

ICT in Panchayati Raj Institutions



Meenakshi, Shalini Saxena

Abstract: In India, the notion of local self government is just as old as the civilisation. In today's time, PRIs, i.e. Panchayati Raj Institutions are local governmental bodies of grass-root governance in rural India and forms the third layer of the federalism in India. These institutions of grass-root government are playing an essential role in improving the living standard of rural masses in India. In the current tech savvy scenario, the concept of e- governance and usage of Information and Communications technology (ICT) in offering services to the community have gained momentum. In order to move from governance to good governance with the help of ICT, the Government of India has initiated many projects such as National e-Governance Plan, e- Kranti, Bharat Net etc. This paper depicts the use of ICT by Panchayati Raj Institutions in providing effective public service delivery to the rural masses. Further, this paper also throws some light on various programs and applications which are designed by national and state governments to strengthening the position of PRI's in development of rural areas.

Keywords: E-Governance, ICT, Local Government, Service Delivery, Digital India.

I. INTRODUCTION

India is a country of villages. As indicated by the Census Data 2011, in India there are 6,63,811 villages that accounts for more than 68 percent of the total populace. The improvement of this growing rural populace is one of the primary reasons of concern on the part of government while making policies. The Indian government has initiated many policies, programmes and projects planned for uplifting the way of life in rural areas. In order to develop rural areas in a smooth manner the Panchayati Raj Institutions (PRI's) has come into reality. Panchayati Raj Institutions (PRI's) are rural local self-government institutions and establishes the third level of multi order government in India. The state government provides the required authority to Panchayati Raj Institutions which has main responsibility to promote and develop these institutions. In this process of attaining cooperative federalism in the country and to help the state governments in accomplishing their mandated obligations, the Central Government provides the required support and guidance. The seventy third amendment to the Indian constitution, 1992, established democratic decentralized institutions of grass-root government which are legally authorized to govern the rural areas. From two tiers of government i.e. Central and State governments, a new level was presented which could be comprehensively known as local government. There are 2.79 lakh local bodies in India,

which include 2.53 lakh Gram Panchayats, 6716 Block Panchayats and 654 District Panchayats.¹ There are more than 29 lakh Panchayat's representatives in India.

The ICT (Information and Communication Technology) has gained momentum in the last two decades in the developing nations especially in India. With the expending role of ICT various e- governance programmes and applications are invented for the development of rural areas. ICT occupies a noteworthy position in the management of Panchayati Raj Institutions in various aspects like accounts, agriculture development, finances, land records, procurement etc. This paper throws some light on some landmark projects initiated to strengthen the e-governance in rural India.

INDIA POPULATION DIVIDE

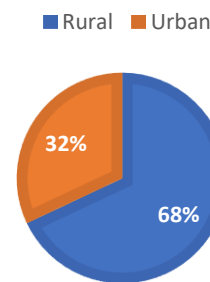


Fig 1: India's rural and urban population

II. PANCHAYATI RAJ INSTITUTIONS AND ICT

Panchayati Raj Institutions (PRI's) works as a third tier of administration that incorporates Gram Panchayats as basic unit of local level governance. Gram Panchayat is designated as the corner stone of local self-governments in India. Electronic governance make reference to the utilization of data advancements by government offices, (for example, world wide web, Intranet, Wide Area Network, and cloud computing) that can change relations with residents, organizations, and different organs of the government.² ICT (Information & Communication Technology) empowers the Panchayats to flourish their participation in process of decision making, planning and governance by organizing correspondence among residents and government. Throughout the years, the union government and different state governments have been embraced an enormous number of activities to help the e-governance. Ceaseless endeavours have been made at various levels to improve public service delivery at local level. The three tier system of democratic decentralisation intends towards the participation of local people via elected

Revised Manuscript Received on October 30, 2019.

*Correspondence Author

Meenakshi*, Ph.D, Department of Political Science, Amity Institute of Social Sciences, Amity University, Noida (U.P), India. Email:saroaha.meenakshi@gmail.com

Dr. Shalini Saxena, Associate Professor, Amity Institute of Social Sciences, Amity University, Noida (U.P), India.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>

¹ Ministry of Panchayati Raj (2019). Local Government Directory.

Retrieved from: <https://lgdirectory.gov.in>

² World Bank. Definition of e-governance



representatives in policy making. The description of some landmark projects strengthening ICT at local level as below:

III. NATIONAL E-GOVERNANCE PLAN

To improve the administration and governance in India by ensuring people’s participation in decision making process, the union government has initiated the NeGP (National E-governance Plan) in the year 2006 with an aim -- "Make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at affordable costs to realise the basic needs of the common man."³ As a part of NeGP, Indian Government has introduced thirty one MMP’s, i.e.-Mission Mode Projects, covering all three- union, state and integrated level (local governments) in India. A Mission Mode Project (MMP) means a single project in the sphere of NeGP (National e-Governance Plan) which aims at one facet of electronic governance, for example- agriculture or land records etc. The MMP’s have clear aims, scopes and execution timetables as well as assessable results.⁴

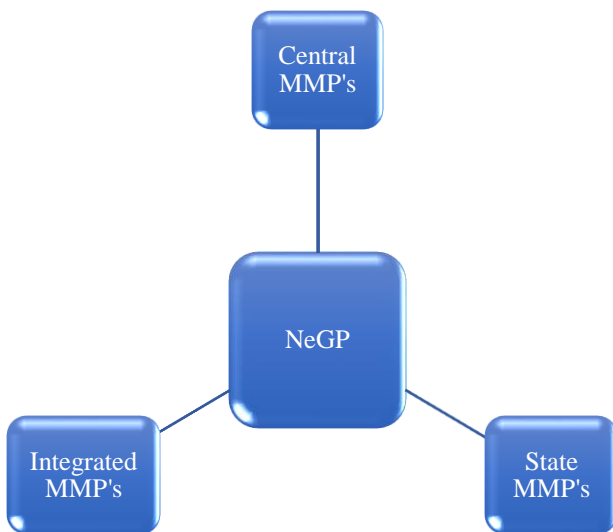


Fig 2: National E-governance Plan

A. E- INFRASTRUCTURE:

To empower the e – Governance in an all encompassing way, several projects, programmes and policies have been started to foster basic and supportive infrastructures. The foremost central infrastructure apparatuses are- CSCs (Common Service Centres), S.W.A.Ns (State Wide Area Networks), SDCs (State Data Centres), and service delivery entryways includes: The NSDG (National e-Governance Service Delivery Gateway), SSDG (State e-Governance Service Delivery Gateways), and MSDG (Mobile e-Governance Service Delivery Gateways).

B. STATE DATA CENTRES (SDCs):

Under NeGP, the infrastructure is being developed to make available effective e- service delivery of Government to Government (G2G), Government to Customer (G2C) and Government to Business (G2B) services. The SDC (State Data Centre) has been initiated by the government of India through a layout of Rs. 1623.20 crores with many objectives. SDC (State Data Centre) has been recognised like an important component of the central e- infrastructures to support electronic- governance initiatives of National e-Governance Plan. Each State Data Centre is providing Online Service Deliveries, state intranet portal, citizens information portal, secure storage of data etc., and become central repository of the State.⁵

C. STATE WIDE AREA NETWORKS (S.W.A.N.):

SWANs (State Wide Area Networks) are proving secure network for governmental work and connecting all States Headquarters, District Headquarters and Block headquarters, in a vertical hierarchical structure by ensuring minimum broadband connectivity of 2 Mbps per link.

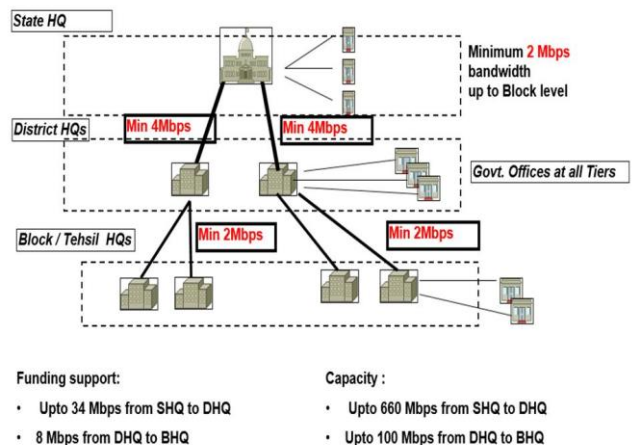


Fig 3: State Wide Area Networks

Source: Ministry of Electronics and Information Technology (MeITY)

Depending upon the utilisation, every state can increase the bandwidth between state headquarters and district headquarters up to 34 Mbps and up to the bandwidth of 8 Mbps in between District headquarters and Block headquarters. S.W.A.Ns are being operational in 34 states across India.⁶ The States are utilizing the infrastructure of S.W.A.N. for offering the safe and secure user connectivity to different government offices in state. Implementation of S.W.A.N. is still remaining in 2 States namely, Jammu & Kashmir and Andaman & Nicobar Islands. S.W.A.N. can be implemented through two options⁷:

³ Ministry of Electronics and Information Technology. *National e-Governance Plan*. Retrieved from : <https://meity.gov.in/divisions/national-e-governance-plan>

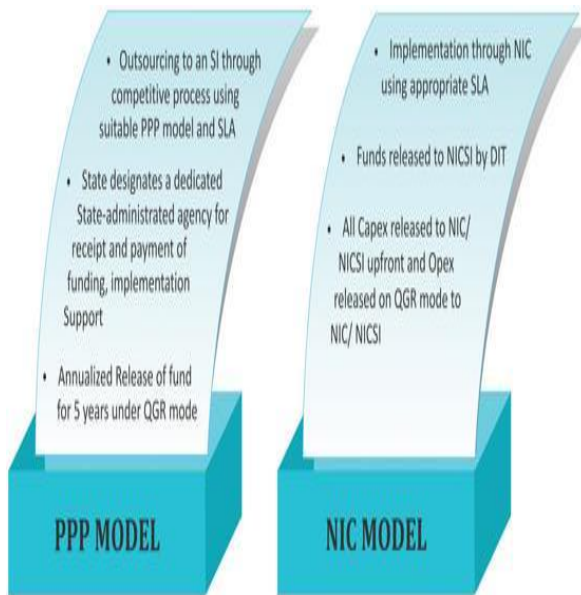
⁴Ministry of Electronics and Information Technology. *Mission Mode Projects*. Retrieved from: <https://meity.gov.in/content/mission-mode-projects>

⁵ Ministry of Electronics and Information Technology. *State Data centre*. Retrieved from: <https://meity.gov.in/content/state-data-centre>

⁶ Ministry of Electronics and Information Technology. *State Wide Area Networks*. Retrieved from: <https://meity.gov.in/content/state-wide-area-network-swan>

⁷Ministry of Electronics and Information Technology. *Implementation Models of SWAN*. Retrieved from: <https://meity.gov.in/content/implementation-model>

- I: Public - Private Partnership (PPP model)
- II: National Informatics Centre (NIC model)



For both Options Third Party Monitoring of Performance of networks for Release of QGR is essential

Fig 4: Implementation model of SWAN

Source: Ministry of Electronics and Information Technology (MeITY)

D. COMMON SERVICE CENTRE (CSCs):-

The CSCs are designated as the cornerstone of the NeGP (National e-Governance Plan) for introduction of the e-Governance on a large platform. Within the streams of e-governance, education, entertainment, health etc., the Common Service centres(CSC) are providing web-enabled cost effective and high quality voice, video and data content services. The CSCs are offering e-Governance support and services to the masses belonging to rural areas, which includes utility bill payments, post, various documentation, certificates etc. This model is being implemented through PPP model.⁸

E. CSC 2.0:

Its main objective is to set up self -sustaining network of 2.5 lakhs common Service Centres at Gram Panchayat level under Digital India campaign to provide non-discriminatory access to web enabled services to the rural population. It is implemented through E- Governance Services India Ltd (CSC SPV). This project is based on transaction and service delivery based model. It is providing a large number of e-services via a single delivery platform.⁹

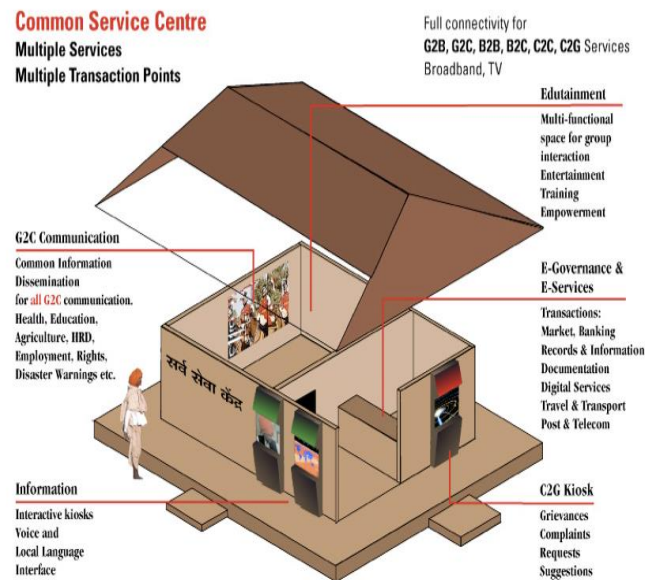


Fig 5: Common Service Centre

Source: Department of Information Technology¹⁰

F. SERVICE DELIVERY GATEWAYS:

The Indian Government has started NeGP (National e-Governance Plan) to avail all the governmental services to the citizens in their own vicinity at affordable prices, via public service delivery centres and to make sure efficacy, reliability and transparency of such services. In order to attain this vision, various government departments needs to integrate, collaborate and cooperate across various tiers of administrative setup. To deliver variety of e-services, a service delivery mechanism at different levels has been developed as:

- A) NSDG (National e-Governance Service Delivery Gateway);
- B) SSDG (State e-Governance Service Delivery Gateway);
- C) MSDG (Mobile e-Governance Service Delivery Gateway).

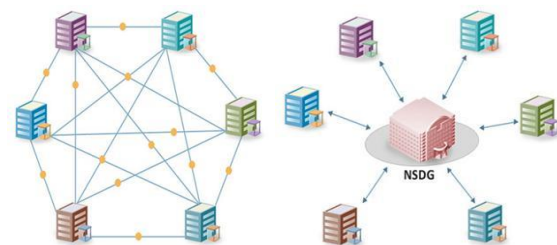


Fig 6: E-service delivery gateway

The NSDG (National E-Governance Service Delivery Gateway), SSDG (State E-Governance Service Delivery Gateways) and MSDG (Mobile e-Governance Service Delivery Gateways) are an endeavour to decrease the point

¹⁰ National Institute of Smart Governance. (2019), Retrieved from: <https://nisg.org/files/documents/A05140001.pdf>

⁸ National Institute of Smart Governance. Retrieved from: <https://nisg.org/files/documents/A05140001.pdf>

⁹ Ministry of Electronics and Information Technology. *Common Service Centres*. Retrieved from: <https://meity.gov.in/content/csc-20-way-forward>

to point level connections in between various governmental offices and offer an uniform messaging, interfacing and routing switch services via several stake-holders, for example- front to end services access providers, Back-end services providers, different government departments can generate their documents, application forms, and Data interoperable. The NSDG proposes to attain an extreme level of inter-operability between heterogeneous and autonomous units at various levels of the government.¹¹ This initiative reduces the overall outlay of the projects under e-governance by scattering, optimising and rationalising the service framework.

IV. E-PANCHAYATS

Electronic Panchayat or e- Panchayat is one among the various MMPs (Mission Mode Projects), the Ministry of Panchayati Raj (MoPR) is responsible for its implementation to strengthen and transform the scene of rural areas. E- Panchayat’s goal is to provide better service delivery to citizens living in rural locations across the country. The main aim of e- panchayat is to make sure development of local area and to empower grass-root governance by availing wide range of services to citizens, Panchayat officials, elected representatives and other knowledge workers at local level. Under the e-Panchayat, PES (Panchayat Enterprise Suite) has been introduced. The PES contains twelve core common applications which are depicted in the below figure. In the current scenario, PES is working with ten core common applications but Audit Online and Geographic Information System is still under consideration.¹²

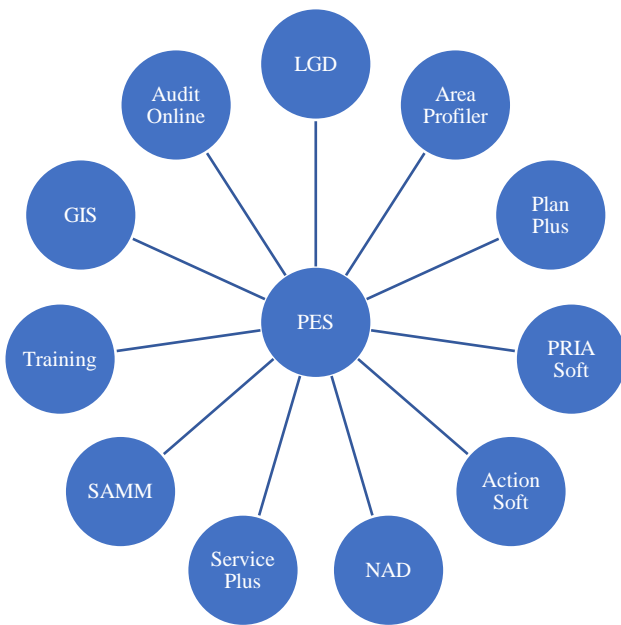


Fig 7: Panchayat Enterprise Suit

Table1: PES Applications Description

S. No.	PES Application	Details
1	LGD (Local Government Directory)	It provides all the information about local self-governments and with unique code. It also traces the Panchayat with respective Assemblies and Parliamentary Constituencies.
2	Area - Profiler	It detains profiles of village panchayats containing demographic, geographic, socio-economic, natural resources and infrastructural and elected representatives information.
3	Plan- Plus	It helps ULB’s, Panchayats and other line departments in developing Annual and Perspective plans.
4	PRIA- Soft	This maintains details regarding expenditure and receipts via voucher entries and automatically creates cash books.
5	Action- Soft	This app enables monitoring of financial and physical outputs beneath different prog.
6	NAD (National Asset Directory)	It detains all the information about assets at local level
7	Service- Plus	It is a meta-data based service delivery platform which helps in offering all the services in all the states across India.
8	SAMM (Social Audit)	It maintains the account of all the statutory meetings held at Gram/Block/Zila panchayats and also makes social audit reports.
9	Training Management	This platform provides all required material, process relating to training of its stakeholders.
10	NPP (National Panchayat Portal)	It provides dynamic website to every panchayat in order to put information in public domain.
11	GIS (Geographic Information System)	It is mean to provide all the information on a geographical information system (GIS) map by a spatial layer.
12	Online Audit	Its main objective is to conduct online audit of government institutions.

V. BHARAT NET

Bharat Net is the world’s largest rural broadband project which mean to provide broadband connectivity to all 2.7 lakh Gram panchayats in rural India. Under the Bharat net project all panchayats will be provided high speed broadband connections in India. The government connected one lakh Gram Panchayats under phase 1 of Bharat Net Project. The Union Cabinet on July 19, 2017 approved a modified strategy for implementing Bharat Net under which, the remaining 1,50,000 (approximately) GPs in the country are to be provided broadband connectivity in Phase-II of the project. The Phase II of the project is under implementation, and a total of 2 lakh GPs (gram panchayats) are targeted to be completed by March 2020.¹³

¹¹ Ministry of Electronics and Information Technology. *E- service Delivery Gateways*. Retrieved from: <https://meity.gov.in/content/nsdg>

¹² Ministry Of Panchayati Raj. *Panchayat Enterprise Suit*. Retrieved from: <https://panchayatonline.gov.in/viewPESHHome.do>

¹³ Government of India. *Bharat Broadband Network Ltd*. Retrieved from: <http://www.bbnl.nic.in>



VI. E-KRANTI

E-Kranti: Transforming e-Governance for Transforming Governance. In India, the e- governance has smoothly evolved from computerisation in government units to endeavours which capture the true essence of governance, for example- citizen centric service delivery, better service inclination, transparency and reliability. But a gap in service delivery is created because of limited scope of existing MMPs, lack of latest technology such as mobile and cloud. Considering the need of the hour for transformation of e-governance and encourage good governance and mobile governance in India, the methodology and main modules of e-Kranti have been approved by the Union Cabinet in the year 2015 with the idea of “Transforming e-Governance for Transforming Governance”. There are forty four MMPs (Mission Mode Projects) beneath the e – Kranti programme, which are divided into Central, State and Integrated projects.¹⁴

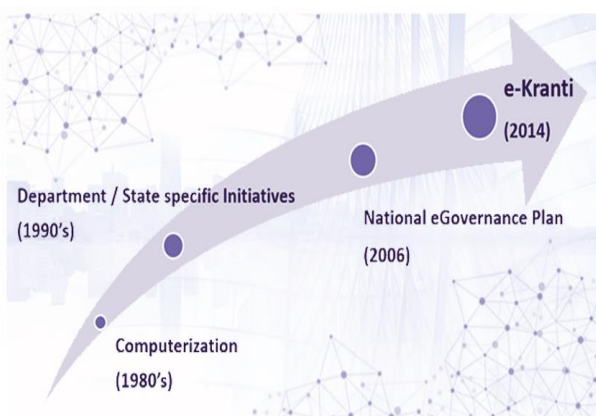


Fig 8: Evolution of e-governance in India

Source: Digital India

VII. CONCLUSION

From the last decade, the e-governance has transformed completely from computerisation to e-services in the country. This revolution has raised the more expectations in the mind of people living in rural areas. To empower and transform the lives in rural India there is a need of more comprehensive strategy. The system of e-Panchayat should be based on primary data rather than secondary resources. All stakeholders in PRI’s should be well informed about the new development in the area of e-governance and empowered to make best of it. In today’s time, for good governance, the e-governance is pre-condition. Hence, to strengthen the role of PRI’s and upliftment of the lives in rural India a more specific and comprehensive strategy is the need of the hour.

AUTHORS PROFILE



Meenakshi, is currently pursuing Ph.D. in Political Science from Amity University, Noida. She has qualified National Eligibility Test (NET) in Public Administration. She received her master’s degree in Public Administration from Indira Gandhi National Open University, Delhi. She has completed her graduation in Mathematics Hons. (B.Sc.) from Banasthali University, Rajasthan. Her

research interest includes Decentralization, local government, Center-state relations, Fiscal decentralization, e-governance, public policy. Her recent publications include - a chapter in book namely ‘Issues in Panchayati Raj Institutions’ in Jyotika Techchandani’s edited Economic, Political and Social Issues of India. New Century Publication. ISBN: 978-81-7708-487-0. And an article ‘Local government institutions and environment management in South Asia: A case study of India and Bhutan’ is published in International Journal of Innovative Technology and Exploring Engineering 8(7C2), pp. 168-173 (2019). Newspaper Articles: 24th April 2019, The Impressive Times, ‘Nation celebrates democratic decentralisation’.



Dr. Shalini Saxena has done her Ph.D. from Lucknow University in March 2010. Prior to this, she completed her M.Phil. from Centre for International Politics, Organization and Disarmament, School of International Studies, Jawaharlal Nehru University (JNU), New Delhi, in International Politics. She has done M.A. (Political Science) from Department of Political Science, University of Lucknow. Currently she is working as Associate Professor in Political science and international relations and Department Coordinator in Department of Political Science, Amity Institute of Social Sciences, Amity University, Sector 125, NOIDA, UP, India. Earlier she was a Lecturer in Guru Gobind Singh College (Punjab University), Chandigarh. Her core interest areas are international relations, State and local governments, international organizations, campaign management and polling, journalism, electoral politics, research and university and college teaching. She is the editor of Amity’s political science journal, political and has published many research articles and book chapters in reputed national and international journals. Besides convening National conferences and workshops, she has edited a book “Rethinking Contemporary Indian Polity”. She appears as a Political Analyst in debates on television. She is a blogger in TOI “Voices” and has her own blog in Times of India with the name “Reformist”. She is a course developer and content maker for Political Science and International Relations. She is also a member of IPSA and IIPA.

¹⁴ Government of India. *Digital India Initiative e-Kranti*. Retrieved from: <https://digitalindia.gov.in/content/ekranti>