 13 cities allocated to the state.

List of 20 Smart Cities Selected in First Round

S. No.	Name of State/UT	Cities Shortlisted
1	Odisha	Bhubaneswar
2	Maharashtra	Pune
3	Rajasthan	Jaipur
4	Gujarat	Surat
5	Kerala	Kochi
6	Gujarat	Ahmedabad
7	Madhya Pradesh	Jabalpur
8	Andhra Pradesh	Visakhapatnam
9	Maharashtra	Solapur
10	Karnataka	Davangere

11	Madhya Pradesh	Indore
12	New Delhi	New Delhi
13	Tamil Nadu	Coimbatore
14	Andhra Pradesh	Kakinada
15	Karnataka	Belagavi
16	Rajasthan	Udaipur
17	Assam	Guwahati
18	Tamil Nadu	Chennai
19	Punjab	Ludhiana
20	Madhya Pradesh	Bhopal

ISO 37120 briefing note: the first ISO International Standard on city indicators

Sustainable development in communities: City indicators for service delivery and quality of life

Currently 70 percent of global GDP is now generated by cities and 53 percent of the total world's population resides in cities. It is estimated that 70 percent of the world's population will be living in cities by 2050. This means the role of cities in enabling more sustainable futures is now more important than ever. Cities are the cultural and economic centers of the world whose progress depends upon effective management and evidence-based policy making.

In this age of urbanization, city indicators can be used as critical tools for city managers, politicians, researchers, business leaders, planners, designers and other professionals to help ensure policies are put into practice that promote livable, tolerant, inclusive, sustainable, resilient, economically attractive and prosperous cities globally

WHY THIS INDICATOR IS IMPORTANT.

Cities need indicators to measure their performance for improving quality of life and sustainability globally. Existing indicators are often not standardized, consistent, or comparable over time or across cities. As part of a new series of International Standards being developed for a holistic and integrated approach to sustainable development and resilience under ISO/TC 268, Sustainable development of communities, ISO 37120 establishes a set of standardized indicators that provide a uniform approach to what is measured, and how that measurement is to be undertaken. This International Standard does not provide a value judgment, or numeric thresholds on what a particular city should choose as appropriate targets for the indicators.

Standardized Indicators

1. Energy
2. Environment
3. Recreation
4. Safety
5. Shelter
6. Solid waste
7. Telecommunications
8. and innovation
9. Finance
10. Fire and emergency
11. response
12. Governance
13. Health
14. Transportation

15. Urban planning
16. Wastewater
17. Water and sanitation
18. Economy
19. Educations

DEFINATION OF SMRAT CITY

Smart cities are those cities which have smart (intelligent), Physical, Social, and Economic Infrastructure while ensuring centrality of citizens in a sustainable environment. It is expected that such a smart city will generate options for all residents to peruse their lively hoods and interests meaning fully and with joy.

TARGETS OF SMART CITIES IN INDIA

1. Travel time of max.30 minutes in
Small& medium size cities and 45 minutes in
METRO cities.
2 Unobstricaled foot path at least two meters wide on either sides of all streets with ROW
3 Round the clock .water supply with 135 liters/per person

PILLERS OF SMART CITY

1).   Institutional Infrastructure (including Governance. The current governance structures do not focus on citizen participation. People do not get the feel of ownership of city. Therefore, there is a need for involving citizens in decision-making processes. Procedures are cumbersome and citizens often find it difficult to secure public services they seek. Further, responsibilities for different services are fragmented across multiple institutions, making the situation even more complex for any citizen. Besides, many of these institutions report to different departments of the State government and local bodies have little influence on them. For example, even within the transport system, metro rail, buses, roads, parking, traffic lights, street lights, etc. are dealt with by different institutions/ department

2)Physical Infrastructure refers to its stock of cost-efficient and intelligent physical infrastructure such as the urban mobility system, the housing stock, the energy system, the water supply system, sewerage system, sanitation facilities, solid waste management system, drainage system, etc. which are all integrated through the use of technology..

(3))ECONONIC INFRASRUCTURE

For a city to attract investments and to create the appropriate economic infrastructure for employment opportunities, it has to first identify its core competence, comparative advantages and analyze its potential for generating economic activities. Once that is done, the gaps in required economic infrastructure can be determined. This would generally comprise the following:

1. Incubation centres
2. Skill Development Centres
3. Industrial Parks and Export Processing Zones
4. IT / BT Parks
5. Trade centers
6. Service Centres
7. Financial Centers and Services
8. Logistics hubs, warehousing and freight terminals

(4)Social Infrastructure

Social Infrastructure relate to those components that work towards developing the human and social capital, such as the education, healthcare, entertainment, etc. It also includes performance and creative arts, sports, the open spaces, children's parks and gardens. These together determine the quality of life of citizens in a city. It is also necessary that city promotes inclusiveness and city has structures which proactively bring disadvantageous sections i.e. SCs, STs, socially and financially backwards, minorities, disabled and women into the mainstream of development.

FINANCIAL STUCTURE FOR SMART CITIES

1 .60% FUNDS will be allocated for investment in infrastructure
2. 10 % For E –Governance initiative
3. 30 % remaining funds will be inform of Equity from PPP

FUNDS REQUIREMENTS BY SECTORS

TOTAL=G B P -384 Bn=383/06= 640 Bn   US DOLLORS

1)   Urban roads   –44.1 %
2)   Mass Transit----11.5 %
3)   Renewal l& Redevelopment-10.4%
4)   Water supply ---8.2 %
5)   Sewerage--------6.2 %
6)   Strom Water Drainage –4.9 %
7)   Traffic Support INF   –2.5%
8)   Solid Waste Management 1.2%
9)   Street lighting ---0.5 %
10)   Others ----------10.5 %
TOTAL----------100 %

FOREIGN COUNTRIES / ORGANIZATIONS COLLAORATING WITH INDIA ON SMART CITIES PROGRAMME

1 US -Private investment in partnership GBP-25 Bn- in clean water &Solid Waste Management in 500 cities.

2) JAPAN –GBP 22Bn Mix of Private & Public investments

3)CHINA –GBP-12 Bn do---

4) GERMANY---7 Bn Solar city projects for 10 yrs

5)FRANCE- 1.5 Bn IN Development of 3nos smart city projects INCLUDING PUDUCHERRY ,NAGALAND,ETC

6 ADB)Asian Dev.Bank –Industrial Zone of AP.& Karnataka GBP 39 Mn

7) DUBAI-KEEN TO INVEST IN GREATER HYDERBAD.

INDIAN COMPANIES PARTICIPATING IN SMART CITY PROJECTS

1)   L & T LMT
2)   IL&LS lmt
3)   Fair Wood Grooup
4)   Town ship & Urban Associan lmt
5)   Pennusula land lmt
6)   Tata Reality & Infrastructure

CONCLUSION

Due to great efforts of the PM this smart city program for 100 cities will take minimum 20 yrs But 20 smart cities are proposed to be developed in next five yrs .along with clean India.Close monitoring of projects are required task force have been set up for monitoring AJMER (RAJ) ,ALLAHBAD (UP) VISAKHAPATNAM   SMART CITIES Consist of1)Divisional commissioner2.)Ajmer Developent authority –chairman 3) distt collector Ajmer,4)

Administrator of Ajmer Infrastructure 5) Mayor 6)MCA 7) JOINT SECRETARY UD 8) GOI USTDA This will create opportunities for development of Indian economy.

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ABOUT THE AUTHOR

Mr.K.K.JAIN FIE (PhD),Presently working as PROF&HOD,EEE Deptt AT ELLENKI INSTITUTE OF ENGG&TECHNOLOGY IN PATELGUDA NEAR BHEL PATENCHERU VILLAGE

Kiran Kumar Jain

HYDERABAD, Formerly working as Professor & HOD EEE ,Bhasker Engineering College JB Group of Institutions , Moinabad Hyderabad , Consultants for Thermal power ,Solar & MSW to Electricity and Furnace oil from waste plastic (By Pyrolysis Plant).Former Superintending Engineer (Power generation) MP State Electricity Board 1142 MW (Thermal Power Station). Sarni MP & Director Training.

Dr D.P.KOTHARI. PhD,NAGPUR MS

DR J.PRAVEEN, Dean Student Affairs,Professor, Dept of EEE,Gokaraju Rangaraju Institute Engineering and Technology,Kukatpally, Nizampet, Bachupally,