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EVALUATION OF IMPLEMENTATION OF E-PANCHAYAT MISSION MODE PROJECT & STATE SPECIFIC ICT INITIATIVES

FOR
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- MoPR Project Team, CGG

"Make all government services accessible to the common man in his/her locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable cost to realize the needs of common."

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ABBREVIATIONS

A&N	Andaman & Nicobar Islands
ADC	Autonomous District Council
AP	Andhra Pradesh
ARC	Administrative Reforms Commission
ArP	Arunachal Pradesh
ASSK	*Aaple Sarkar Seva Kendra*
B-C	Business to Consumer
BP	Block Panchayat
BPR	Business Process Re-engineering
BRGF	Backward Region Grant Fund
BSNL	Bharat Sanchar Nigam Limited
CHIAK	Comprehensive Health Insurance Agency of Kerala
CSC	Citizen Service Centres
CSC 2.0	Common Service Centres
CSC-SPV	Citizen Service Centre - Special Purpose Vehicle
D&D	Daman & Diu
DBT	Direct Benefit Transfer
DeGS	District e-Governance Society
DIT	Directorate of Information Technology
DNH	Dadra and Nagar Haveli
DP	District Panchayat
DPMU	District Project Management Unit
DPR	Detailed Project Report
DRDA	District Rural Development Agency
DTH	Direct to Home
EA	Enterprise Architecture
EAM	Enterprise Architecture Management
EGDI	e-Government Development Index
ER	Elected Representative
FFC	Fourteenth Finance Commission
G2B	Government to Business
G2C	Government to Government
G-C	Government to Consumer
G-G	Government to Government
GIS	Geographic Information System
GoI	Government of India
GP	Gram Panchayat
GPDP	Gram Panchayat Development Plan
HHD	Handheld Device
HoD	Head of Department
HP	Himachal Pradesh
ICT	Information and Communication Technology
IP	Intermediary Panchayat
ISNA	Information and Services Need Assessment
J&K	Jammu & Kashmir
KC	*Kendra Challak*
KNRK	Kerala Non Resident Keralite Welfare Board
mAsset	Mobile Asset (Mobile App)
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIS	Management Information System

MMP	Mission Mode Project
MoPR	Ministry of Panchayati Raj
mPES	Mobile Panchayat Enterprise Suite
MS	Microsoft
NAD	National Asset Directory
N. Ad	Not Adopted
NeGP	National e-Governance Plan
NOC	No Objection Certificate
NOFN	National Optical Fibre Network
NREGS	National Rural Employment Guarantee Scheme
OGD	Open Government Data
OSS	One Stop Shop
PDA	Personal Digital Assistant
PES	Panchayat Enterprise Suite
PGL	Panchayat GIS Landscape
PKI	Public Key Infrastructure
PMU	Project Management Unit
PNA	Panchayat Network Analysis
PPP	Public Private Partnership
PRD	Panchayati Raj Department
PRI	Panchayati Raj Institute
PRIASoft	Panchayati Raj Institution Accounting Software
PRPS	Panchayat Raj Payment Switch
PSSK	*PalleSamagraSevaKendralu*
RDD	Rural Development Department
SAMM	Social Audit and Meeting Management
SANGRAM	*SanganakiyaGramin* Maharashtra
SC	Scheduled Caste
SDC	State Data Centre
SERP	Society for Elimination of Rural Poverty
Sevana- CR	*Sevana*- Civil Registration
SHG	Self Help Group
SHO	State House Officer
SMS	Short Message Service
SPMU	State Project Management Unit
ST	Scheduled Tribe
SWAN	State Wide Area Network
TM	Training Management
TP	Taluka / Tehsil Panchayat
TRIGP	Telangana Rural Inclusive Growth Project
Ukhand	Uttarakhand
UNDP	United Nations Development Program
UP	Uttar Pradesh
UT	Union Territory
VLE	Village Level Entrepreneur
WBSRDA	West Bengal State Rural Development Agency
WiFi	Wireless Fidelity
ZP	Zilla Panchayat

EXECUTIVE SUMMARY

In the global context of recognition and advancement towards usage of Information Communication Technology (ICT) by Governments, for the purpose of streamlining their internal processes of functioning and gearing up governance towards prompt, efficient and effective service delivery to the citizens, it is observed that India is not lagging behind. With the National level movement on introduction of ICT at all levels of the Government, Service delivery got led through the National e-Governance Plan (NeGP). Mission Mode Projects (MMPs) were launched in several key departments. One of the critical challenges, the government faces in service delivery is reaching out to its vast rural population. The MMP e-Panchayat is the medium for streamlining the functions of the Panchayats' roles and responsibilities and strengthening the rural local governance to bring it on par with the best of Government to Citizen (G2C) service delivery mechanisms.

The Ministry of Panchayati Raj (MoPR) is the Nodal Ministry to take up the challenge of rolling out e-Panchayat with the help of National Informatics Centre (NIC). Based on an assessment of the requirements and an understanding of the work flow at Gram Panchayat (GP), Block Panchayat (BP), District Panchayat (DP) and State level and the linkages with the National government, MoPR-NIC has launched the Panchayat Enterprise Suite (PES) comprising 11 core applications to suit and cater to the various critical functionalities of the Panchayati Raj system.

Owing to the massive horizontal and vertical linkages that the system comprises, it is a challenge to meet the core requirements as well as to ensure a seamless coordination between multiple ways of information and communication. An automated system is not a one-time solution for an efficient system. However, it has a potential to gradually change the system of massive Panchayat operations with a possibility to create a culture of open, transparent and accountable exchange of information between the various structures involved in the process.

In an attempt to understand the deployment status and actual functioning of the PES applications at the last mile, MoPR has approached Centre for Good Governance (CGG) to evaluate implementation of PES and to physically observe the status of deployment and its usage across the 3 tiers of Panchayat Raj System. It was also important to examine:

i. The reasons for PES not being in use in some of the States / Union Territories (UTs);
ii. If the States / UTs had developed any State specific ICT package to maintain the functions and services; and
iii. The state specific applications catering to the local requirements.

The features of PES and State specific ICT package were documented for possible inter-operability between the National and State level applications. Findings from the evaluation reveal that PES suite is deployed across all the States and Union Territories. While we observe the usage trends, it is interesting to note that 13 States have developed at least one application of their own and using it strongly. From among the six States who have developed their own suite, follow the minimum applications in the PES suite. The States which have developed one or two State specific applications are focusing on citizen service delivery needs.

There are 21 States which solely depend on PES and do not have any State specific applications. One of the important observations is that most of the States follow four applications across viz., Plan plus, Local Government Directory (LGD), Action soft and Area profiler irrespective of having or not having State specific suites/applications. This may be because these applications are linked to budget releases and budgets calculated based on constituency profiles. From among the States which do not have State specific applications, 8 States fall in the range of using 2 to 3 PES applications and 13 States using 4 to 10 applications and there are 5 States that use all the 11 PES applications irrespective of having one or two State specific applications. States like Kerala, West Bengal and Karnataka are proactive in developing the state specific applications for delivery of citizen services.

The questionnaires at Gram Panchayat and State Nodal Officer level assert lack of infrastructure, absence/non-availability of qualified personnel, unstable or lacking of internet connectivity as most important barriers for not being able to use the PES suite completely. States using PES report failure of continued usage of PES due to non-availability of on-time technical support and delayed responses received for the queries raised by the States. The response from the States also assert that, interoperability issues lead to duplication of work which ends up in non-usage of applications in the PES suite.

It is observed that the institutional structures are in place in 25 states in line with the clarification issued by the MoPR dated 31st May 2012 even though there is shortage of manpower with respect to technical positions in many states. The study suggests futuristic technologies in development of data analytics panchayat network analysis, panchayat open government data and knowledge kiosk will help in improved service delivery to citizens. It has emerged from the field study, mechanisms to integrate State specific and PES applications will result in automatic data updation in PES applications.

In nutshell, the evaluation would like to suggest that, addressing infrastructure issues, provisioning of on-time and continuous technical support, building capacities of the functionaries at all levels on importance of using PES suite and mechanisms to improve the usage, developing mechanisms for interoperability thus reducing the burden of the staff at grass root levels need to be taken up by the Ministry, to make the PES suite more efficient, effective and user friendly. Recommendations have been made along with an indication of the agency responsible for the action in this report. They have been categorised into three heads viz. those addressing certain Critical issues, those addressing subsidiary issues and those addressing PES application specific technical and operational issues.

The evaluation report gives a sequential narration of the findings. It concludes with pertinent issues that emerge from the survey. Constructive recommendations are made to take forward the initiative and possible areas to explore in future are indicated.

1. INTRODUCTION

1.1 Background

As per the current[1] UNDP rankings of member countries on the E-Governance Development Index (EGDI), the overall India Index score is 0.4638. On its comparative ranking with other countries, India has an EDGI rank of 107 out of the 193 member countries. Corresponding to the EDGI, another Index is also computed to rank countries and that is its E-Participation Index (EPI). India's score on EPI is 0.7627, and its ranking is 27 among the 193 UN member countries.

This score and the rank may be explained as a progress in government's own e-enablement of its internal transactions as well as service delivery mechanisms. Compared to 2014, India's rank on EDGI has moved up 11 positions from 118 in 2014 to 107 in 2016. The corresponding EPI moved up by 13 positions from 40 in 2014 to 27 in 2016. This improved status augurs well for Digital India, and gives a fillip to the Government to plan, formulate and act upon e-enabling governance policies and take the e-Participation in its stride. This can help the country reach out to the millions of its citizens and move forward with its pace of growth and development.

To explain why the UN scores and rankings are important, it is important to understand that the EGDI[2]is a composite measure of three important dimensions of e-government, namely: provision of online services, telecommunication connectivity and human capacity. The scores on these parameters are the following:

Table 1–UN EDGI Parameters

S.No	EDGI Parameters	Score
1	Online Services Index	0.7464
2	Telecom Infrastructure Index	0.1430
3	Human Capital Index	0.5019

[1]United Nations (2016), https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/77-India
[2]Ibid

The EPI[3]is an extended dimension of the global survey that focuses on the use of online services to facilitate provision of information by governments to citizens (e-information sharing), interaction with stakeholders (e-consultation), and engagement in decision-making processes (e-decision making). It is enabling the participation of the Governments in terms of their openness to share government information, engage to dialogue and encourage inputs for a better / more grounded decision- making.

The UN computes e-participation on the basis of a notion of participation, derived from the provisions made by the government to engage with its citizens. However this may not be the real case of participation. In a country like India, where the majority of the population lives in rural areas, Rural E-Government Development and Rural E-Participation would be worthwhile parameters to study. These would give a realistic picture of the penetration of information technology to the nook and corner of the country as well as give an idea about its usefulness at that level. E-Participation of the rural population would and should ideally mean that citizens have access to provisions for e-engagement to access services, being vigilant towards the local development by accessing the data available on physical and financial works of the Gram Panchayat and by dialoguing with authorities based on the information in hand, at that level.

It is to be noted that the level of importance given to E-Government at the global level is nothing but a technology enabled change expected in the relationship between the Government and its Citizens. It also calls for narrowing the gap between the institutions of governance and the governed.

From the figures presented above, it can be observed that India does not lag behind in its endeavour to make shifts in its approach towards its citizens. This is true of the many interventions that have both, an urban and a rural orientation.

1.2 National Policies on e-Government

The Second Administrative Reforms Commission (ARC), in its Eleventh Report titled e-Governance observed that one of the lessons learnt from ongoing or completed e-governance projects was that “business process reengineering is a pre-requisite in case of complex projects”. The ARC also emphasized that business process re-engineering “would

[3]Ibid

form the backbone of e-governance initiatives" and that "business processes would in effect be changed fundamentally to allow the efficiency and transparency gains associated with e-government".

Under the overall ambit of the National e-Governance Plan (NeGP), the national government undertook to identify 33 key areas in all, in which e-Governance is launched on a Mission Mode Project (MMP). E-Panchayat is the MMP adopted by the government to bring about an e-enabled streamlining of its functioning, transparency and accountability in its internal functioning and effective last-mile service delivery. The Ministry of Panchayati Raj (MoPR) through the National Informatics Centre (NIC) undertook a systematic review of system requirements through the Information and Services Needs Assessment (ISNA) undertaken in 2009-10. Following this, a Business Process Reengineering (BPR) and Detailed Project Reports (DPR) were also undertaken for all States/Union Territories at a National level[4]. This involved studying of the work flow processes of the following:

i. 135 Panchayats across 45 Districts in 34 States/Union Territories;
ii. needs of 11 Line Ministries at the Central level, 11 Line Departments at the State level, including State Panchayati Raj Department,
iii. District / Block Administration, DRDAs.
iv. Field level functionaries were assessed at Zillah Panchayat, Block Panchayat and Gram Panchayat level; and
v. 23 Central Schemes.

1.3 Enterprise Architecture – conceptual clarity

The field of enterprise architecture started in 1987, with the publication in the *IBM Systems Journal* of an article titled "A Framework for Information Systems Architecture," by J.A. Zachman. In that paper, Zachman laid out both the challenge and the vision of enterprise architectures that would guide the field for the next 20 years. The challenge was to manage the complexity of increasingly distributed systems. As Zachman said, "*The cost involved and the success of the business depending increasingly on its information systems require a disciplined approach to the management of those systems".*

Zachman's vision was that business value and agility could best be realized by a holistic approach to systems architecture that explicitly looked at every important issue from every

[4]accessible at http://e-Panchayat.gov.in

important perspective. His multi-perspective approach to architecting systems is what Zachman originally described as an *information systems architectural framework* and soon renamed to be an *enterprise-architecture framework*.Enterprise Architecture, as the name suggests, is a borrowed nomenclature from architecture. It means building technological systems as building blocks that can together support the enterprise grow in a holistic manner. In technological terms enterprise architecture caters to a design and development of functional technical systems as they would be applicable and contributory to the whole system. Ken Griesi, a leading practitioner and thought leader in the field of EA defined EA thus: "*EA is about the skillful manipulation of an enterprise's structure and behavior within a complex environment*". According to Andreetto, "*The fundamental quality of Enterprise Architecture is its vision of the future.*"

In the present context of evaluation of e-Panchayat, it is obvious that Government is a complex system of organisation akin to an enterprise. Government's functions are at the same time, multiple, diverse, huge and voluminous in scale and spread across vast geographical areas, catering to a large population that it serves. This complexity calls for it to look for technological solutions that can meet the requirement of effective, efficient and integrated service delivery to its constituency ensuring a last-mile coverage.

Government of India has embarked on a journey to deliver services through technology, and at an economical cost to its citizens. This is being done through the Mission Mode Projects or MMP that is enlarging the scope of usage of technology to deliver critical services that the Government is mandated to deliver. With the resources available at its disposal, the National e-Governance Plan or NeGP has identified sectoral areas that touch the daily lives of the citizens and where services can be delivered through a transparent, responsive system, literally and virtually, at the citizen's door step.

The broad goals of the e-Governance are:

i. Better service delivery to the citizens
ii. Ushering in transparency and accountability
iii. Empowering people through information
iv. Improved efficiency within Government
v. Improved interference with business and industry

One of the MMPs that the Government has visualised for unencumbered, easy service delivery is the e-Panchayat. By enabling the Panchayats to take up its mandated functions in a less cumbersome manner, the e-Panchayat MMP envisages the Panchayat Enterprise Suite or PES.

1.4 Terms of reference

The terms of reference of the study communicated vide File No. N-19011(50)/7/2015-e-Panchayat, dated September 08, 2016 of Under Secretary, Governance Division, Ministry of Panchayati Raj. Government of India, is as follows:

i. Impact assessment of PES applications as well as the State specific applications *(on a scale of 0-10 for each State/ UT);*

ii. Study of State specific software in order to identify the best features available for adoption into PES Applications;

iii. e-Preparedness (including IT infrastructure, capacity building of ERs and PFs, internet connectivity, power, etc.) at the Panchayat level;

iv. Institutional structures and financial support (including incentives) *available to PRIs for e-Governance;*

v. Completeness, quality and reliability of data captured in software applications;

vi. Usage/consumption of data by the PRIs/Government/Citizens/other *(National or State)* applications (interoperability);

vii. Engagement of futuristic e- Governance technologies such as mobile applications, cloud computing, spatial planning, etc.

viii. To study the various electronic service delivery models adopted by the States/ UTs;

ix. Various factors which influence the effective rollout & implementation of software applications at the Panchayat level and their status on the scale of 0-10 for each State/ UT;

x. Gaps/impediments and make recommendations for improvements, wherever shortcomings/inadequacies have been observed; and

xi. New areas/domains *(in terms of applications)* for ICT intervention.

1.5 Expected outcome

It is expected that the present evaluation will help the Ministry of Panchayati Raj, Government of India and its technology counterpart National Informatics Centre,

i. Re-examine the MMP of e-Panchayat and adapt it to the requirements of the States especially of those that are dependent on the PES for taking forward the e-Panchayat agenda;

ii. Consider and take steps to formulate a cooperative framework of EA that converges elements of State specific ICT, that are better positioned than PES in catering to the State's specific needs;

iii. Evolve a mechanism by which the service delivery models of some states and CSCs of the Ministry of IT, GoI are leveraged to extend the scope of Panchayat's empowerment and enhance their image and credibility to handle its major functions; and

iv. Enhance the scope of good local self-governance.

The following chapters discuss the approach and methodology adopted, as well as give the findings of the desk and field based review of PES , identify State level equivalents adopted by States/ UTs, flag the issues impeding complete adoption of PES and suggest recommendations for better cooperation with the States. It also shares some of the potential arras for future ICT developments, especially applicable to the panchayats.

2. APPROACH AND METHODOLOGY

The evaluation of the e-Panchayat Mission Mode Project has been carried out through a national survey in 35 States and Union Territories, covering all the three tiers of the Panchayati Raj system i.e. District, Block and Gram Panchayat.

The State/UT wise number of Panchayats to be studied had been stipulated by the Ministry of Panchayati Raj (MoPR), Government of India (GoI), which has commissioned the study. The sampling methodology devised by CGG for the selection of districts, blocks and GPs, provided for diversity in terms of relative degrees of development of the area. In this direction, the regions covered under the erstwhile Backward Regions Grant Fund (BRGF) and Schedule V and VI areas were included for their relative backwardness alongside 'ordinary' regions. The second dimension of diversity considered in the sample pertained to different levels of usage of Panchayati Enterprise Suite (PES). An attempt was made to cover a mix of gram panchayats having 'acceptable' and 'less than acceptable' usage levels of the PES, based on definitions that had been developed for both these terms.

"Semi-structured" questionnaires have been the principal instrument used for data collection. A set of 7 different questionnaires were developed to capture the responses of various stakeholders at State, DP, BP and GP levels, including the Panchayat Raj Department officials, elected representatives, Panchayat functionaries, State and District Project Management staff and citizens.

The sample size was small because the focus of evaluation was on getting the physical feel of ICT and time was a limitation factor to go for a bigger representative sample. The sample was sufficient to identify the ground level factors facilitating or deterring usage of ICT.

The sample coverage is thus:

Table 2 – Sample Coverage

Level of Interaction	Total Visited
States /Union Territories	35
District Panchayats	68
Block Panchayats	69
Gram Panchayats	99
TOTAL	**271**

The study has focused on assessing the enabling factors such as infrastructure availability, awareness levels of elected representatives, Panchayat functionaries and citizens etc. The actual usage of PES by the Panchayat has been measured for the 7 PES applications in active usage, based on a combination of, frequency of data updation of the respective PES application and the extent of implementation of certain key attributes which have been identified for each PES application. Where State specific applications are being used in lieu of PES applications, the notable features of the same have been captured.

Between December 2016 and March 2017, CGG undertook visits to 35 States / Union Territories in the country to physically verify the status of infrastructure and to understand the issues and constraints of e-deployment and implementation of e-Panchayats.

Ten applications[5] were examined for deployment and usage, across the levels of Panchayats, with the varied constituency and examined the better features of State specific ICT. Further it was the mandate of one of the PES applications – Service Plus- to improve the nature of service delivery. This evaluation examined the service delivery mechanisms in place in various States / UTs and their co-existence with the Common Service Centres (CSCs) launched by Ministry of Electronics, Information Technology (MeiTY).

2.1 Approach to the Survey

This study combined the virtues of the mixed method to ascertain the facts regarding PES applications and their usage. It leans more towards a qualitative assessment as the number of GPs and the constituency surveyed is a small proportion of the population compared to the whole. Hence perceptions are captured here.

In an attempt to understand the rationale for construction of each application under PES, its functionality and the status of appreciation of the same prior to our field level evaluation. Data and information pertaining to three broad areas have been reviewed as part of this study report viz., (a) PES and/ or its counter-part State Specific Applications, (b) Service Delivery Models at Panchayat level, and (c) advanced technological solutions for decentralization with focus on futuristic technologies. The insights gained from the desk and field review have been discussed in the various chapters of this report.

[5] GIS of PES is not deployed as of now.

2.2 Survey methodology

An initial desk review of all the PES applications was undertaken to make a desk assessment of the application with reference to each PES application. The team studied the features of each PES minutely and critically to observe lacunae from a user / reader / citizen perspective. This desk analysis formed the backdrop of understanding the design level appreciation of functionality, PES application usage gaps, concerns of the Ministry and the possible constraints to implementation. Some of the issues identified against the applications from the desk review are as follows:

2.2.1 Panchayat Enterprise Suite (PES) / Desk review

Desk review of the PES applications

A roadmap was created to execute the e-Panchayat project wherein 11 Core Common Applications, together called the Panchayat Enterprise Suite or PES were planned to be designed and interlinked.

An Enterprise Suite address all the functions of an enterprise and presents an integrated view of the enterprise to the users by ensuring seamless flow of information from one functional area to another. The software requirements for all the core common applications provided the basis for identifying points of integration among these functional areas. By ensuring standardization of the data elements that are exchanged among these areas, seamless flow of information among all the applications was assured.

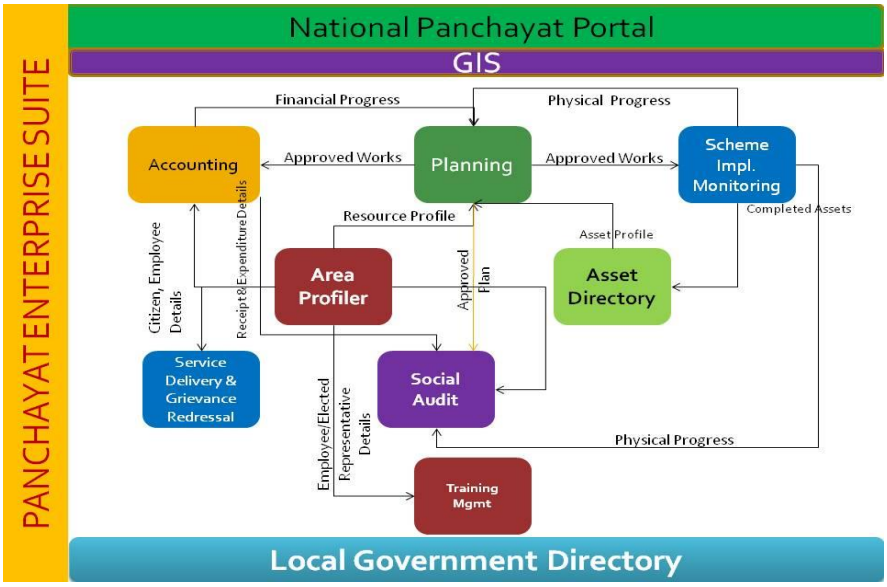


Fig. 1 - An Integrated View of PES

PES was conceived as an integrated suite of applications, individuals applications can be accessed and used in isolation. PES strategy was adopted mainly to facilitate States towards an incremental adoption of the entire suite.

The 11 applications, between them address all specialized aspects of Panchayats' functioning including Fool-proof Accounting, Planning, a dynamic website of Panchayat, Management of list of local government, Implementation & Monitoring, Budget and Asset management, Socio-economic database of rural areas, eService Delivery & Public Grievance Management System, Social Audit by Gram Sabha and meeting management, Training demand & supply management, GIS presentation of basic data in generic manner. It also planned to link citizen service delivery issues like issuance of certificates, licenses etc., with the PES. These were to be created and maintained through a decentralized database by assigning unique codes to Panchayats and alignment of the same with GIS based applications.

The intent to create a transparent and accountable system of panchayat functioning, through the active involvement of the elected representatives, facilitated by the executive machinery at the local level was clear. A decentralized system of accountability was planned, funds allocated for purchase and procurement of requisite infrastructure, personnel were trained and the PES applications were made available for States and Union Territories to use and optimize.

Some technologically progressive States in the country developed their own, information, communication, technology (ICT) to manage rural local self-governance systems and these preferred to keep their home-grown tools customized to the local needs and conditions intact as they serve the local purpose and garner a wider base of acceptance due to their availability in the language of the State. Hence these suited the local requirements as against the national package which customized all state needs into a common package.

The 11 core functionalities identified for creation of the enterprise suite include the following:

Table 3 – PES Functionalities

S. No.	Panchayat Enterprise Suite (PES)	Focus Area	Functionality[6]
1.	PRIASoft (PS)	Panchayat Accounting	Captures receipt & expenditure details through voucher entries and automatically generates cash book, registers, utilization certificates etc.
2.	PlanPlus (PP)	Planning	Helps Panchayats, Urban Local Bodies and line departments in preparing Perspective, Annual and Action Plans.
3.	National Panchayat Portal (NPP)	A dynamic website of Panchayat	Dynamic Web site for each Panchayat to share information in public domain.
4.	Local Government Directory (LGD)	Management of list of local government	Captures all details of local governments and assigns unique code. Also maps Panchayats with Assembly and Parliamentary Constituencies.
5.	ActionSoft(AS)	Works/Scheme Progress Reporting	Facilitates monitoring of physical & financial outcomes/outputs under various programmes
6.	National Asset Directory (NAD)	Asset management system	Captures details of assets created/maintained; helps avoid duplication of works and provides for maintenance.
7.	AreaProfiler(AP)	Socio-economic database of rural areas	Captures geographic, demographic, infrastructural, socio-economic and natural resources profile of a village/panchayat. Universal database for planning of all sectoral programmes and also provides details of Elected Representatives, etc.
8.	ServicePlus	eService Delivery & Public Grievance Management System	A dynamic metadata-based service delivery portal to help in providing electronic delivery of all services in all States. The functionality of the erstwhile Grievance Redressal Application has also been subsumed into this Application.

[6] www.panchayatonline.gov.in

9.	Social Audit and Meeting Management (SAMM)	Social Audit by Gram Sabha and meeting management	Captures details of statutory meetings held at ZP/BP/GP level sand prepares reports for social audit
10.	Training Management Portal (TMP)	Training demand & supply management	Portal to address training needs of stakeholders including citizens, their feedback, training materials etc.
11.	Geographical information systems (GIS)	GIS presentation of basic data in generic manner	A spatial layer to view all data generated by all Applications on a GIS map

Except the GIS all other PES applications are in place for the States / UTs to adopt, populate with data / details as are required to be fed and uploaded into the system for a responsive, transparent and accountable management of Panchayat resources. These services were initially piloted and then launched, with trainings arranged to the Panchayat Functionaries at different levels and in various locations across the country. Since 2014, about 366 training programmes[7] were conducted at the National, State, District and sub-District level to familiarize Officers of the Panchayati Raj department and other Panchayat functionaries on the PES tools and their functionalities and urged to upload data and keep the system going. However the adoption and usage (as gathered from the Reports generated on the PES site) indicate, PES has not been adopted uniformly across by the States / UTs. There have been selective usages, unaddressed local level customization requests, language barriers, e-preparedness hardships that seem to come in the way of its complete adoption.

As per the information accessed from the public domain, prior to the present evaluation, the following observations / comments were recorded on the usage of PES Applications:

PRIASoft

i. In the Conference of State Principal Secretaries / Secretaries dated 8/5/2015, it was discussed that adoption of PRIASoft is 68.2%-District Level, 62.2% -Intermediate Panchayat Level and 68.5% -Village/Gram Panchayat Level, it is not adequately aligned with Plan Plus, National Asset Directory, Action Soft.

[7] www.panchayatonline.gov.in (Training Management)

ii. In the proceedings of the National Consultation held at MoPR on Sept. 14–15, 2015, it was maintained by the Institute of Public Auditors of India –IPAI (engaged by MoPR for standardization and qualitative improvement in accounting) that no mechanisms in place at block/ district or State levels to establish accuracy of account being entered in PRIASoft.

iii. On the technology in use, CAG in its Report of 2016 observed that inadequate input control due to multiple users for same log-in and password resulted in duplicate bank account numbers. The online scheme monitoring system (OSMS) software lacked referential integrity, effective input and process control, audit trail and business mapping rules etc.

iv. As connectivity is a problem in some remote rural locations, an offline model could be made available to States / UTs that cannot access internet on the go. Broadband connectivity has been provided to only 20,000 GPs by 31/3/2015 as against 2,50,000 GPs[8].

Plan Plus

A decentralized Planning tool, which aids the various participants through the Planning process, so that informed decisions can be taken by the participants in preparing, vetting and approving the Plan. The interactive workflow starting from need assessment, identification of project, work, preparation of annual plans, approval by Technical Appraisal Committee and DPC is captured. The package also provides a holistic view of how funds from different central and state sponsored schemes could be converged to carry out works approved in a Plan. It targets the various participants which include Rural Local Bodies, Urban Local Bodies, the Technical Approval Committees, the District Planning Committees, State Government Departments and Central Government Departments who will be responsible for preparing, vetting and approving the Plan. Rural (panchayats) and Urban Local Bodies (municipalities) can prepare their individual plans and converging these rural and urban plans could generate an integrated District Plan Document. Apart from these there will be User Manager at State and District Level, who will be responsible for creating and maintaining the User Account, State/System Administrators who will be involved in the State/System Administration activities.

[8]www.trai.gov.in,17.4.2015

National Panchayat Portal (NPP)

NPP aims to generate a website for each Panchayat in the country as well as for each of the State Panchayati Raj (PR) departments, thereby providing a unique web identity to each Panchayat and interlink the Panchayat sites with State PR sites and the website of Ministry of Panchayati Raj (MoPR) to enable information exchange. NPP software has an inbuilt content management and site management system this enable each NPP site to effectively manage its content and configure the site as per need. Each NPP site also acts as a common gateway to all the software applications being developed as part of Panchayat Enterprise Suite under e-Panchayat MMP.

Local Government Directory (LGD)

i. LGD lacks horizontal integration with other PES applications requiring each change made to be made again physically and correspondingly in other PES applications as well.

ii. The CBTs could be made in translated versions as well

Action Soft

Action Soft aims to monitor and keeps record of the progress of the works being undertaken as part of the finally approved plans(Action Plan) of various ULB, RLB and Line departments as available in PlanPlus. It facilitates proper recording of the Financial and Physical progress of the works. It will act as a tool to support the monitoring of the status and the expenditure incurred in works undertaken under various central and state schemes by various governments.

i. Works in collaboration with PlanPlus
ii. Captures the work execution flow
iii. Facilitates decentralized reporting of progress of work execution
iv. Converges and keeps track of the flow of funds from different sources during implementation
v. Converges the rural and urban plan units to report the physical and financial progress of works
vi. Brings about total transparency in the reporting of physical and financial progress

National Asset Directory (NAD)

NAD aims to keep a stock of all the assets created/controlled/maintained by the Rural Local Bodies (RLBs) i.e., Panchayat at district, intermediate and village level; Urban Local Bodies (ULBs) i.e. Municipalities, Corporations, Town Areas and Line Departments in the country. It acts as a repository of various assets created/controlled/maintained by the RLBs/ULBs/Line Departments and assigns a code to each asset for its unique identification leading to effective utilization of the assets.

i. The CAG has observed that there is a serious lacunae in which the assets are managed. Weak asset management- missing asset registers, inadequate physical verification, lack of effective control & no institutional mechanism to track assets. The physical records are found lacking in proper asset record management. Data capturing on NAD may be ensured to not only record assets but do so in a scientific and systematic manner.

ii. As per the comments made by a professional Chartered Accountant[9], the basis of valuation and depreciation rates are not formulated and standardized across Local Bodies. This leaves a large margin for error and duplication of entries.

Area Profiler

i. As per the BSLLD[10] Pilot study report 2014 done by the CSO, GOI, information on 234 items is required for local level developmental planning in rural areas but the Area Profiler has provisions to include extra five items in each block.

ii. It also mentions that the information/data is found to be incomplete, inadequate as the PRI staff/outsourced personnel are not trained and knowledgeable. It recommended that collection, compilation, processing and updation may be done under the control and supervision of District Statistical Offices.

iii. Demographic details are collected as available in the village records which are not updated regularly and evenly across the country. When a new local body (village/block/district) is created, the profile of the local body has to be changed

[9]RangaSwamy, S, CA (2015), *The Dynamics of Local Governance in India,* ICAI of India

[10]Basic Statistics for Local Level Development (BSLLD), Ministry of Statistics and Programme Implementation, Government of India

manually to reflect it (lack of integration). Existing data of an invalidated local body is not archived and new data is not added (lack of understanding).

iv. Need for requisite hardware and software to carry out offline data entry from village schedules before uploading it on the area profiler is a must.

Service Plus

The Service Plus provides an interface for citizens to avail various citizen centric services like applying for certificates, license, permits etc. Facilitates rapid rollout of any Service at any time by any level of Government. Service plus is used by citizens, served by Kiosk operators to citizens and operations are maintained by State Officers (Administrators). Application serves G2B, G2C, G2E, G2G or others services.

Social Audit

Social Audit is a tool with which government departments can plan, manage and measure non-financial activities and monitor both internal and external consequences of the department/organization's social and commercial operations. It is an instrument of social accountability for an organization. In other words, Social Audit may be defined as an in-depth scrutiny and analysis of the working of any public utility vis-à-vis its social relevance. Social Audit gained significance especially after the 73rd Amendment of the Constitution relating to Panchayat Raj Institutions

The purpose of conducting Social Audit is not to find fault with the individual functionaries but to assess the performance in terms of social, environmental and community goals of the organization. It is a way of measuring the extent to which an organization lives up to the shared values and objectives it has committed itself to. It provides an assessment of the impact of organization's non-financial objectives through systematic and regular monitoring, based on the views of its stakeholders.

Meeting Management

Manage and Maintain Standing/General or Gram Sabha Meeting Notices & Minutes held in Panchayats / Local Bodies. Management of meetings at panchayat level to enable transparent and user friendly flow of system. Captures details of statutory meetings held at ZP/BP/GP levels and prepares reports for social audit.

It claims to capture the details of the social auditor, results of the social audit and action taken by the Panchayat based on the social audit. It also captures the meeting notice, agenda of the meeting, minutes of the meeting held, other notices, attendees of the meeting etc., along with the performance reports.

Training Management Portal

Training Management Portal is meant to address the training management need of the government organizations. It will help the organizations in capturing the Training demands/needs of the Elected Representatives and officials. Such detailed need capturing of training can lead to sizing the demand and preparation of training calendar and resource estimation. The training management portal also allows Resource Persons and Training Agencies to register with it (Provider agency). Agency registration includes the sharing of information on training venue, infrastructure, thrust areas, faculty, resource material availability etc. Once the training calendars are published, it facilitates the Training organizations (i.e. Providers) in following up of the activities leading to organization of training. The portal acts as a single platform for consumers (trainees) and providers to know demand and supply and facilitates the intermediate processes including registration, alerts, nomination, attendance of trainees in a course, certificate generation, feedback etc.

Geographical Information System (GIS)

GIS is a technology to geo-enable e-Governance to undertake efficient planning & decision making as part of 'e-Kranti – Electronic delivery of services' and 'Information for All' and to facilitate location based 'Information for All'.

Geo-informatics is integral to Planning, Decision Making & Electronic Delivery of Services. It geo-enables e-Governance to facilitate location based information for all. Thus, implementation of GIS based Decision Support Systems (DSS) is essential for ushering 'Good Governance' as it facilitates transparency, responsiveness, efficiency & effectiveness, accountability and participation across Government.

Following through the desk level review and understanding of the PES applications from the website, a field level test of implementation based on questionnaire was formulated, communicated to the Ministry for approval. The field study was to be conducted in all the

States/UTs of India, except Delhi to gain insights on PES or alternative State ICT deployment to handle the various functions of the rural local bodies (especially the Gram panchayat) and to probe and find the barriers to adoption of PES or any other locally developed ICT. Timely consent for carrying out the study could not be obtained from the States of Chhattisgarh and Jammu & Kashmir hence, these States have not been surveyed at the initiate stage and later on both the States are covered. Thus, 35 States and UTs have been covered in the survey.

2.3 Geographical Coverage

The study has a national level coverage because each state has made forays into IT at its own pace. The number of Panchayats hence to be surveyed was decided in consultation with the Ministry to depict a clear picture of PES usage or otherwise. As each state had its domain-specific requirements based on its topography, fund base and personnel in place, it was important to touch base with each state and gather feedback on IT applications being used and hindrances if any.

The sampling and the geographical spread for this evaluation was pre-defined, guided by the officials of the Ministry of Panchayati Raj at the initial stage of evaluation. The spread was defined on the basis of past experience of the Ministry and NIC based on its interactions with the States / UTs on PES. Annexure 1 gives a detailed State/UT wise number of Panchayats stipulated as the survey sample.

2.3.1 Basis for selection of Districts

As suggested by the Ministry, the goal was to identify a mix of districts from relatively backward areas and Ordinary[11] areas of the State/UT. Backwardness has been mapped using 2 main parameters viz. (a) Districts or a part thereof in Schedule V or Schedule VI of the Constitution and (b) districts which were covered under the erstwhile Backward Regions Grant Fund (BRGF) districts. To start with, in the absence of any other criteria for verifying the barriers to usage of ICT applications, backwardness / remoteness / distance away from the core of State / District were taken to be indicator for possible coverage problems / potential neglect areas.

[11]Ordinary here means, non-backward and non-Schedule V & VI only and may not be taken as meaning anything other than that. Basically it means that these areas would otherwise not have any other drawbacks as would be faced by Backward Regions / Schedule V & VI areas and GPs therein.

Districts which are neither in scheduled areas nor are classified under BRGF scheme have been considered 'Ordinary'. In addition to the backwardness criteria, specific district categories (like Autonomous District Council) suggested by MoPR for certain states have also been factored in.

2.3.2 Inter-se District Selection

Selection of States where only one district was sampled to survey: There were 13 states where only 1 district each was stipulated to be selected for the sample. The district selected for the sample belonged to that category (i.e. Ordinary/BRGF/Scheduled) which has majority of the districts of the state under it; there is only one state where the number of districts in scheduled and ordinary category is equal; in this case, an ordinary district has been selected for the sample.

States where two districts were to be sampled for survey: There were 14 states in which 2 districts each were stipulated to be selected in the sample.

a. Unless the number of ordinary districts in the State is overwhelmingly lower than the number in Scheduled /BRGF areas, at least 1 ordinary district has been selected.

b. In selecting the second district, first priority was given to Scheduled district followed by BRGF district.

States where three districts were to be sampled for survey: There were 6 states in which 3 districts each were to be selected in the sample.

a. If a State had districts under all the three categories i.e., 'scheduled', 'BRGF' and 'ordinary', one district from each category has been selected for the sample.

b. If the state has only 2 of the above categories, then the sample distribution was kept proportional to the number of districts under each of the 2 categories.

States where four districts were to be sampled for survey:

There were only 2 States where 4 districts each were required for the sample:

a. If a State has districts under all the three categories i.e. 'scheduled', 'BRGF' and 'ordinary', one district from each category has been selected for the sample; the fourth district selected was 'ordinary'.

b. If the state has only 2 of the above categories, then the sample distribution is proportional to the number of districts under each of the 2 categories.

2.3.3 Geographical Distribution

An attempt has been made to select the districts from different regions of the state, it cannot be said that the same has been possible in the entire district selection as views of the local officers (Nodal Officers) appointed to assist the survey team guided the decision on the districts and the GPs to be visited based on our requirement and their knowledge about the ground reality.

Selection Process

(i) Block Panchayat / IP selection

The BPs/IPs for the sample were selected from among the BPs/IPs in the selected district. If a district has been selected based on the parameter that it or a part thereof falls in a scheduled area, the BP/IP selected also, as far as possible, has been selected from the scheduled area of the district. Where the number of BPs/IPs is same as the number of districts in the study sample, one BP/IP has been selected from each district.

Where the number of BPs/IPs is greater than the number of districts to be sampled in a state, such additional BPs/IPs have been selected from the ordinary, scheduled and BRGF district, in the same order of priority.

(ii) Gram Panchayat or Equivalent Local Body Selection

To the extent possible, only GPs with internet connectivity have been included in the sample, in keeping with objectives of the study. If a district has been selected because it falls in Schedule V or Schedule VI, the selected GP, to the extent possible, has been selected from the Scheduled Area of the district. This parameter was employed in districts where only a part falls in the scheduled V/VI areas. In the case of districts which are fully scheduled, the GP selected would, by default, be in the scheduled area. Similarly, since the BRGF scheme was applicable for the district as a whole, the GP selected in BRGF districts, by default, fall in the BRGF areas.

Table 4 - Abstract of category wise Panchayats selected

Level of Interaction	Nature	No. Visited	Total Visited
States /UTs	Approached	35	**35**
Districts	Ordinary	40	**68**
	Scheduled	11	
	BRGF	17	
Block / Tehsil / Taluka/ Mandal/ Aanchal	Ordinary	40	**69**
	Scheduled	6	
	BRGF	18	
	ADCs	05	
Gram Panchayat	Ordinary	62	**99**
	Scheduled	16	
	BRGF	21	
	TOTAL		**271**

Survey Instrument & Data Collection

Semi structured questionnaires have been the principal instrument used to collect the survey data. A set of 7 different questionnaires were developed to capture the responses of various stakeholders at State, DP, IP and GP levels. The questionnaires were finalized after field testing them in 6 Panchayats of Telangana, at the following GPs:

i. Basar GP, Mudhole mandal, Adilabad district,
ii. Choutuppal GP, Choutuppal Mandal, Nalgonda district
iii. Pragati Nagar GP, Ranagreddy district

The district level questionnaires were piloted in the following districts:

i. Khammam
ii. Rangareddy
iii. Siddipet of Telangana State

Despite the variations found and shared with the co-surveyors, few changes were decided to be made as the ground realities of each state were perceived to be different. Further the questionnaires were translated into Hindi at this stage (on the request made by MoPR).

The following is the abstract of respondents covered in the survey:

Table 5 - Snapshot of level and nature of Respondents

S.No	At	Principal Respondent/s
1	State Headquarters	HoD/ PRD officials/ SPMU officials
2	District Panchayat	District Panchayat Officials/ DPMU officials
3		Panchayat Elected Representatives
4	Block Panchayat	Block Panchayat Officials/ PES Computer Operator
5		Panchayat Elected Representatives
6	Gram Panchayat	Gram Panchayat Officials/PES Computer Operator
7		Panchayat Elected representatives
8		Women citizens
9		Differently abled citizens
10		Citizens belonging to SC/ST Communities

Citizen Respondents Profile

While the survey was conducted through contact with officials at different levels, interactions with citizens was also part of this survey, especially to understand the level of understanding among the citizens about the availability of ICT mechanisms at the Gram Panchayat level and their experiences of service delivery through the CSC. The profile of the citizen respondents interacted with for the survey is as follows:

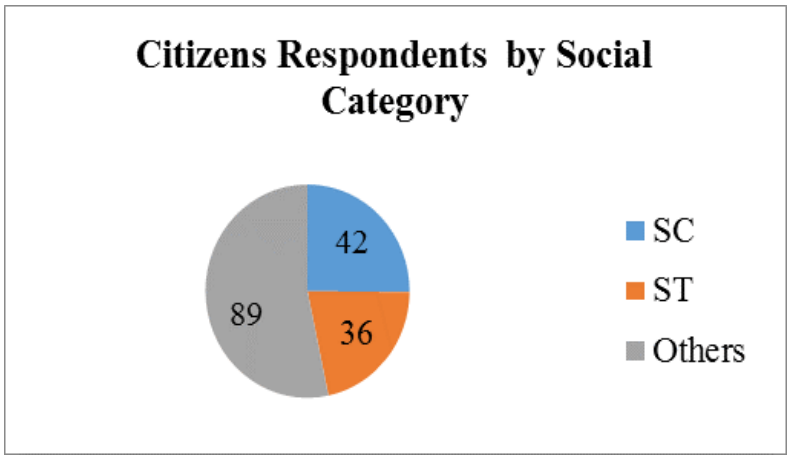


Fig. 2 -Citizen Respondents by Social Category

As the figure shows, 89 citizens spoken to belong to the other Castes, while 42 belonged to the Scheduled Caste and 36 belonged to the Scheduled Tribe. Other citizens were met in groups and hence their caste profiles were not noted. Focus Group Discussions (FGDs) were held in most GPs for want of a better way of interacting with citizens within the stipulated time-frame of this evaluation study.

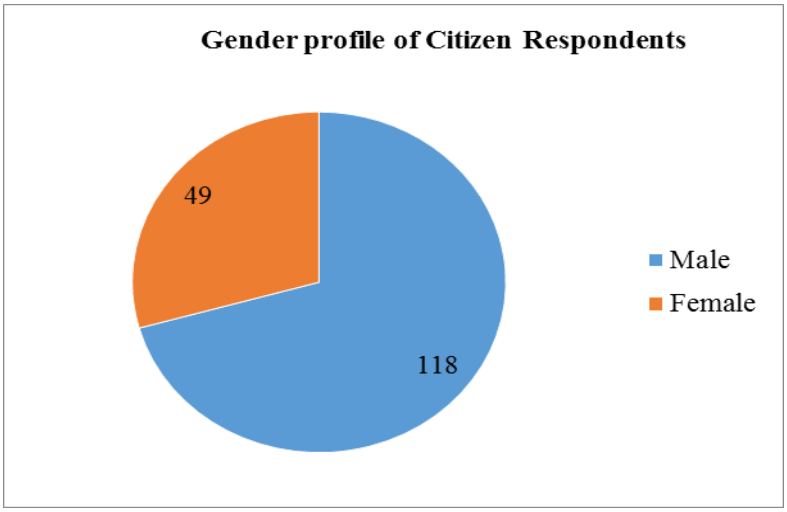


Fig. 3 - Gender Profile of respondents

Coming to the gender composition of the respondents, as can be seen from the figure, 118 respondents were male respondents who were forthcoming in sharing their views on the services being delivered from the panchayat premises, and 49 respondents were women respondents who had come to seek services from the GP. As with the respondents mentioned above, interaction with citizens at the GP level were held in groups and in a meeting-kind of setting. Based on the level of the GP and the socio-economic profiles of the citizen respondents, the responses towards citizen service delivery varied and the same is incorporated elsewhere in the findings chapter.

While the profile gives an idea of the social composition of citizens covered, it does not reflect the interactions with groups of citizens who responded on behalf of the GP and its inhabitants in various States / UTs.

Data Analysis Tools

The data collected in the survey has been analyzed using MS Excel and SPSS package.

CGG has devised measuring tools to assess Performance of PES / equivalent State specific application and an Impact Assessment. The Performance Measuring Tool is explained in the following pages and the Impact Measuring Tool is given in the Summary of findings chapter.

Assessing the PES Performance (Performance Measuring Tool)

The PES applications are pitched for streamlining internal functions in the panchayats at all levels, and especially with reference to the functions, activities and the relevant book-keeping at the Gram Panchayat level.

The parameters for evaluation of the PES performance has been adopted from certain aspects enquired into through the GP questionnaire. Four applications have been excluded from this rating i.e., Social Audit and Meeting Management, Training Management, GIS and Service Plus. The first three applications have been excluded owing to their negligible implementation and the fourth (Service Plus) owing to the fact that a separate comparative analysis of service delivery models in states/UTs has been attempted as part of this report.

Two principal aspects have been examined to grade the GPs' PES performance on a seventy point scale viz.

i. frequency of updation of the application – 14 marks, at the rate of maximum of 2 marks per application and
ii. implementation of attributes – 56 marks, at the rate of maximum of 8 marks per application.

Frequency of Updation

In the states/UTs surveyed, it was examined whether, as on the date of the survey, the State/UT data on the PES application is: 'Up to date', 'Updated 3 months ago', 'Updated 6 months ago' and 'Updated over an year ago' (this included the PES applications which were

yet to be adopted by the State/UT). The maximum marks allotted for updation of each application is 'Two'. The following is the score given based on the frequency of updation:

Table 6 - Frequency of updation

Frequency of updation	Score
Upto date	2.0
Updated 3 months ago	1.5
Updated 6 months ago	1.0
Updated more than an year ago	0

Implementation of certain key attributes for each PES application

The second aspect examined in the survey was whether and the extent to which certain key attributes of the aforementioned 7 applications had been implemented. The application wise list of attributes is given below. A maximum of 8 marks have been assigned for each application as cumulative score for all attributes of the application.

The examination of the frequency of updation and implementation of the attributes have been considered for state specific applications as well i.e. states/UTs using a state specific application have also been graded using the same criteria.

Table 7- Attributes and Scoring Criteria

PES Application	Attributes Examined	Max. cumulative marks	Per Attribute Score		
			If Complete	If Partial	If not implemented
PRIASoft	Whether all funded schemes to GP's been mapped in PRIASoft	8	2.66	1.33	0
	Whether entries into Receipt/Payment/Contra/Journal Vouchers are being done				
	Have you closed annual accounts in PRIASoft of financial year 2015-16				
Plan Plus	Whether resolution of the Gram Sabha is uploaded	8	1.6	0.8	0
	Whether Create/Update/Modify/Delete of Activity is being used				
	Whether Resource Envelope is created and used				
	Whether Create/Modify/Revert/Approve Planning is being used				
	Whether Gram Panchayat Development Plan is generated				
National Panchayat Portal	Whether Creation of own web pages and sub web pages is done	8	2.66	1.33	0
	Whether published content like About Us, Flash News, Elected Representatives details, Information to Public, Gram Sabha details, Place of interest in the portal				
	Whether updated the content like G.O. to public interest, Employee Details, Any Related Links, FAQs, Area Map, Tender Notifications, Transport Facilities available				
Local Government Directory	Whether Creation of villages and Panchayat etc. is done	8	1.6	0.8	0
	Whether Entries of elected members details is done				
	Whether Entries of PRI Local Bodies details is done				

PES Application	Attributes Examined	Max. cumulative marks	Per Attribute Score		
			If Complete	If Partial	If not implemented
	Whether Entries of local government bodies and its mapping with constituting land is done				
	Whether Upload of support documents (GO's) is being done				
Area Profiler	Whether Entries of Village infrastructure, tourist places, etc. is done	8	1.6	0.8	0
	Whether Entries of family register details is done				
	Whether Tracking of the Village Demographic details is being done				
	Whether Entries of Basic Statistics for Local Level Development like Demographic (BSLLD) status of villagers, land utilization, livestock & poultry is done				
	Whether Entries of elected member details are done				
Action Soft	Whether Entries of the work details is being done	8	1.6	0.8	0
	Whether Status of work details is being updated				
	Whether Physical and financial progress of activity is being reported				
	Whether Creation of action plan is done				
	Whether Monitoring of works is being done on the portal				
National Assets Directory	Whether Creation of Assets, Maintenance & Upgradation is being done	8	2	1	0
	Whether Asset Transfer & Receiving is being done				
	Whether Asset Earning details are entered				
	Whether Geo tagging of assets is being done				

Performance Levels

Based on tertile distribution, the scores of GPs have been divided into three parts and have been classified as being 'High', 'Medium' and 'Low' as follows:

Table 8 – Score and performance rating

Score	Performance Level
0 to 23	Low
Greater than 23 to 49	Medium
Greater than 49	High

Limitations of the study and other constraints

The following are the limitations of the study:

i. The study has been conducted in limited number of Panchayats, as stipulated by MoPR. The sample not being statistically significant, the responses may not be extrapolated to the entire State/UT.

ii. Despite spelling out the criteria for selection of Panchayats, in many states the final selection was based on the inputs received from the field. Given the criteria mentioned from the survey team, the local level Nodal Officers (in consultation with their senior officers – Commissioner / CEO ZP, District Development Officer etc.), decided to take the survey team member to the place that would appropriately give the team an idea about the functioning, non-functioning of ICT so that the ground realities are seen and documented. As such, there was a variation in numbers from the original plan, in the proportion of different categories of districts and GPs that were covered.

iii. Time was a major constraint in the project due to the nature of the assignment which involved understanding the status of the complex EA based PES application, researching the equivalent / corresponding State specific ICT and their functionalities,

travel plans, field visits to 35 States/UTs, response from the local host State / UT to facilitate visits etc.

iv. Enlargement of the scope of the survey meant reaching out to a wider constituency and stop-over at different levels of Panchayats at different locations enroute (or otherwise) to gather information at that level were all time-taking, but welcome, though not planned as part of the itinerary.

v. Declaration of elections in 5 States, Imposition of Section 144 in the poll-bound States, local disturbances (Nagaland), inclement weather conditions (Himachal and Jammu & Kashmir), request to delay visits due to Assembly sessions in the State (Chhattisgarh) were other requests that needed to be accommodated.

3. SURVEY RESULTS

3.0 Interpretation of Field level Findings

For the convenience of understanding of the context of evaluation and its findings, this chapter is divided into three Sections.

Section One deals with the sample selection of geographical areas and its bearing on PES application adoption and usage status.

Section Two deals with the responses from Elected Representatives / Panchayat Functionaries and the Citizens regarding their awareness about PES/ State Specific applications leading to usage of its output for either monitoring or decision-making.

Section Three presents the field level findings of implementation of the PES applications in the Gram Panchayats as per the responses from the official machinery that is in place for its implementation (Department Officials / SPMU/ DPMU/APM personnel/ Operators and VLEs) – the primary respondents for implementation of PES / State specific applications. This section deals with each of the application, starting with the applications that are currently in use, followed by the applications that are used least, as of now. The reasons for adoption of some applications and not the others are narrated in each application analysis as well as barriers to usage faced by States / UTs are documented.

Section One- Sample selection & PES Implementation

As discussed in the 'Methodology' chapter, the Panchayats for the survey sample fall under three broad categories i.e. 'Ordinary, BRGF and Scheduled (V&VI)'. The latter two categories have been included in the sample to assess the potential diversity in results owing to 'backwardness' of these Panchayats. This chapter begins with a discussion on whether the PES implementation has been found proportional to the relative forwardness/backwardness of the Panchayats surveyed.

PES implementation is a function of, among other important factors, infrastructural readiness, capacities of and awareness among the elected representatives and implementing staff. The findings on these factors in the gram Panchayats surveyed have also been discussed in this chapter.

PES and Performance Measurement

Based on the classification of the performance of the GPs as 'High', 'Medium' and 'Low', as discussed in the chapter on 'Methodology', it has been found that the proportion of GPs that are in the 'high' performance bracket are seen roughly in similar proportions in all the 3 classifications i.e. ordinary, BRGF and Scheduled. However, the difference is stark when the 'Low' performing GPs are examined. 68.8% of the total GPs from the sampled scheduled areas fall in the 'Low' performing category.

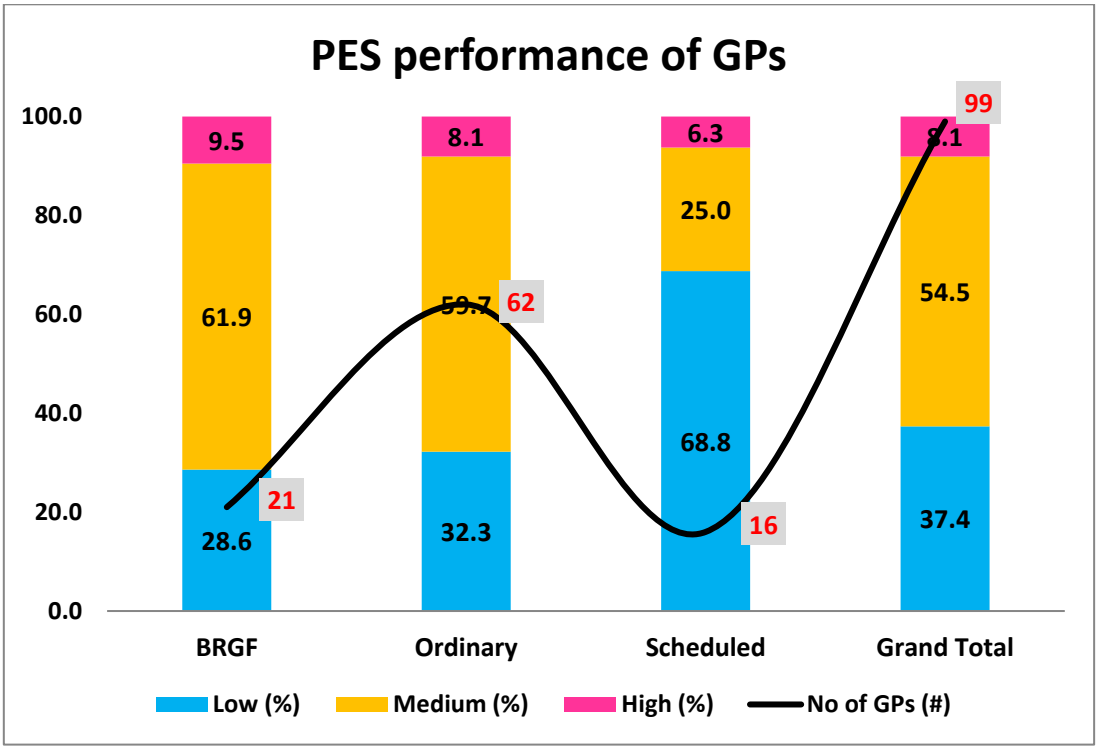


Fig. 4 - PES performance of GPs

Reasoning for Usage / Non Usage - Infrastructure Readiness

Having Own Building

Having own building is the first step towards securely keeping the requisite hardware required for deployment of ICT applications and its usage. Ninety three of the 99 Gram Panchayats surveyed have reported functioning from the Panchayat's own building. Others were either shifting the hardware between the Sarpanch's residential premises or functioning without the hardware using their personal computer for small calculations and drafting letters / mails etc.

Availability of Power Supply

Availability of continuous power supply is an enabler for usage of ICT at any level. Power supply to villages and remote areas has been a challenge and the efforts to ensure that power availability does not come in the way of agricultural production and other necessary works brings the focus on an uninterrupted power supply. For the ICT deployed in the villages to function, this is an important criteria to keep the system functional and running. As per the responses received from the Panchayats surveyed, sixty five of the 99 GPs surveyed have reported having 24 hours power supply. This includes the GPs having alternate sources of power back up, such as solar power plants.

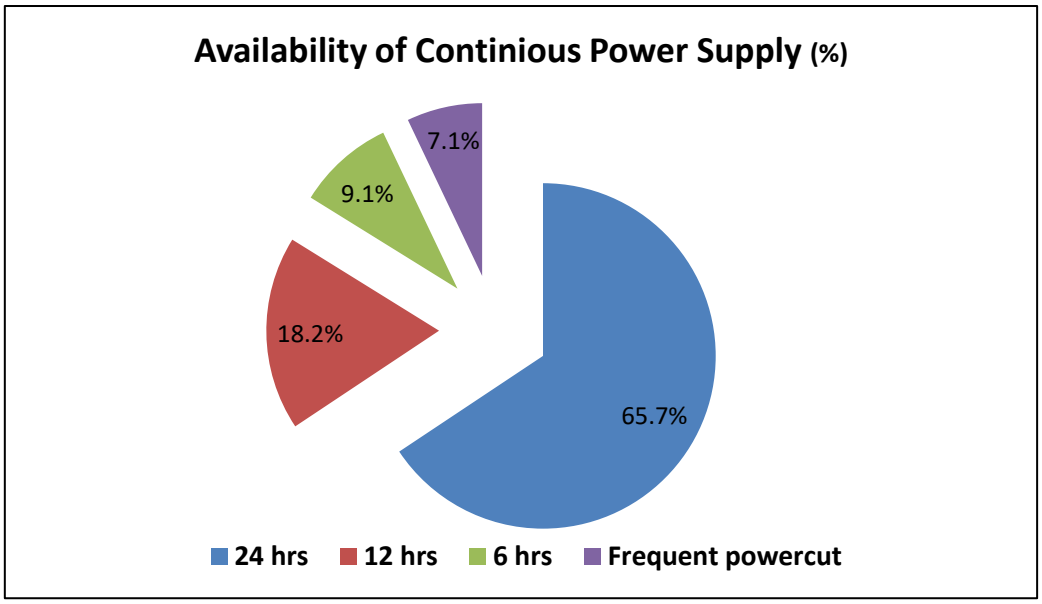


FIG. 5 – Availability of Power Supply

Key IT Equipment

Having own building and power supply will have to be augmented by having all the necessary hardware and software to use the PES / State specific applications functional and optimally utilized.

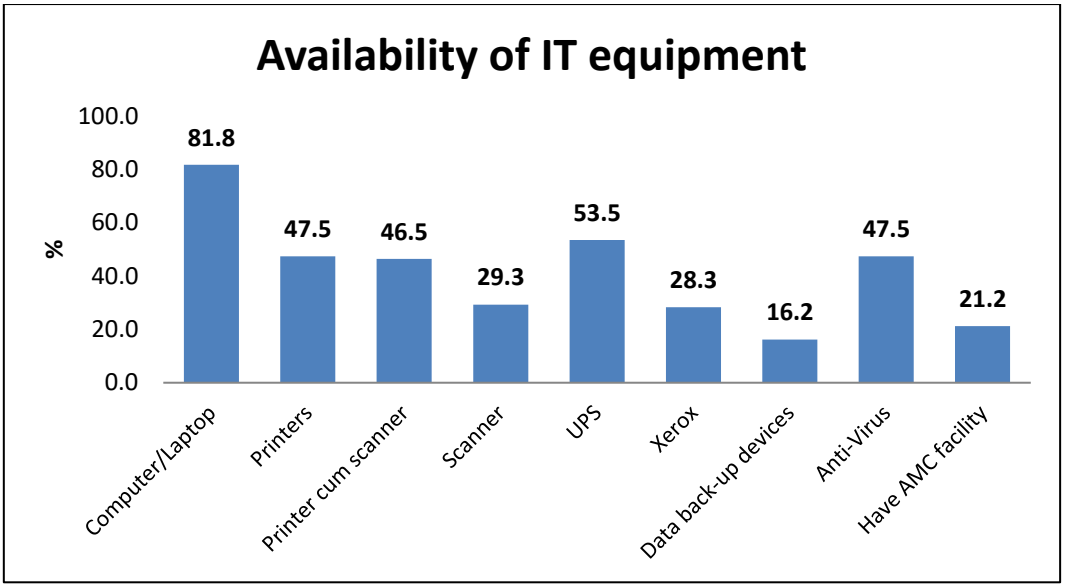


Fig. 6 – Availability of IT equipment

To make ICT usage completely operational and sustain it and also it is necessary that the functional aides to hardware are available at each GP level. From the survey it is found that Eighty One (81) of the surveyed GPs have a Personal Computer. About 50% of the surveyed GPs have printers and more than 50% of the GPs have the facility for Uninterruptible Power Supply / Uninterruptible Power Source (UPS) or a battery.

SECTION TWO - Levels of Awareness on PES / State Specific applications

(a) Among Elected Representatives /Panchayat Functionaries

It is presumed that ICT is deployed for the benefit of the efficient functioning of the Panchayats and for better delivery of services to the Citizens. Hence it is prudent that the constituency is aware about the deployment of ICT for the purpose, is aware of the input going in and is also aware that the output could be put to use for efficient and effective functioning of the Panchayat. The level of awareness among these groups is hence an important yardstick to measure the ownership and sustenance of the system.

The following analysis describes the level of awareness in these 2 constituencies, in the GPs visited.

Awareness of Elected Representatives/Panchayat Functionaries

In addition to administering the GP/BP/ZP level questionnaires to the officials, 89 Elected Representatives/Panchayat Functionaries were administered the ER/Panchayat Functionary Questionnaire. This was to gauge their levels of awareness on PES, among other things.

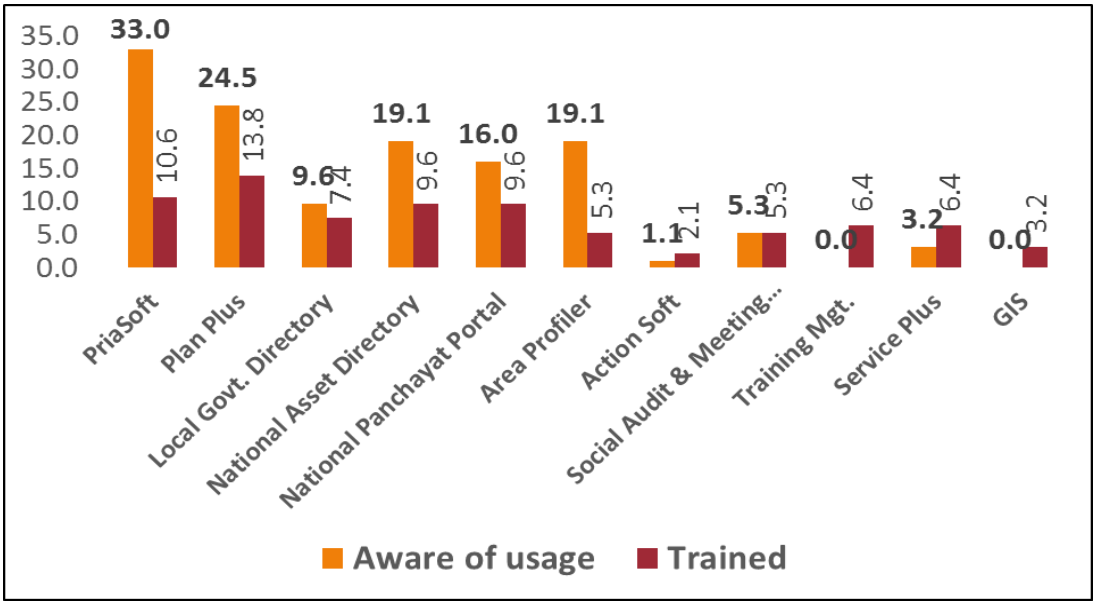


FIG. 7 - Awareness of Elected Representatives/Panchayat Functionaries (%)

In about half the GPs surveyed, the Elected Representatives/Panchayat Functionaries were not aware of PES. On PES application specific awareness, about a third of the ERs/PFs surveyed reported being aware of PRIA Soft usage and about one fourth of them were reportedly aware of Plan Plus usage. Application specific training is lacking at this level among most of the respondents of this category.

(b) Awareness about PES / State Specific applications - Citizens

Awareness

Of the 179 Citizen respondents, only 37, i.e., about 20% were aware of the existence of a website (created under NPP) for their GP. Despite the fact that the awareness about it was less, the citizen respondents were enthused that such an interface was available and that their GP had a national identity and could keep it so by populating the GP website with information about their village. This was seen as an opportunity to reach out to Government of India.

Citizens Participation

The Citizen respondents were asked about their participation in Gram Panchayat activities, namely, participation in Gram Sabha, physical / online verification of GP plans and verification of assets being reported as being created.

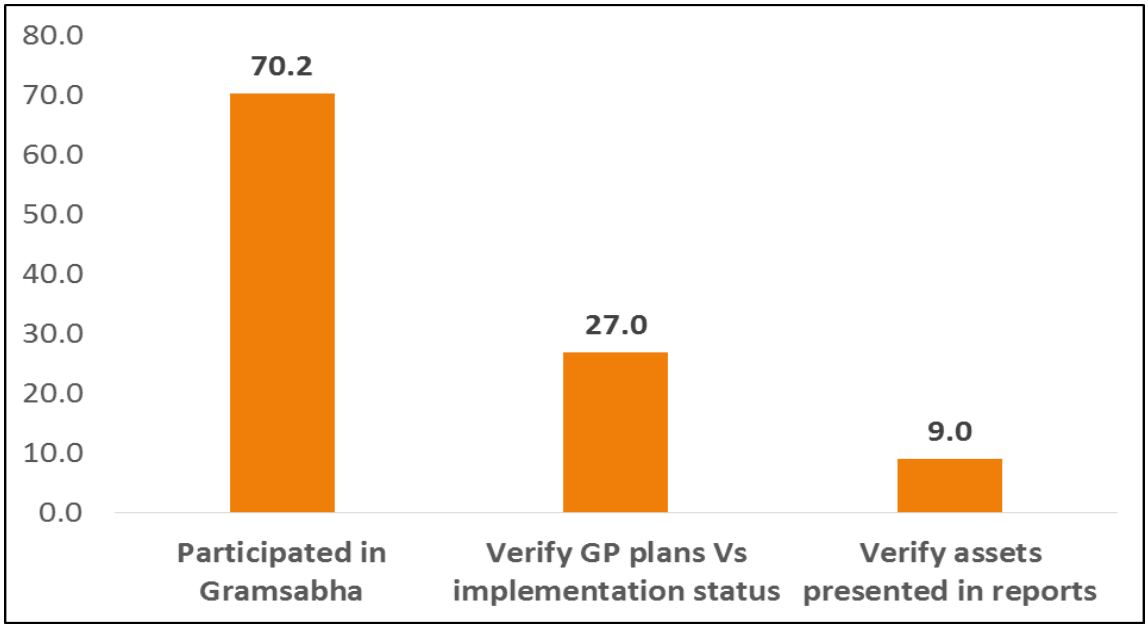


Fig. 8 - Citizen Participation (%) (N=178)

About 70.2% of the surveyed citizens have reported participating in the Gram Sabha meetings. However, the proportion of them verifying the GP plans against the implementation status and those verifying the assets being reported on the PES / State specific application is much less, at 27.0% and 9% respectively. Those that did respond to verifying seem to do so from manual records and not from the computer generated records.

SECTION THREE–PES / State equivalent ICT – An application wise analysis

There are a few identified parameters based on which the field level findings are discussed. An evaluation of PES presumes its usage, which is its adoption by States / UTs and populating the applications with data / information as is required for each PES application. If the application is adopted, it is used. If it is used, its choice of periodicity of updation will be based on their need, priority and the administrative requirements of the particular State / UT. Subsequently, to quell any doubts on the usage and date of updation before the survey commenced, certain attributes of the PES applications that feature in the application and are populated have been taken as a yardstick to find if these attributes have been added or not. This is to gauge their regularity and comfort of use. Further a last criteria used to gauge the adoption status is the status of capacities in hand and the expressed necessity for further training.

The field findings are presented in the following order of PES applications. State specific applications equivalent to each PES application are dealt with and showcased along with the relevant PES application analysis. Some State applications carry more than one of the PES application features. The same have been noted too.

1. PlanPlus (PP)
2. PRIASoft (PS)
3. Local Governance Directory (LGD)
4. National Panchayat Portal (NPP)
5. National Asset Directory (NAD)
6. AreaProfiler (AP)
7. ActionSoft (AS)
8. Social Audit and Minutes Management (SAMM)
9. Training Management (TM)
10. Service Plus (SP)

3.1 Planplus

The data[12] available on Plan Plus portal for 2016-17 gives an overview of its usage by states and union territories. There are 18 states which are not using Plan Plus at all of which, 7 states (Kerala, West Bengal, Madhya Pradesh, Jharkhand, Gujarat, Haryana, Karnataka) are using state specific applications equivalent to Plan Plus. There are 4 states which have uploaded on Plan Plus, less than 50% of total plans prepared by their Panchayats and there are 9 states which have uploaded on Plan Plus, more than 50% plans prepared by the Panchayats. At all-India aggregate level, for the year 2016-17, 68% of all GPDPs prepared by the Panchayats are on Plan Plus. The State wise abstract is presented below.

[12] http://www.planningonline.gov.in/ReportData.do?ReportMethod=getGpdpCount accessed on April 23 2017

Table 9 - Planplus Abstract

Zero Plans on Plan Plus	<= 50 % plans on Plan Plus	>= 50% plans on Plan Plus
Bihar	Arunachal Pradesh	Andaman & Nicobar Islands
Chandigarh	Assam	Tripura
Dadra & Nagar Haveli	Maharashtra	Uttar Pradesh
Daman & Diu	Manipur	Andhra Pradesh
Goa	Gujarat	Uttarakhand
Lakshadweep		Rajasthan
Puducherry		Himachal Pradesh
Punjab		Odisha
Jammu & Kashmir		Sikkim
		Telangana
		Chhattisgarh

Certain states have a significant proportion of the total plans prepared for the year 2016-17 in the approval processing stage. These include the states of Jharkhand (4039 plans pending), Maharashtra (1754 pending), Chhattisgarh (1203 pending). Upon completion of the same these plans would be reflected on Plan Plus.

Usage

The following table presents an abstract on the usage of Plan Plus, as observed in the survey:

Table 10 - Plan plus usage abstract

S. No	Description	Number
1	States/UTs not using PES but using State Specific Application equivalent to Plan Plus	7
3	States/UTs using neither PES nor State Specific Application equivalent to Plan Plus	11
5	States/UTs using Plan Plus	17

State/UT wise classification on Plan Plus usage is presented in the matrix below:

Table 11- State wise Plan Plus usage

State/UT	Using Plan Plus	Not using PES but using State Specific Application equivalent to Plan Plus	Neither PES nor State Specific Application equivalent
A&N Islands	✓		
Andhra Pradesh	✓		
Arunachal Pradesh	✓		
Assam	✓		
Bihar			✓
Chandigarh			✓
Chhattisgarh	✓		
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat	✓		
Haryana		✓	
Himachal Pradesh	✓		
Jammu & Kashmir	✓		
Jharkhand		✓	
Karnataka		✓	
Kerala		✓	
Lakshadweep			✓
Madhya Pradesh		✓	
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa	✓		
Puducherry			✓
Punjab			✓
Rajasthan	✓		
Sikkim	✓		
Tamilnadu		✓	
Telangana	✓		
Tripura	✓		
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal		✓	
Total	**17**	**7**	**11**

Of the 99 GPs surveyed, 40.4% have their Plan Plus/equivalent State application updated, as on the date of the survey. 12% GPs had reported carrying out the said updation 3 months ago, 7% GPs had reportedly updated 6 months ago and 40% GPs had not updated Plan Plus/equivalent state application for over a year. The last figure includes the GPs that have not initiated the use of the application.

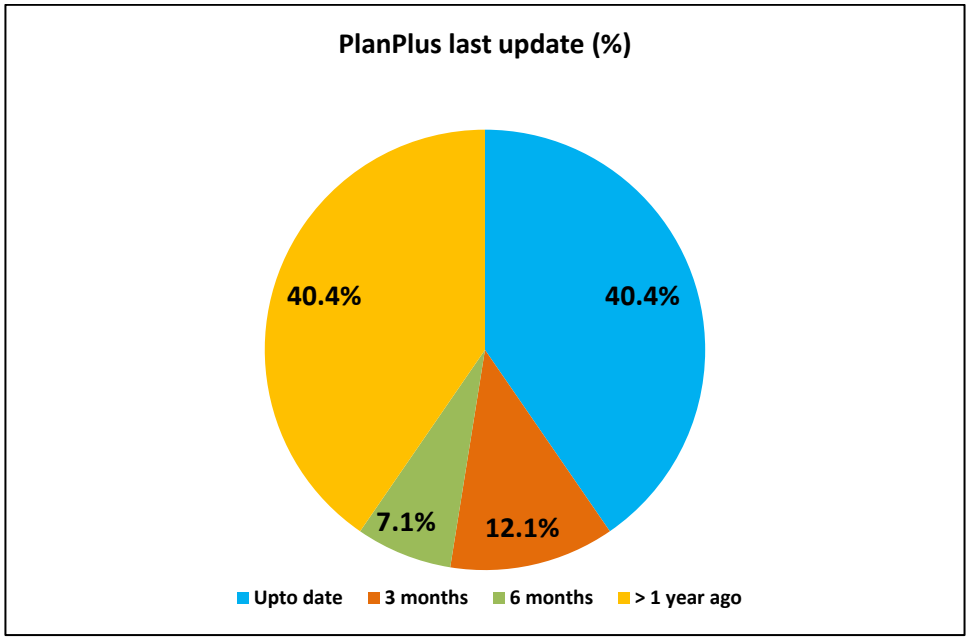


Fig. 9 - Planplus last update

Implementation of Key Features of Plan Plus

The Panchayats surveyed were examined on their implementation of 5 key attributes of Plan Plus i.e.

i. Uploading of resolution of Gram Sabha,

ii. Creating/ Updating/deleting activity,

iii. Resource envelope,

iv. Creating/ Modifying/ Approving planning and

v. Generation of GPDP.

The following are the findings:

Table 12 - Implementation of key attributes in GP

	No. of GP implementing key attributes		
All 5 attributes	*Any 3 attributes*	*Less than 3 attributes*	*None of the attributes*
19.2%	28.3%	11.1%	41.4%

The above listed five attributes are considered as key attributes to measure the usage of Plan Plus application at Gram Panchayat level. It is quite possible that, all the visited Gram Panchayats need not be implementing the above listed five key attributes. Some GPs might be implementing few or all. Hence, the status of implementation of key attributes in the visited Gram Panchayats across the States is mentioned in above table.

Of the visited 99 Gram Panchayats, 59% GPs are using PES PlanPlus application. Out of 59% GPs, 19.2% GPs are implementing all the five key attributes, 28.3% GPs are implementing any three attributes, 11% GP is implementing less than three attributes and 41.4% GPs are not implementing any attributes out above-mentioned five despite they have adopted PlanPlus. This shows the usage of PlanPlus application in Gram Panchayats.

Training

About 39% of the 99 GPs surveyed received some training on Plan Plus 6 months ago or earlier. Again, 38% GPs have never been trained on Plan Plus and 16% GPs have expressed the need for additional training on the application.

3.2 PRIASoft

USAGE

The State wise, Panchayat category wise data of year book closure, extracted from the PRIASoft portal[13] is at Annexure 3.With a view to comparing the usage of PRIASoft by the Panchayats over the years, data pertaining to 2010-11 (the earliest data available on the portal), to 2013-14 (a mid-point between the beginning and the present) and to 2016-17 (the present) has been examined.

[13] www.accountingonline.gov.in, accessed on Apr 23, 2017

Year book has been selected for the analysis as it is the most widely implemented feature of PRIASoft and is implemented at the intended periodicity i.e. annually by the Panchayats, unlike the day book and month book, which, contrary to the envisaged periodicity, are closed, almost perforce, just before the closure of the year book.

At a national aggregate level, for the year 2010-11, all the 3 levels of Panchayats have seen a healthy implementation of the year book closure on PRIASoft, at levels above 80%. For the year 2013-14, as many as 60% of the Block Panchayats and 76% of District Panchayats closed their year books. For just concluded financial year 2016-17, the year book closure for all the three levels of the Panchayat has been slow to begin and hence low, at 16%, 3% and 6% for the District, Block and Gram Panchayats respectively. It must however be added that the performance on the said parameter for 2016-17 would improve in the next few months since it is just a little over a month since the financial year has ended when this analysis has been carried out.

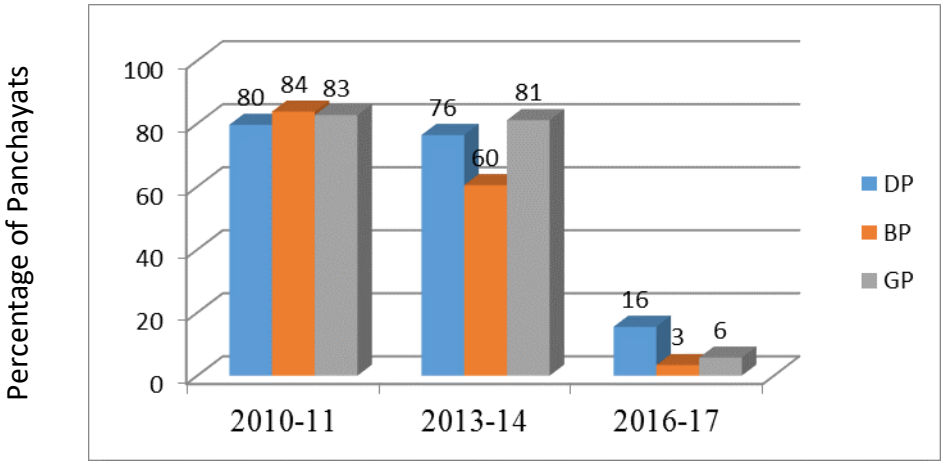


Fig. 10 - Percentage of GPs that closed their Year Books

USAGE

It is found that 18 of the 35 States/UTs surveyed are using PRIASoft, although with varying degrees of updation. The States of Gujarat, Kerala, Karnataka, West Bengal and Madhya Pradesh are using State specific applications equivalent to PRIASoft.

The following matrix captures the State/UT wise usage of PRIASoft/Equivalent State Application, as observed in the Panchayats visited by the study team. This data gives an idea as to how many are actually using it and have demonstrated the usage in the physical verification of the process done by the surveyors.

Table 13 - State/UT wise PRIASoft/ equivalent USAGE - ABSTRACT

State/UT	Using PRIASoft	Using State Specific Application equivalent to PRIASoft	Neither PES nor State Specific Application equivalent to PRIASoft
A&N Islands			✓
Andhra Pradesh	✓		
Arunachal Pradesh			✓
Assam	✓		
Bihar			✓
Chandigarh			✓
Chhattisgarh	✓		
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat		✓	
Haryana	✓		
Himachal Pradesh	✓		
Jammu & Kashmir	✓		
Jharkhand	✓		
Karnataka		✓	
Kerala		✓	
Lakshadweep			✓
Madhya Pradesh		✓	
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa	✓		
Puducherry			✓
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamilnadu	✓		
Telangana	✓		
Tripura	✓		
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal		✓	
Total	**18**	**5**	**12**

While the physical verification gave an idea about its usage and the issues in comfort of usage, the last updation status gives an idea about whether the application is being used on a regular basis and the periodicity of usage. It dwelt upon the reasons for following the particular timelines for updation.

Migration from PAMIS Accounting Software to PRIASoft - Odisha State

Prior to the adoption of PRIASoft, Odisha was using the **Project Accounting and Monitoring Information System (PAMIS**). Introduced in the state in 2007-08, this trial version was introduced at the Zillah Parishad and the Block level. It had the advantages of following a double-entry accounting, captured daily transactions and could be customized as per accounting requirements.

However, it also had a few shortcomings like, not having a Standard Budget Head, it was a standalone version, lack of security features for data storage and was an internal system of accounts management. It did not carry any features for interoperability with NREGS or PlanPlus.

The State felt that PRIASoft had all the features that they would ideally look for such as having Standard Head of Accounts, compliance with the C&AG formats, formats available for all levels of PRIs and was a web-based software with interface to the public.

The system was found to be more transparent on more counts that PAMIS allowed.

Bridge between the state specific applications and PES application to be developed as West Bengal (Setu), so that data can be populated to PRIASoft application easily from end to end State specific applications.

Andaman & Nicobar Island is facing lack of internet connectivity and training in PRIASoft. It is noticed that the State is unaware of offline entries in PRIASoft and this information has been disseminated to State higher authorities.

Karnataka uses Panchatantra Accounting package, which is similar to PRIA soft, the entire process is done manually, and after that the data will be uploaded to the system for generation of reports.

Last Updation done

About a third of the GPs surveyed have the data up to date on PRIASoft while another third of the GPs have not updated their accounts related data on the portal for over a year. The remaining of the surveyed GPs have updated the data between 3 to 6 months prior to the survey date.

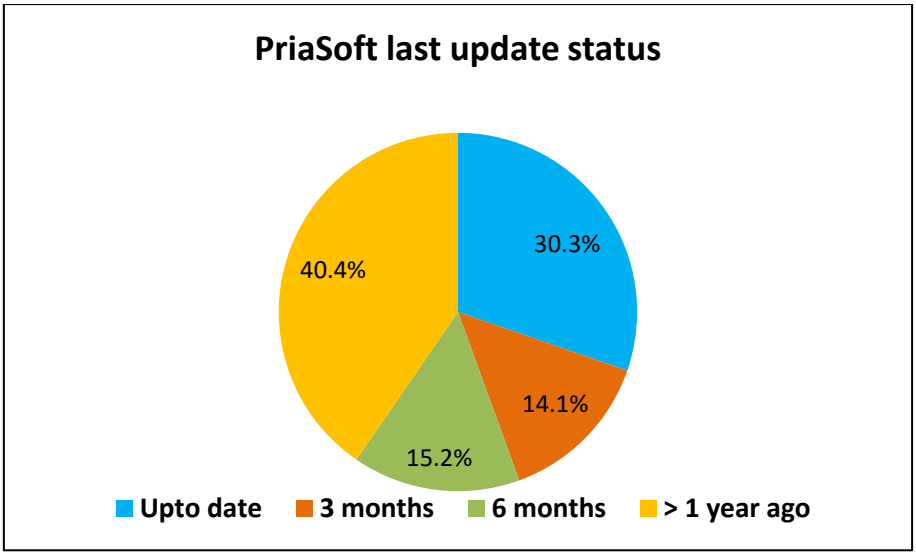


Fig. 11 - Periodicity of last updation on PRIASoft by GPs (in %)

While the periodicity mentions when and how, the critical success factor of the adoption of the PES package is in its access by users of the key features of the ICT.

Implementation of Key attributes

The Panchayats surveyed were examined on their implementation of 3 key attributes of PRIASoft, i.e.

i. Mapping of funded schemes to GPs
ii. Entries into Receipt/Payment/Contra/Journal Vouchers
iii. Closure of annual accounts in PRIASoft of financial year 2015-16

A total of 44.4% of the surveyed GPs are implementing all the three features of PRIASoft/equivalent features in State Specific applications; 19.2% GPs have at least 2 attributes implemented; 6.1% GPs have implemented at least one key attribute and 30.3% GPs have none of the features/attributes implemented.

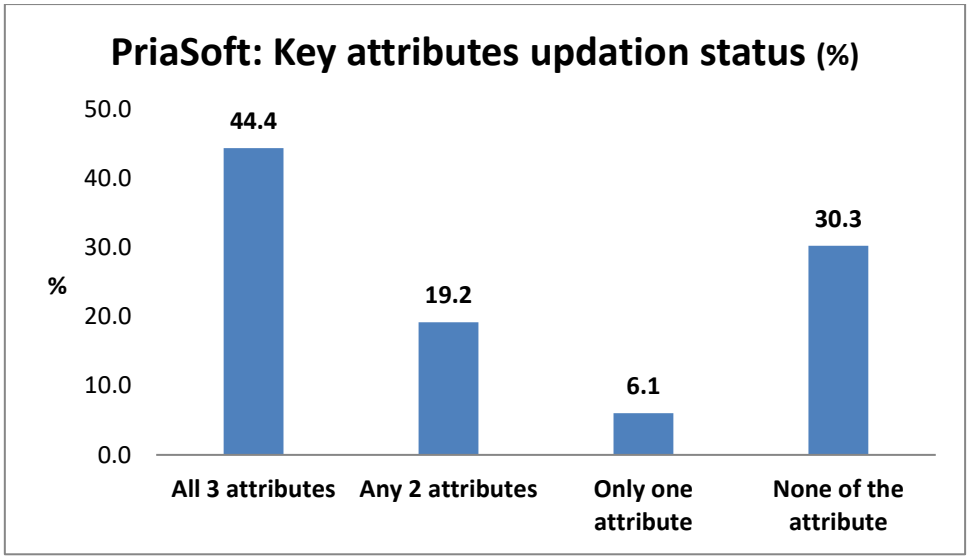


Fig. 12 - GPs implementing Key Attributes of PRIASoft

Bridge Application

Some State specific applications developed having features of transparent accounting equivalent to PRIASoft have managed to create a bridge software to exchange the state data with the National portal as per the mandated formats.

Building the ICT Bridges –West Bengal

Aptly called so, the *SETU* (a bridge) created by West Bengal is an attempt to ensure that the Gram Panchayat Management System (GPMS) is aligned with the National PRIASoft.

The *SETU* is an in-house application software that helps the state move the verified accounting data from GPMS to PRIASoft. The software dynamically converts the data from GPMS to XML format as per PRIASoft architecture.

Practical Solutions for Integration of State Application with PES

1. State Specific application Gram Jyothi is integrated with Plan Plus with the help of National Informatics Centre (NIC), New Delhi for data entry. At present Telangana State stopped Gram Jyothi website and continuing in Plan Plus only, to avoid double entry in both the applications. However, the National Informatics Centre (NIC) at Hyderabad shall create a bridge for De-Centralized Planning (DCP) to be integrated by which it can share State Specific application data with PlanPlus.

2. LGD code must be used in all schemes and programs of Central Government. When LGD code is used then the other State Specific application can't be used and state specific application portability should be restricted.

3. Integration of PRIA Soft with PFMS should be made mandatory at GP level for not only utilizing Fourteenth Finance Commission (FFC) Grants but also ORS funds of Gram Panchayat and State treasury funds. Government of India may consider releasing funds and providing incentives based on updated data in PFMS integrated PRIASoft.

4. Usage of Action Soft should be made mandatory for updating physical and financial progress of the work. Based on this updation the Government of India may release the funds to the State's.

5. NPP should be more dynamic and the data should be updated time to time. As none of the Gram Panchayats are having a website of their own any information of GPs is not available online at State level. NPP should be a face of all Panchayats across the country, all other applications like LGD, Area Profiler, Plan Plus, and NAD should be linked and all the data should be consolidated to display the progress of Panchayat in NPP.

6. Time-to-time monitoring of technical implementation of PES across the county through evaluation studies may also help in better implementation of PES.

7. Capacity Building should be provided extensively to the Gram Panchayat functionaries of States for wider usage of PES.

Training

MoPR provides trainings for State/UTs and ZP, BP, GP level functionaries including ERs through TOTs on a continuous basis based on the demand sent by the States/UTs. Thus it is a responsibility of the state/UT Govt. to identify the capacity building needs and send the proposal to MoPR. It has been observed that most of the states are not proactively assessing the training needs and hence very limited number of training proposals are submitted to MoPR. In addition State also need to arrange Capacity Building program for all levels of Panchayats regularly. There is a need for State Govt. to identify the target group where training needs and send proposal to MoPR for necessary actions.

However, it has also been observed that wherever State Specific IT applications are used the personnel were comparatively well versed with handling the state application as the State Department are engaging respective State level Institute for Rural Development.

3.3 Action Soft

Usage of Action Soft/Equivalent State Application

22 of the 35 State/UTs surveyed are neither using Action Soft nor are they using an equivalent State specific application. Three States, namely, Kerala, West Bengal and Madhya Pradesh are using State Specific Applications instead of Action Soft. The following matrix captures the State/UT wise usage of Action soft/Equivalent State Application, as observed in the Panchayats visited by the study team.

Table 14 - State/UT wise usage of action soft/equivalent state application

State/UT	Using Action soft	Not using PES but using State Specific Application equivalent to Action soft	Neither using PES nor State Specific Application equivalent to Action soft
A&N Islands			✓
Andhra Pradesh			✓
Arunachal Pradesh			✓
Assam			✓
Bihar			✓
Chandigarh			✓
Chhattisgarh			✓
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat	✓		
Haryana	✓		
Himachal Pradesh			✓
Jammu & Kashmir			✓
Jharkhand			✓
Karnataka	✓		

State/UT	Using Action soft	Not using PES but using State Specific Application equivalent to Action soft	Neither using PES nor State Specific Application equivalent to Action soft
Kerala		✓	
Lakshadweep			✓
Madhya Pradesh		✓	
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa			✓
Puducherry			✓
Punjab			✓
Rajasthan	✓		
Sikkim			✓
Tamilnadu	✓		
Telangana			✓
Tripura			✓
Uttar Pradesh	✓		
Uttarakhand			✓
West Bengal		✓	
Total	**8**	**3**	**24**

Last Updated Status

Of the 99 GPs surveyed, 22.2% have updated data on ActionSoft/equivalent State application, as on the date of the survey. 5% GPs had reported carrying out the said data

updation 3 months ago and 72.7% GPs had not updated Action soft/equivalent state application for over a year. This figure includes the Panchayats who have not initiated the use of ActionSoft/equivalent state application.

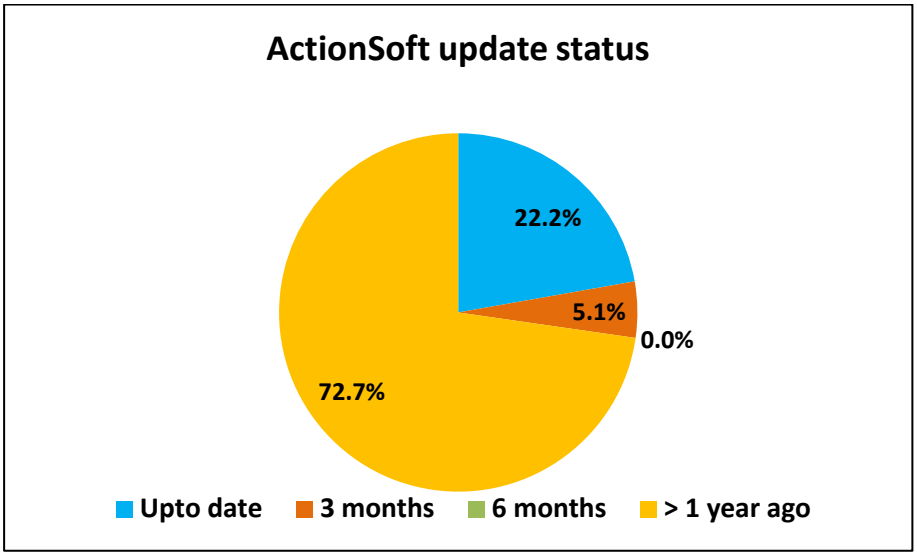
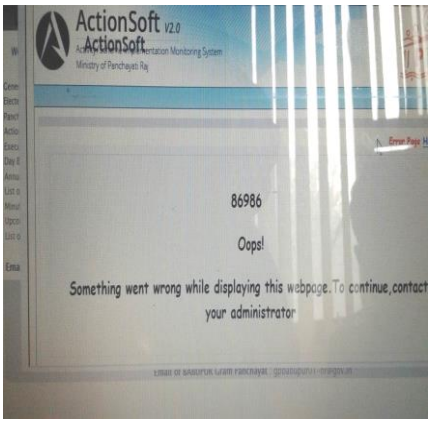


Fig. 13 - Last updation on ActionSoft by GPs

It is observed that a majority of the States / UTs have updated ActionSoft more than a year ago. Some states have tried to pick the threads of PES implementation including ActionSoft quite recently again with their state being trained on the ICT package.



Implementation of Key Features of ActionSoft

The Panchayats surveyed were examined on their implementation of 5 key attributes of Action soft/equivalent state application i.e.

i. Entries of the work details

ii. Status of work details

iii. Physical and financial progress of activity

iv. Creation of action plan

v. Monitoring of works

Only 16.2% GPs were found implementing all the 5 attributes that the survey looked for. There were 3%GPs implementing any 3 attributes indicating a slightly less motivated

updation of the application. There were 2% GPs implementing less than 3 attributes and 78 .8% GPs not implementing any of the key attributes indicating that ActionSoft is not prioritized package either due to technical problems or due to insufficient priority accorded to it by the State / UT authorities.

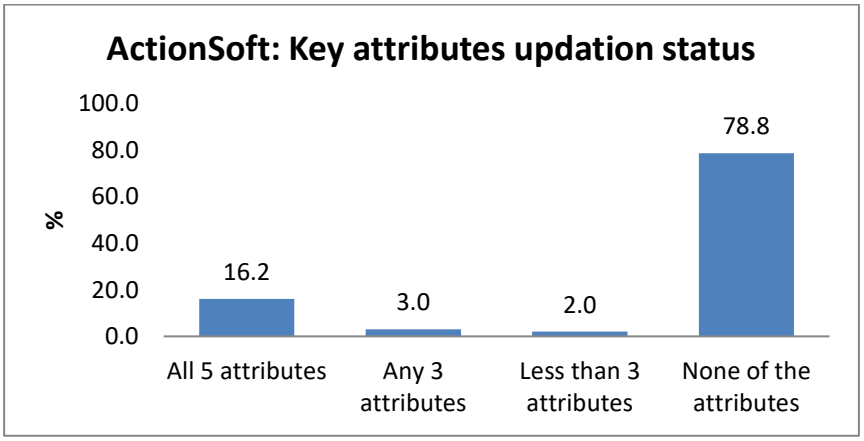


Fig. 14 - Implementation of Key Attributes of ActionSoft

Training imparted

In all, 70% GPs have never been trained on ActionSoft; 10% GPs have been trained 6 months or earlier on the application. 45.4% GPs have expressed the need for additional training on the application.

3.4 National Asset Directory

Usage of National Assets Directory/Equivalent State Application

15 of the 35 State/UTs surveyed are using NAD. Three States, namely, Kerala, Jharkhand and West Bengal are using State Specific Applications instead of National Assets Directory. 12 State/UTs are neither using National Assets Directory nor are they using an equivalent State specific application. The following matrix captures the State/UT wise usage of National Assets Directory/Equivalent State Application, as observed in the Panchayats visited by the study team.

Table 15 - State/UT wise usage of national asset directory/ equivalent state application

State/UT	Using NAD	Not using PES but using State Specific Application equivalent to NAD	Neither using PES nor State Specific Application equivalent to NAD
A&N Islands	✓		
Andhra Pradesh	✓		
Arunachal Pradesh			✓
Assam			✓
Bihar			✓
Chandigarh			✓
Chhattisgarh			✓
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat	✓		
Haryana	✓		
Himachal Pradesh	✓		
Jammu & Kashmir			✓
Jharkhand		✓	
Karnataka	✓		
Kerala		✓	
Lakshadweep			✓
Madhya Pradesh			✓
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa			✓
Puducherry			✓
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamilnadu	✓		
Telangana	✓		
Tripura			✓
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal		✓	
Total	**15**	**3**	**15**

Last Updated

Of the 99 GPs surveyed, 21.2% have updated data on National Assets Directory/equivalent State application, as on the date of the survey. 18.2% GPs had reported carrying out the said data updation 3 months ago, 1% GP had updated the same 6 months ago and 59.6% GPs had not updated National Assets Directory/equivalent state application for over an year. This figure includes the Panchayats who have not initiated the use of National Assets Directory/equivalent state application.

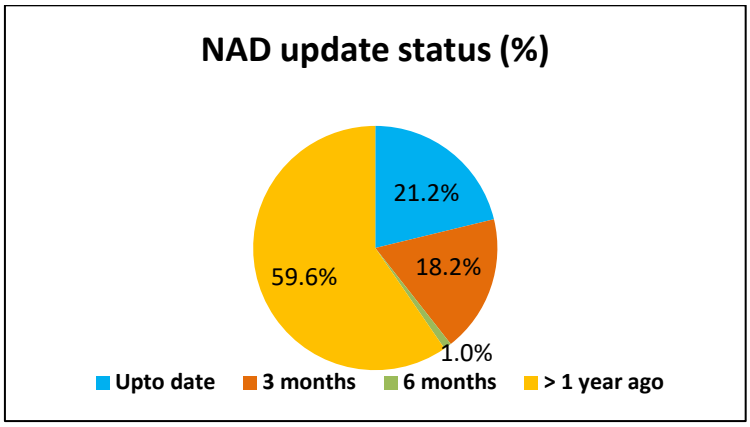


Fig. 15 - Last updation on National Assets Directory by GPs

Implementation of Key attributes of National Assets Directory

The Panchayats surveyed were examined on their implementation of 4 key attributes of National Assets Directory/equivalent state application i.e.

(i) Creation of Assets, Maintenance & Upgradation

(ii) Asset Transfer & Receiving

(iii) Asset Earning details

(iv) Geo tagging of assets

Only 12.1% GPs were found implementing all the 4 attributes; there were 10.1%GPs implementing any 3 attributes and 17.2% GPs implementing less than 3 attributes. 60.6% GPs are not implementing any of the aforementioned attributes.

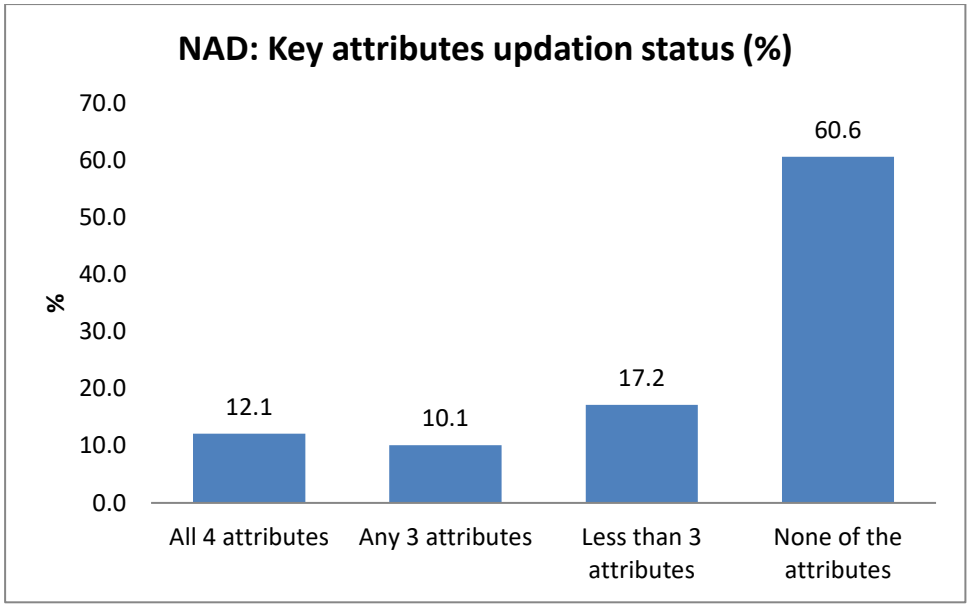


Fig. 16 - Implementation of Key Attributes of National Assets Directory

Training

53.5% GPs have never been trained on National Assets Directory; 29.2% GPs have been trained 6 months or earlier on the application. 48.5% GPs have expressed the need for additional training on the application.

Issues

The following technical/functionality issues pertaining to National Assets Directory have been observed/reported by the States/UTs in the survey:

Tamil Nadu is unable to use the mobile app (corresponding to NAD) as the TN site has data already uploaded onto it. The state has requested for sharing of data structures and the issue is pending resolution.

3.5 National Panchayat Portal (NPP)

Usage of National Panchayat Portal /Equivalent State Application

In all, 17 states out of the 35 State/UTs surveyed are using National Panchayat Portal. Two states i.e. Kerala and West Bengal are using state specific application equivalent to National Panchayat Portal. Thirteen (13) states/UTs are neither using National Panchayat Portal nor a state specific application equivalent to National Panchayat Portal. The following matrix captures the State/UT wise usage of National Panchayat Portal /Equivalent State Application, as observed in the Panchayats visited by the study team.

Table 16 - State/UT- wise usage of National Panchayat Portal

State/UT	Using NPP	Not using PES but using State Specific Application equivalent to NPP	Neither using PES nor State Specific Application equivalent to NPP
A&N Islands			✓
Andhra Pradesh	✓		
Arunachal Pradesh			✓
Assam	✓		
Bihar			✓
Chandigarh			✓
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat	✓		
Haryana	✓		
Himachal Pradesh			✓
Jharkhand	✓		
Karnataka	✓		
Kerala		✓	
Lakshadweep			✓
Madhya Pradesh	✓		
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa			✓
Puducherry			✓
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamilnadu	✓		
Telangana	✓		
Tripura	✓		
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal		✓	
Total	**17**	**2**	**14**

Last Updated

Of the 99 GPs surveyed, 28.3% have updated data on National Panchayat Portal /equivalent State application, as on the date of the survey. 13.1% GPs had reported carrying out the said data updation 3 months ago, 2% GP has reported having updated the data on National Panchayat Portal 6 months ago. 56.6% GPs had not updated National Panchayat Portal /equivalent state application for over a year. This figure includes the Panchayats who have not initiated the use of National Panchayat Portal /equivalent state application.

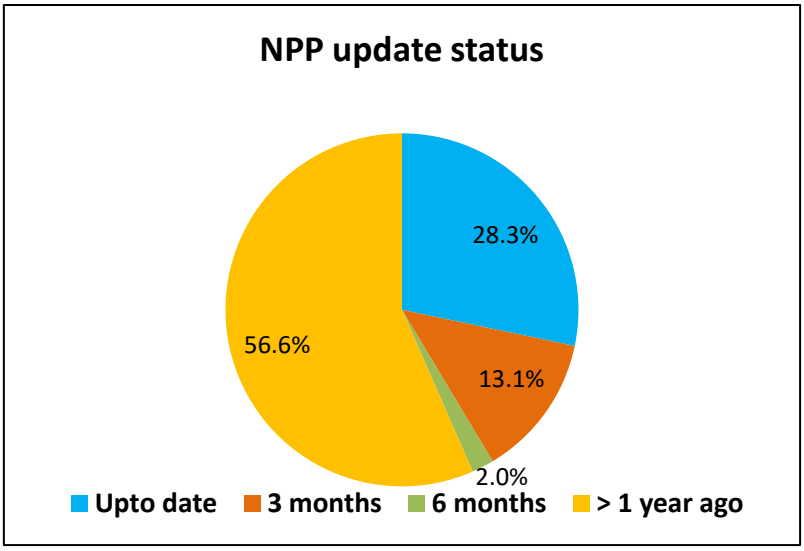


Fig. 17 - Last updation on National Panchayat Portal by GPs

Implementation of Key Features of National Panchayat Portal

The Panchayats surveyed were examined on their implementation of 3 key attributes of National Panchayat Portal /equivalent state application i.e.

i. Creation of own web pages and sub web pages
ii. Publishing of content like About Us, Flash News, Elected Representatives details, Information to Public, Gram Sabha details, Place of interest in the portal
iii. Updation of content like G.O. to public interest, Employee Details, Any Related Links, FAQs, Area Map, Tender Notifications, Transport Facilities available

Only 17.1% GPs were found implementing all the 3 attributes; 6% GPs were implementing any two key attributes, 13.1% GPs were implementing any one key attribute and 63.6% GPs have not implemented any of the aforementioned attributes. However there are instances

where the GPs have, on their own initiative and from their resources created website for the panchayat.

Training

54.5% GPs have never been trained on National Panchayat Portal; 30.3% GPs have been trained 6 months or earlier on the application. 56.6% GPs have expressed the need for additional training on the application.

Issues

The following technical/functionality issues pertaining to National Panchayat Portal have been observed/ reported by the States/UTs in the survey:

i. The existence of the GP level website on NPP is not known to many Panchayat Functionaries.

ii. The data is not being populated because of lack of awareness and also because the operators have not been told to populate the same

iii. The information sharing possibilities were not known nor understood by the functionaries nor were they sure as to what all information could be filled

iv. Apprehensions about its usage. Well-endowed GPs were having their own GP level website developed by a private person and maintained sometimes by a local youth. The need for populating NPP generated website was not felt. The local site gives a local language interface.

3.6 Local Government Directory

Usage of Local Government Directory /Equivalent State Application

32 states out of the 35 State/UTs surveyed are using Local Government Directory. 1 state i.e. Madhya Pradesh is using state specific application equivalent to LGD. 1 state/UT is neither using LGD nor a state specific application equivalent to LGD. The following matrix captures the State/UT wise usage of Local Government Directory /Equivalent State Application, as observed in the Panchayats visited by the study team.

The reasons for States which are not using LGD are given in the remarks column below:

Table 17 - State /UT wise usage of local government directory

State/UT	Using LGD	Not using PES but using State Specific Application equivalent to LGD	Neither using PES nor State Specific Application equivalent to LGD
A&N Islands	✓		
Andhra Pradesh	✓		
Arunachal Pradesh	✓		
Assam	✓		
Bihar	✓		
Chandigarh	✓		
D&N Haveli	✓		
Daman & Diu	✓		
Goa	✓		
Gujarat	✓		
Haryana	✓		
Himachal Pradesh	✓		
Jharkhand	✓		
Karnataka	✓		
Kerala	✓		
Lakshadweep	✓		
Madhya Pradesh		✓	
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram	✓		
Nagaland	✓		
Orissa	✓		
Puducherry	✓		
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamilnadu	✓		
Telangana	✓		
Tripura	✓		
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal	✓		
Total	**31**	**1**	**1**

Last Updated

Of the 99 GPs surveyed, 28 GPs data has been updated at their State level on Local Government Directory /equivalent State application, as on the date of the survey. This figure includes the Panchayats who did not initiate the use of Local Government Directory/ equivalent state application. This figure includes the Panchayats who have not initiated the use of Local Government Directory /equivalent state application.

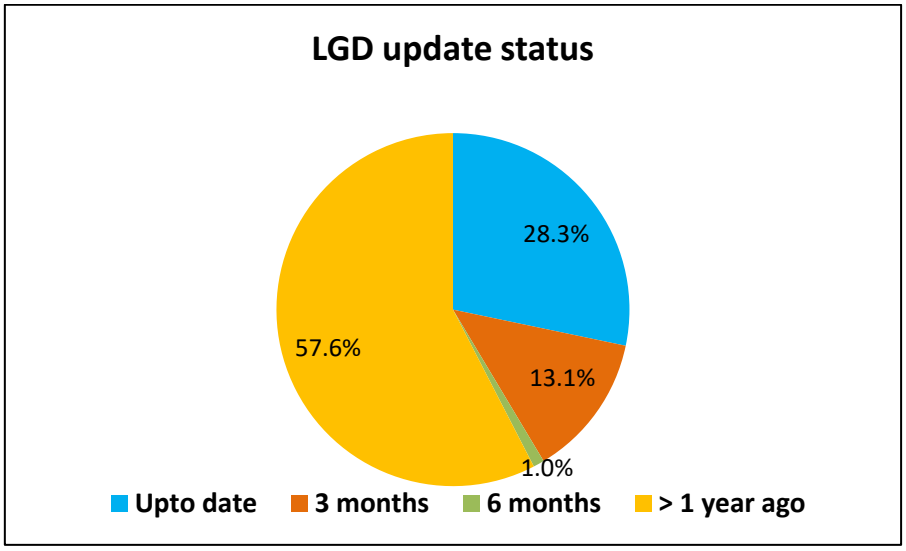


Fig. 18 - Last updation on LGD

Implementation of Key Features of Local Government Directory

The Panchayats surveyed were examined on their implementation of 5 key attributes of Local Government Directory /equivalent state application i.e.

(i) Creation of villages and panchayat etc.

(ii) Entries of elected members details

(iii) Entries of PRI Local Bodies details

(iv) Entries of local government bodies and its mapping with constituting land

(v) Upload of support documents (GO's)

Only States with 13 GPs were found implementing all the 5 attributes; there were 14 GPs implementing 3 attributes and 12 GPs implementing less than 3 attributes. 60GPs have not

implemented any of the aforementioned attributes. The GP updation were done at the state level.

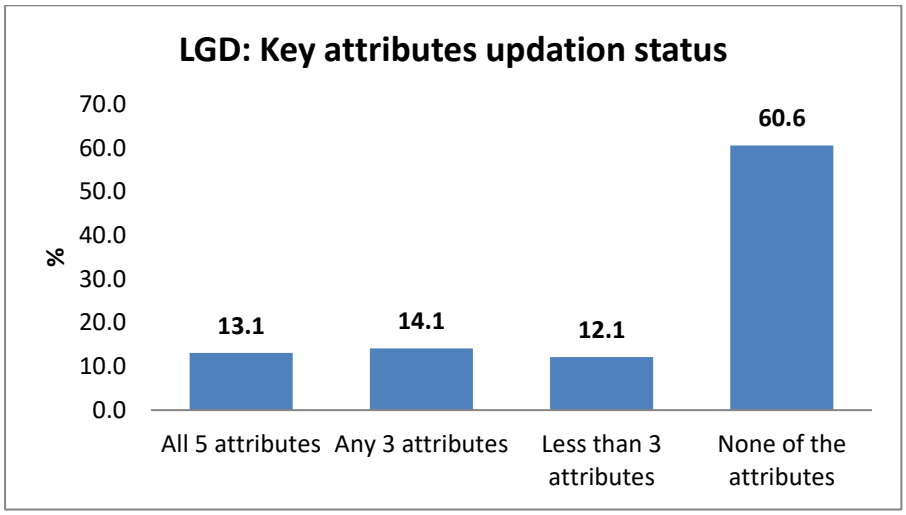


Fig. 19 - Implementation of Key Attributes of Local Government Directory

Training

64.6% GPs have never been trained on Local Government Directory; 24.2% GP personnel have claimed to have been trained 6 months or earlier on the application. A total of 54.5% GP level personnel have expressed the need for additional training on the application.

3.7 Area Profiler

Usage of Area Profiler /Equivalent State Application

19 states out of the 35 State/UTs surveyed are using Area Profiler. 1 state i.e. Tripura is using state specific application equivalent to AREA PROFILER. 13 states/UTs are neither using AREA PROFILER nor a state specific application equivalent to AREA PROFILER. The following matrix captures the State/UT wise usage of Area Profiler /Equivalent State Application, as observed in the Panchayats visited by the study team.

Table 18 - State/UT wise usage of area profiler/ equivalent

State/UT	Using Area profiler	Not using PES but using State Specific Application equivalent to Area profiler	Neither using PES nor State Specific Application equivalent to Area profiler
.	✓		
Andhra Pradesh	✓		
Arunachal Pradesh			✓
Assam	✓		
Bihar			✓
Chandigarh			✓
D&N Haveli			✓
Daman & Diu			✓
Goa			✓
Gujarat	✓		
Haryana	✓		
Himachal Pradesh	✓		
Jharkhand	✓		
Karnataka	✓		
Kerala	✓		
Lakshadweep			✓
Madhya Pradesh			✓
Maharashtra	✓		
Manipur	✓		
Meghalaya			✓
Mizoram			✓
Nagaland			✓
Orissa			✓
Puducherry			✓
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamilnadu	✓		
Telangana	✓		
Tripura		✓	
Uttar Pradesh	✓		
Uttarakhand	✓		
West Bengal	✓		
Total	**19**	**1**	**13**

Last Updated

The data analysis of Area Profiler/equivalent State application shows 26% of GPs have updated data. 8% GPs had updated the data 3 months ago, 4% GPs have reported having updated the data on AREA PROFILER 6 months ago. 62%GPs had not updated Area Profiler /equivalent state application for over a year. This figure also includes the Panchayats who have not initiated the use of Area Profiler /equivalent state application.

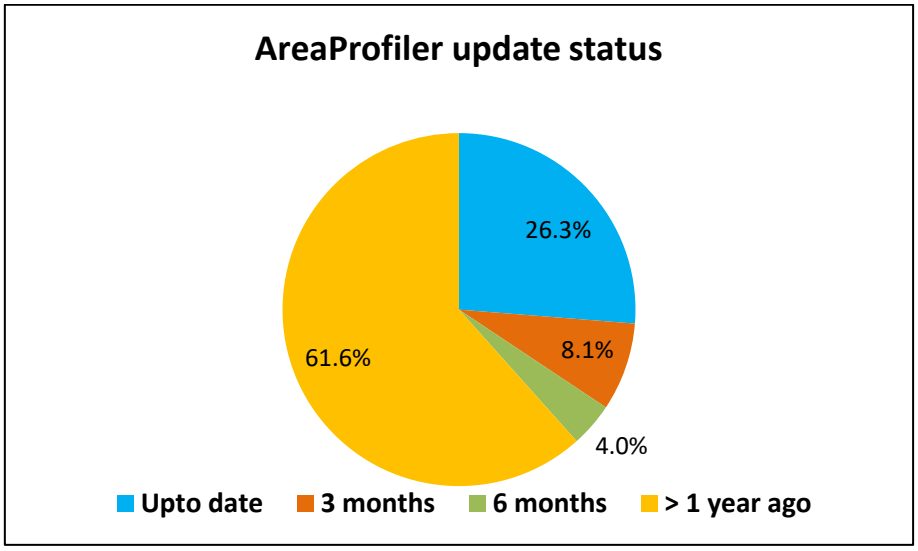


Fig. 20 - Last updation on Area Profiler by GPs

Implementation of Key Features of Area Profiler

The Panchayats surveyed were examined on their implementation of 5 key attributes of Area Profiler /equivalent state application i.e.

(i) Entries of Village infrastructure, tourist places, etc.

(ii) Entries of family register details

(iii) Track the Village Demographic details

(iv) Entries of Basic Statistics for Local Level Development like Demographic (BSLLD) status of villagers, land utilization, livestock & poultry

(v) Entries of elected member details

Only 5.1% GPs were found implementing all the 5 attributes; there were 23.2% GPs implementing 3 attributes and 11.1% GPs implementing less than 3 attributes.60.6%GPs have not implemented any of the aforementioned attributes.

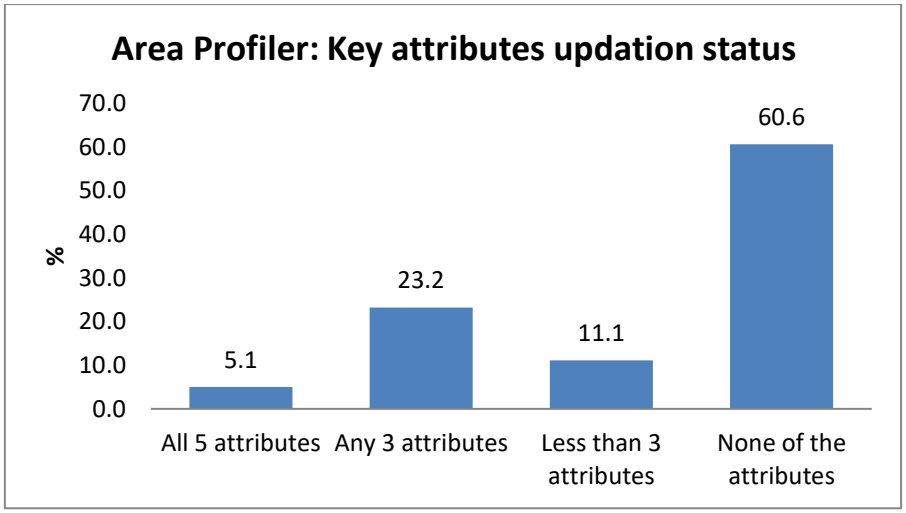


Fig. 21 - Implementation of Key Attributes

Training

60.6% GPs have never been trained on Area Profiler; 24.2% GPs have been trained 6 months or earlier on the application. 51.5% GPs have expressed the need for additional training on the application.

Issues in Area Profiler

The following issues pertaining to Area Profiler have been observed/reported by the States/UTs in the survey:

i. Officers felt that there is a lot of repetition and duplication of information / data being captured in India at the moment.

ii. Aadhaar / Bank linkage / demonetization all seem to capture similar data. Too much of data of people and places are being put on websites. This makes one uncomfortable.

3.8 Social Audit and Meeting Management (SAMM)

When the project started, the Social Audit and Meeting Management was a single application. Presently

Sakarma (Kerala)

Sakarma is a State specific application of Kerala containing the features of SAMM; key features include online and SMS notification of meeting, uploading of minutes of meetings etc. The minutes of the meeting are kept on the portal for public view.

Social Audit and Meeting Management has been segregated into two separate applications Social Audit application and Meeting Management application Social Audit covers record keeping of the number of social audits conducted by the GP. The Meeting Management Portal captures minutes of the meeting which includes venue, logistics and resource persons management, agenda setting, record keeping of the number of participants etc.

Social Audit: Facilitate Social Audit process by providing requested information to Social Auditor, Capture Audit Report and Action Taken by Panchayat / Local Body. Social Audit process involves Auditing of various schemes by Social Auditor and Social Audit Facilitator and submission of audit report. SAMM aims to understand, measure, verify work under different schemes done by the Panchayat and further to improve social performance of respective Panchayats.

Meeting Management: Manage and Maintain Standing/General or Gram Sabha Meeting Notices& Minutes held in Panchayats / Local Bodies. Management of meetings at panchayat level to enable transparent and user friendly flow of system. Captures details of statutory meetings held at ZP/BP/GP levels and prepares reports for social audit.

SAMM aimed at capturing Local Governance Accountability. The central concern of a social audit is how resources are used for social objectives. SAMM also hosts the names of persons who register themselves as Resource Persons. It thus has a bank of resource persons available locally as well as from reputed institutes. This is a self-declared registration portal for resource persons keen on training the GP level functionaries, ERs and Citizens.

According to the Adoption Report[14], the usage of SAMM is as follows: In Panchayat Local Bodies (GP), only two states have used SAMM. They are:

i. Maharashtra : 183 out of 28029 GPs have used SAMM i.e., 0.65%

ii. Uttarakhand : Here, only 1 GP out of 7970 GPs have used SAMM i.e., 0.01%

At the Block / Taluka level, three states have used SAMM. They are:

i. Maharashtra: Here, 91 out of 351 mandals have used SAMM i.e., 25.93%

ii. Telangana : Here, 1 out of 438 are using SAMM i.e., 0.23%

iii. Uttarakhand: Here, 1 out of 95 are using SAMM i.e., 1.05%

[14] as on 14th Oct, 2016

At the District level, 9 states have populated SAMM. They are as follows:

i. Assam : Here, 1 out of 21 districts are using SAMM i.e., 4.76%

ii. Chhattisgarh: Here, 2 out of 27 are using SAMM i.e., 7.41%

iii. Jharkhand: 3 out of 24, i.e., 12.5%

iv. Maharashtra : 28 out of 34 i.e., 82.35% are using SAMM

v. Manipur : 1 out of the 4 districts are using SAMM i.e., 25%

vi. Rajasthan : 1 out of the 33 districts are using SAMM i.e., 3.03%

vii. Telangana : 1 out of 9 districts are using SAMM i.e., 11.11%

viii. Tripura : 4 out of the 8 are using, i.e., 50%

ix. Uttarakhand : 1 out of the 13 are using SAMM i.e., 7.69%

Usage report as generated from the PES website shows the following:

Total No of Social Audit Process initiated by panchayats - 6582

Total no. of Social Auditors applied - 219

Total no. of Social Auditors approved by panchayats - 105

Total no. of Social Auditors needs approval - 113

Issues

This application sees less usage as it overlaps with Social Audits taken up mandatorily under the MNREGA Scheme and are already recorded on the RD website. Thus there is tendency to confuse the social audits under MNREGA for SA under PRI. Further this application may be either integrated with MNREGA or it may be termed differently as Gram Sabha Meeting Management (GSMM) for better clarity.

3.9 Training Management Portal (TMP)

Training Management Portal is meant to address the training management need of the government organizations.

i. It helps organizations in capturing the Training demands/needs of the Elected Representatives and officials.

ii. Such detailed need capturing of training can lead to sizing the demand and preparation of training calendar and resource estimation.

iii. The training management portal also allows Resource Persons and Training Agencies to register with it (Provider agency).

iv. Agency registration includes the sharing of information on training venue, infrastructure, thrust areas, faculty, resource material availability etc.

v. Once the training calendars are published, it facilitates the Training organizations (i.e. Providers) in following up of the activities leading to organization of training.

vi. The portal acts as a single platform for consumers(trainees) and providers to know demand and supply and facilitates the intermediate processes including registration, alerts, nomination, attendance of trainees in a course, certificate generation, feedback etc.

The Training Management Portal (TMP) is designed to capture information / data related to the training organized by the Ministry as well as the State Institutes of Rural Development (SIRD) and sub-district level trainings organized by the PR department of the respective State. Trainings have been conducted for State.

As per the online Training Management Portal of PES, about 269 trainings have been provided in a decentralized manner in between 2014-2016. The number of trainings on the various PES applications imparted is been depicted in the following graph:

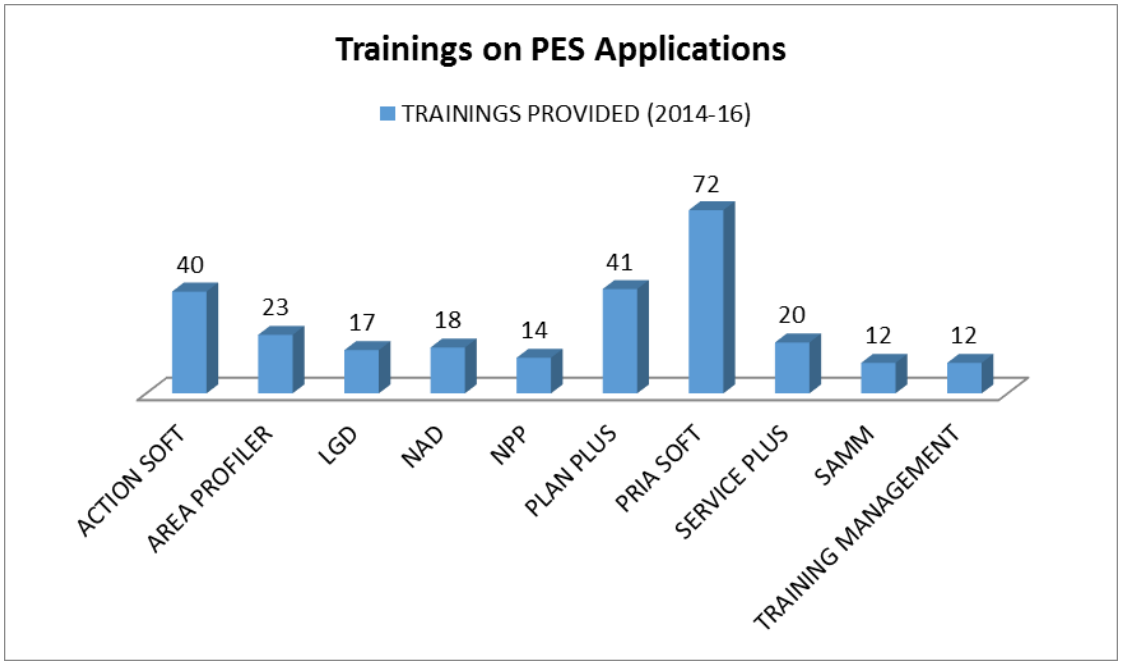


Fig. 22 - Training on PES applications

Source: http://www.trainingonline.gov.in

Trainings have by and large been concentrated at the State level and in few instances involved the district level officials and operators. The PES applications being the entry point for ICT at the GP level, it is expected that training percolates to the lower levels and trainings are held for the Panchayat functionaries and the elected representatives at the local level. This will ensure that e-enablement of panchayat functions are taken forward. Ownership of the ICT and its usage is dependent on the constituent stakeholders of its benefits adopt it as a way of life and carry it forward. It may be said that promotion of e-payments at the local level could provide the necessary fillip to take forward the PES / State specific applications further.

Trained Status and additional requirement

1. **Plan Plus (PP):** Personnel from37% of GPs received training on Plan Plus about 6 months ago. In 38% GPs the personnel reported of not been trained on Plan Plus and that they have learnt through upload of plans on the job. In nutshell, personnel in 16% GPs have expressed the need for additional training on the Plan Plus application for them to be able to handle it better. The above percentage do not include trainings imparted by the States to their personnel on State specific applications.

2. **PRIASoft (PS):** Personnel from 9% GPs claimed to have received training on PRIASoft as recently as one month prior to the survey; 38% GPs claimed to have been trained 6 months ago or earlier; 29% GPs have not received any training on the application yet. This is a huge capacity gap that needs to be addressed urgently. However where states / UTs are utilizing their state specific ICT for Accounting purposes, the above data does not reflect them. The personnel here are well versed with handling the state application and have been trained by the State department and the State Institute for Rural Development.

3. **Local Government Directory (LGD)**: Personnel of 64% GPs have never been trained on Local Government Directory; 24% GPs have been trained 6 months or earlier on the application. 54% GPs have expressed the need for additional training on the application.

4. **National Asset Directory (NAD)**: Personnel and functionaries of 53% GPs have never been trained on National Assets Directory; 29% GPs have been trained 6 months or earlier on the application. 48% GPs have expressed the need for additional training on the application

5. **National Panchayat Portal (NPP)**: 54% GPs have never been trained on National Panchayat Portal; 30% GPs have been trained 6 months or earlier on the application. 56% GPs have expressed the need for additional training on the application

6. **Area Profiler (AP):** About 60% personnel at GP level have never been trained on Area Profiler; 24% GPs have been trained 6 months or earlier on the application. 51% GPs have expressed the need for additional training on the application.

7. **ActionSoft (AS)**: In all, 64% GPs have never been trained on ActionSoft; 10% GPs have been trained 6 months or earlier on the application. 42% GPs have expressed the need for additional training on the application.

8. **Social Audit and Meeting Management (SAMM):** Most personnel of GPs have heard about Social Audit, but in the context of NREGS, not as an ICT application under PES

9. **Training Management Portal (TMP):** As the training institutes are imparting training and managing TM Portal, the personnel looking after the data input have not come across TMP

3.10 Service Plus

The service plus application encapsulates the service delivery aspects of Panchayat and their level of citizen interface. Service Plus provides a single metadata based portal to citizen and government where any service can be defined, accessed, delivered and monitored. As per the field visit, the following table gives details of States using Service Plus, State Specific Initiatives and CSC's.

Table 19 - State/UT Specific Initiatives and CSCs

State/UT	Using Service Plus	Not using Service Plus but using State Specific Application/CSC equivalent to Service Plus	Neither using Service Plus nor any State Specific Application /CSC equivalent to Service Plus	Remarks
A&N Islands		✓		1. CSC 2.www.andaman.gov.in
Andhra Pradesh		✓		MeeSeva
Arunachal Pradesh				Neither using Service Plus nor any other online service delivery model
Assam		✓		Common service centers
Bihar		✓		e-Municipality Bihar
Chandigarh			✓	Neither using Service Plus nor any other online service delivery model
Chhattisgarh			✓	Neither using Service Plus nor any other online service delivery model
Dadra & Nagar Haveli		✓		Saral Seva Kendras (CSC)
Daman & Diu		✓		Saral Seva Kendras (CSC)
Goa		✓		Common service centres
Gujarat		✓		E-Mitra
Haryana				Neither using Service Plus nor any other online service delivery model
Himachal Pradesh		✓		1. www.digitalseva.csc.gov.in 2. www.lmk.gov.in 3. www.parivar 4. www.edistrict
Jammu &			✓	Neither using Service Plus nor any

Kashmir				other online service delivery model
Jharkhand		✓		E-District
Karnataka		✓		Panchatantra
Kerala		✓		Sevana Civil Registration
Lakshadweep		✓		CSC
Madhya Pradesh		✓		Panchayat Darpan
Maharashtra		✓		Neither using Service Plus nor any other online service delivery model
Manipur	✓			But not fully
Meghalaya		✓		Common service centres and Rainbow centres
Mizoram		✓		e-District
Nagaland			✓	Neither using Service Plus nor any other online service delivery model
Odisha		✓		Jan Kendra Seva (CSC)
Puducherry		✓		Birth and Death Information portal
Punjab		✓		E-district
Rajasthan		✓		E-Mitra
Sikkim				Neither using Service Plus nor any other online service delivery model
Tamil Nadu		✓		1. http//tnrd.gov.in 2. http//tngis.tn.gov.in 3. http//ammacallcentre.tn.gov.in 4. http//cmcell.tn.gov.in 5. CSC
Telangana		✓		MeeSeva/T Seva
Tripura		✓		e-District
Uttar Pradesh		✓		E-district
Uttarakhand		✓		CSC
West Bengal		✓		Gram Panchayat Management System
Total	1	27	1	

Among the states visited, Manipur is using Service Plus; remaining states are using either State Specific Initiatives or CSC's for the Service delivery. E-Services provided to the local residents are as follows:

Table 20 - State/UT wise e-services

S.No.	State/UT	e-Services Provided		
		Within the Panchayat Bhawan/Premises	Outside the Panchayat Bhawan/Premises	e-Services were not Provided in the locality
1.	A&N Islands	✓	✓	
2.	Andhra Pradesh	✓	✓	
3.	Arunachal Pradesh			✓
4.	Assam	✓	✓	
5.	Bihar		✓	
6.	Chandigarh	✓	✓	
7.	Chhattisgarh			✓
8.	Dadra and Nagar Haveli	✓		
9.	Daman and Diu	✓		
10.	Goa	✓		
11.	Gujarat	✓		
12.	Haryana			✓
13.	Himachal Pradesh	✓	✓	
14.	Jammu & Kashmir			✓
15.	Jharkhand	✓	✓	
16.	Karnataka	✓	✓	
17.	Kerala	✓	✓	
18.	Lakshadweep	✓	✓	
19.	Madhya Pradesh	✓	✓	
20.	Maharashtra	✓	✓	
21.	Manipur	✓		
22.	Meghalaya	✓	✓	
23.	Mizoram	✓	✓	
24.	Nagaland			✓
25.	Odisha	✓	✓	
26.	Puducherry	✓		
27.	Punjab	✓	✓	
28.	Rajasthan	✓	✓	
29.	Sikkim	✓	✓	
30.	Tamil Nadu	✓	✓	
31.	Telangana	✓	✓	
32.	Tripura	✓	✓	
33.	Uttar Pradesh	✓	✓	
34.	Uttarakhand	✓	✓	
35.	West Bengal	✓	✓	

4. IMPACT ASSESSMENT OF PES/STATE SPECIFICICT APPLICATIONS

4.0 Snapshot of PES adoption

A cursory look at the PES adoption status in the country shows a non-uniform adoption of applications made by the various States / Union Territories, presumably based on their needs and local level requirements.

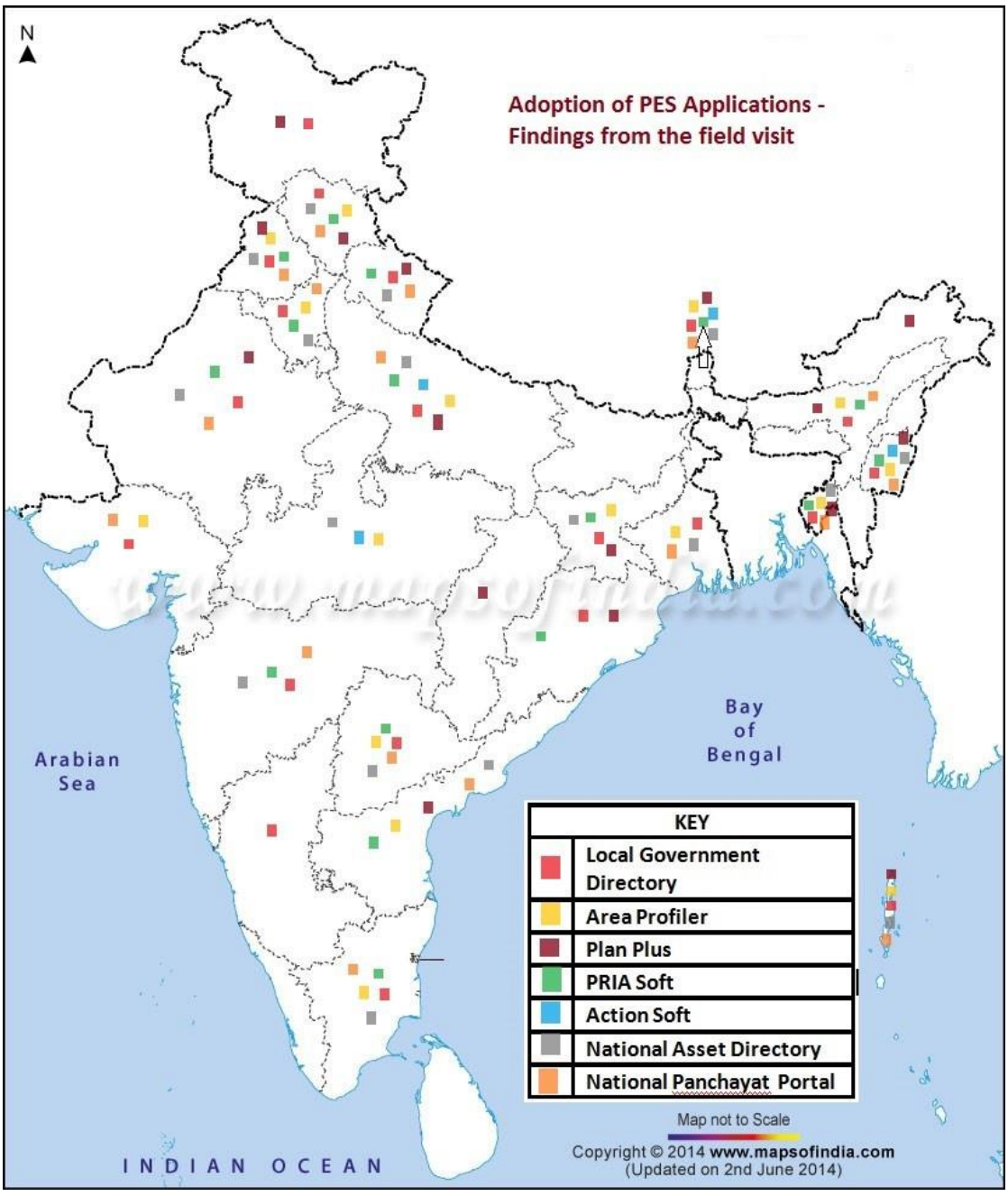


Fig. 23 - Adoption of PES Application - From the Field

Table 21 - PES Application Status (%)

PES applications adoption status (%)									
PES applications	GP			Block			District		
	Total	Adopted	%	Total	Adopted	%	Total	Adopted	%
Action Soft	99	37	37.4	69	32	46.4	68	27	39.7
Area Profiler		63	63.6		50	72.5		43	63.2
Local Government Directory (LGD)		61	61.6		51	73.9		43	63.2
National Asset Directory (NAD)		57	57.6		45	65.2		39	57.4
National Panchayat Portal (NPP)		60	60.6		48	69.6		40	58.8
PlanPlus		70	70.7		57	82.6		47	69.1
PRIASoft		74	74.7		60	87.0		50	73.5

The aim of PES applications implementation is to digitalize the work being done at different Panchayat levels and to bring in Accountability, accuracy and consistency among the reported data in the PES applications. As one of the study objectives is to look the attributes of data, the study attempted to measure the key attributes of data like Data Completeness, Data Accuracy, Data Consistency and Real time Capturing.

As we know that, some states adopted PES applications and some states are using the State specific applications. The above-mentioned key data attributes has been measured for all the PES and State specific applications. PES applications and State specific applications similar PES like PRIASoft, PlanPlus and NAD were looked during the study as these applications have some records/register/reports available to cross check the data, which have been keyed into PES/State specific applications.

Based on the verification of physical register/record with the online PES/State specific application data, the data attributes were measured.

Out of the 10 applications under PES, maximum usage has been found to be in Plan Plus and PRIASoft. This is owing to prioritisation given to streamlining of the accounts of Panchayats and preparation of bottom-up plans for execution.

In addition, the fund disbursement under the Fourteenth Finance Commission (FFC) directly to the Gram Panchayats warrants streamlining of the processes of fund utilisation so that the desired outcomes of fund disbursement are met to the satisfaction of the primary stakeholders and with the spirit of good local governance intact.

On factors affecting PES Implementation

i. Ninety three percentage of GPs surveyed have reported having their own Panchayat building;
ii. Internet connectivity at the GP level was found to be a factor affecting implementation of the applications in the present survey. While the ground work for National Fibre Optics Network (Bharat Net) appears to be in place, its operationalization is yet to begin. As such, in many States/UTs surveyed, the entry of GP level data is carried out at the Block level Panchayat (which has better internet connectivity);
iii. Sixty five percentage of the GPs have reported having 24 hours power supply, including through alternate power sources (like solar plant, inverter etc.);
iv. There is an acute shortage of functionaries critical to PES implementation viz. Panchayat Secretary and Computer Operator;
v. Awareness of PES among elected representatives is low. Only thirty four percentage of them were aware of PRIASoft. The proportions are much lower for the other PES applications;
vi. Citizens' awareness of PES was poor; only 20% of the surveyed persons were aware of the existence of a website of their GP; 70%of the citizens surveyed reported participating in the Gram Sabha; however, only 27% of them reported verifying GP plans against their implementation status and only 17% reported verifying the assets against those reported by the GP.

Ranking Performance of GPs

Based on the parameters of 'frequency of updation' and 'extent of implementation of key attributes', a numeric 70 point scale was devised and based on tertile distribution, the GPs have been classified as 'High', 'Medium' and 'Low' on performance. The following graph presents ordinary, BRGF and scheduled GP wise performance grading of GPs:

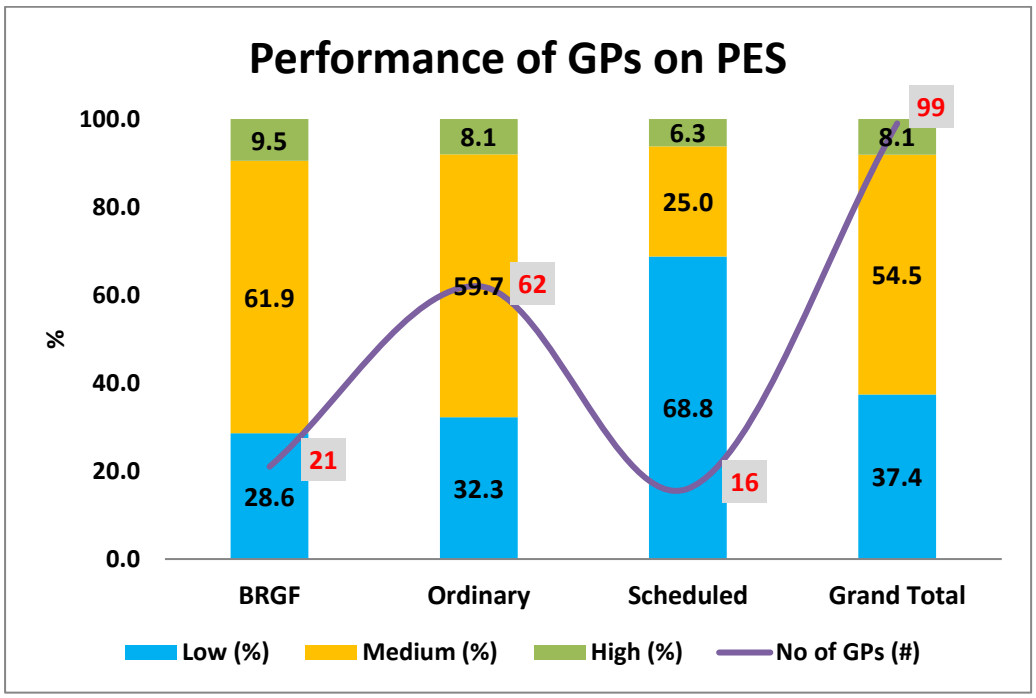


Fig. 24 - Performance of GPS on PES (%)

4.1 Impact assessment

Assessing the Impact of PES /State specific ICT application

Approach[15]

It was submitted that optimal '**usage**' of PES applications would lead to the desired outcomes as envisaged in the objectives of the e-Panchayat Mission Mode Project viz. automation of internal work flow of the panchayats, improving citizen service delivery, improving efficiency, transparency, accountability of panchayats etc. Therefore it was suggested that 'usage' be considered as proxy indicator of impact.

[15] CGG submitted a PES measuring note to MoPR on a proposed State / UT self-declaration approach to assessing the impact of PES by the States / UTs, for impact assessment for Objective 1 of the ToR: 'Impact assessment of PES applications as well as state specific applications (on a scale of 1-10) '.

In pursuance of the same, the approach adapted to assessing the impact of PES applications has been one of assessing their usage. While usage has a different meaning ranging from the preliminary using of the application to populate it with data / information as an input, it also means usage of the data thus filled in for reviewing plans, policies and decision support. In the present context usage is the initial part of usage viz. filling in data / information.

An important measure of advanced usage of PES/ State specific ICT applications is that the data is available in the public domain for public viewing. This is an important measure of practicing openness in the financial transactions, in conceiving action plans along with the budget, and in disclosing contact details of the elected representatives of the Panchayats for the citizens to approach.

Measuring Usage (For Applications: *PRIASoft, LGD and Plan Plus*):

As the data from the survey is limited to a few panchayats, it was thought necessary to measure the usage of the PES applications based on the combination of data from the survey as well as that pertaining to usage by all the panchayats in the states/UTs as obtained from PES reports on the website, available in the public domain. This approach of assessing the usage based on the aforesaid combined data sources has been adopted for PRIASoft, LGD and Plan Plus, as data of PES usage by all the panchayats is available only for these applications on the PES portal. This is an indication of the preferred usage based on need and an overall requirement for complying with set benchmarks by the Ministry.

Criteria for scoring based on data from PES portal (A):

The following data has been drawn from the PES portal:

i. Number of Gram Panchayats, as a proportion of total Gram Panchayats in the State/UT that have closed their yearbook 2015-16 and 2016-17. This data is used to assess the usage of PRIASoft /its equivalent State Specific Application.

ii. Number of GPDPs, as a proportion of total GPs in the State/UT, on Plan Plus/equivalent State Specific Application for 2015-16 and 2016-17. This data is used to assess the usage of Plan Plus or its equivalent State Specific Application.

iii. Proportion of Villages mapped to GPs. This data is used to assess the usage of LGD or its equivalent State Specific Application.

For the above mentioned data pertaining to PRIASoft and Plan Plus, the average score of the two years under consideration has been taken as the final score.

Maximum marks allotted to this component i.e. usage assessed from the data taken from PES portal is Five for each of the three above mentioned applications.

Criteria for scoring based on Survey data (B):

The method adopted to measure usage from survey data is similar to that discussed for Performance measurement tool with slightly different score allocation, as discussed below:

i. Frequency of updation of the application – maximum of 1 mark for each of the three PES applications. The scores for different frequencies of updation are as follows:

Table 22 - Frequency of Updation

Frequency of updation	Score
36. Up to date	37. 1.0
38. Updated 3 months ago	39. 0.75
40. Updated 6 months ago	41. 0.50
42. Updated more than an year ago	43. 0

ii. Implementation of the identified key attributes – a maximum of 4 marks for each the 3 aforementioned PES applications.

Subject to all together conditions being the same, it is presumed that if the Panchayats are able to close their Year Books on PRIASoft (PES / SSA), early, it is a sign of prompt book-keeping and a measure of openness in keeping the data / information in the public domain. Similarly if the data is updated upto the last 3 months, then it is a measure of being considerably open in disclosure of financial information. If it is closed in the last 6 months, then it is relatively open and if it is lagging behind in uploading of data / information online for the last one year, it is a measure of less open.

In order to measure impact / outcomes of PES / State Specific ICT, it is necessary that the conditions of the deployment of ICT and access to all necessary conditions, of power, connectivity, manpower, trained personnel are all to be uniform across the universe.

However this is not to be in this particular survey. An attempt has however been made to assess impact based on the basic premise of usage at the preliminary level.

The scores of States / UTs for different levels of implementation of PES and its key defined attributes are given below:

Table 23 - Impact Measurement

PES Application	Attributes Examined	Max. cumulative marks	Per Attribute Score		
			Complete	Partial	Not implemented
PRIASoft	Whether all funded schemes to GP's been mapped in PRIASoft	4	1.33	0.67	0
	Whether entries into Receipt/Payment/Contra/Journal Vouchers are being done				
	Have you closed annual accounts in PRIASoft of financial year 2015-16				
Plan Plus	Whether resolution of the Gram Sabha is uploaded	4	0.8	0.4	0
	Whether Create/Update/Modify/Delete of Activity is being used				
	Whether Resource Envelope is created and used				
	Whether Create/Modify/Revert/Approve Planning is being used				
	Whether Gram Panchayat Development Plan is generated				
LGD	Whether Creation of villages and Panchayat etc. is done	4	1.33	0.67	0
	Whether Entries of elected members details is done				
	Whether Entries of PRI Local Bodies details is done				
	Whether Entries of local government bodies and its mapping with constituting land is done				
	Whether Upload of support documents (GO's) is being done				

The average of the scores attained by the GPs in a State/UT is taken to constitute the final score from the field survey for the state/UT.

Consolidated Score (A+B):

The consolidated score of usage of PRIASoft, Plan Plus and LGD is the sum of score attained in the score from the PES portal data and that from the survey data, totaling a maximum of 10 marks for each of the three applications.

Measuring Usage (For Other Applications: *ActionSoft, NPP, NAD and Area Profiler*):

As the data of PES usage by all panchayats for ActionSoft, NPP, NAD and Area Profiler is not available on the PES portal, the usage for these applications has been measured based solely on the data from the survey.

The method adopted to measuring usage is similar to that discussed in Performance measurement for arriving at the scores on a Ten Point Scale, as follows:

i. a maximum of Two marks for frequency of updation for each application

ii. a maximum of 8 marks for implementation of attributes for each application, with inter-se distribution being similar to that discussed in with reference to performance measurement

The average of the scores attained by the GPs in a State/UT was taken to constitute the final score from the field survey for the State/UT.

State wise Impact Assessment

In furtherance to the note submitted to the MoPR discussing CGG's proposed approach of considering 'usage' as a proxy indicator of impact, 7 PES applications have been rated on a Ten Point Scale in each of the State/UT surveyed. The following table contains the classification and colour coding of different scores.Based on tertile distribution, the scores of the State/UT have been divided into three parts and have been classified as being 'High', 'Medium' and 'Low' as follows:

TABLE 24 – USAGE BASED COLOUR CODES

Score	Usage	Colour Code
0 to 4	Low	Pink
4 to 7	Medium	Blue
7 and above	High	Green

Note: GPs using the PES application to at least one considerably acceptable level

TABLE 25 – STATE-WISE IMPACT ASSESSMENT

Rating of PES Applications in States/UTs on a 0-10 Point Scale*								
S.No	State/UT	Consolidated Online + Field data			Only Field data			
		PRIASoft	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*
1	Andaman & Nicobar Islands	0.0	1.6	8.1	0.0	4.8	8.0	0.0
2	Andhra Pradesh	5.8	7.1	5.4	0.0	6.4	5.5	5.5
3	Arunachal Pradesh	0.0	3.6	3.8	0.0	0.0	0.0	0.0
4	Assam	7.4	4.3	5.6	0.0	2.2	0.0	1.9
5	Bihar	0.0	0.0	5.0	0.0	0.0	0.0	0.0
6	Chandigarh	0.0	5.0	5.0	0.0	0.0	0.0	0.0
7	Chhattisgarh	1.9	3.5	5.0	0.0	0.0	0.0	0.0
8	Dadra and Nagar Haveli	0.0	0.0	5.0	0.0	0.0	0.0	0.0
9	Daman and Diu	0.0	0.0	2.7	0.0	0.0	0.0	0.0
10	Goa	0.0	0.0	5.0	0.0	0.0	0.0	0.0
11	Gujarat	N.Ad	1.0	7.5	2.0	4.0	8.0	3.3
12	Haryana	6.2	N.Ad	7.5	5.5	5.5	5.5	5.5
13	Himachal Pradesh	7.9	6.2	9.2	0.0	6.8	6.0	0.0
14	Jammu & Kashmir	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Jharkhand	6.7	N.Ad	7.3	0.0	3.9	N.Ad	4.0
16	Karnataka	N.Ad	N.Ad	7.8	N.Ad	4.7	4.8	6.9
17	Kerala	N.Ad	N.Ad	9.3	N.Ad	8.4	N.Ad	N.Ad
18	Lakshadweep	0.0	0.0	5.0	0.0	0.0	0.0	0.0
19	Madhya Pradesh	N.Ad	N.Ad	N.Ad	N.Ad	0.0	0.0	7.3
20	Maharashtra	4.6	1.7	6.7	1.7	5.2	3.2	6.7
21	Manipur	4.4	2.0	9.2	8.0	7.6	9.0	9.3
22	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Mizoram	0.0	0.0	3.8	0.0	0.0	0.0	0.0
24	Nagaland	0.0	0.0	3.8	0.0	0.0	0.0	0.0
25	Odisha	5.2	8.5	5.1	0.0	0.0	0.0	0.0
26	Puducherry	0.0	0.0	5.0	0.0	0.0	0.0	0.0
27	Punjab	3.8	0.0	8.7	0.0	6.0	7.5	8.7
28	Rajasthan	5.0	9.1	7.0	4.0	4.0	5.5	4.0
29	Sikkim	7.8	7.5	5.0	0.0	8.4	8.0	10.0
30	Tamil Nadu	8.2	N.Ad	8.1	2.8	8.7	6.7	9.1
31	Telangana	6.2	5.9	8.1	0.0	2.3	1.0	3.3
32	Tripura	9.2	4.7	4.8	0.0	N.Ad	0.0	0.9
33	Uttarakhand	6.3	6.8	9.2	0.0	4.4	3.3	6.7
34	Uttar Pradesh	6.4	7.3	6.8	8.5	0.6	5.3	2.1
35	West Bengal	N.Ad	N.Ad	10.0	N.Ad	5.3	N.Ad	N.Ad
***Note: Index: HIGH- Green (7 and above), MEDIUM - Blue (4 to 6.99), LOW Pink (below 4), N.Ad (Not Adopted) – Orange**								

Basis of Rating of PES applications in States/UTs on a 10 Point Scale

For rating the PES applications, each application have been given a maximum of 10 points. In each application, a set of key attributes were taken which will reflect the usage of application. These selected attributes were given weightage points which totals to minimum of zero and maximum of 10 points. A similar process is followed for scoring all the applications. Later stage, the arrived score is divided into three parts like Low, Medium and High usage. The applications which scored between 0 and less than 4 are rated as Low usage, applications scored between 4 and below 7 are rated as Medium usage and applications scored 7 and above are rated as High usage.

Since the PES applications data of all states is available on PES web portal, it is decided to give weightage to online portal PES data which has the application usage details and current progress status. Hence, a combination of online portal PES data and CGG field study data is taken consideration for the rating of the usage of PES applications. Depending on the availability of online portal PES data, two categories were formed. First category is a combination of **Consolidation of online + field data** and the second category is the **only field data** collected from study. Online data means, the data which is available in PES web portal on PES applications is taken into consideration for maximum of 5 points for rating the usage of PES applications. Field data means, the data collected through the field survey, given a weightage of 5 points for rating.

Consolidated online and field data: It is mix of above two online data and field data, which accounts for a maximum of 10 points (online data 5 points and field data 5 points).

For rest of the applications, as the data is only through CGG field study have been taken for 10 points rating as there is no sufficient data in online PES web portal to follow as above.

IMPACT ASSESSMENT OF STATE SPECIFIC INITIATIVES

For rating the State specific applications, key attributes from State specific applications, which are similar to PES and frequency of updation, are considered. Same rating pattern is followed as it is used to rate PES on a scale of 0 to 10.

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TABLE 26 - STATE/UT WISE STATE SPECIFIC APPLICATION

Rating of State Specific Applications on a 0-10 Point Scale*													
S.No	State/UT	Consolidated Field data											
		PRIASoft	***Plan Plus***	***LGD***	***Action Soft***	***Area Profiler***	***NAD***	***NPP***	***Social Audit***	***Meeting Management***	***Training Management Portal***	***Service Plus***	***GIS***
1	Andaman & Nicobar Islands	-	-	-	-	-	-	-	-	-	-	CSC 10.0	-
2	Andhra Pradesh	-	-	-	-	-	-	-	-	-	-	MeeSeva 10.0	-
4	Assam	-	-	-	-	-	-	-	-	-	-	CSC 10.0	-
5	Bihar	-	-	-	-	-	-	-	-	-	-	e-Municipality 10.0	-
7	Dadra and Nagar Haveli	-	-	-	-	-	-	-	-	-	-	SaralSeva Kendra 10.0	-
8	Daman and Diu	-	-	-	-	-	-	-	-	-	-	SaralSeva Kendra 10.0	-
9	Goa	-	-	-	-	-	-	-	-	-	-	CSC 10.0	-
10	Gujarat	Gram Soft 6.5	-	-	-	-	-	-	-	-	-	e-Mitra 10.0	-
11	Haryana	-	State Website for GPDP 4.8	-	-	-	-	-	-	-	-	-	-

12	Himachal Pradesh	-	-	-	-	-	-		-	-	-	1. Digital Seva, 2. LMK, 3. E-Parivar, 4. E-district 10.0	-
13	Jharkhand	-	GRAMTANTRA 5.2	-	-	-	Panchayat Bhavan 0.7	-	-	-	-	-	-
14	Karnataka	PANCHATANTRA 6.8	PANCHATANTRA 5.8	-	PANCHATANTRA 5.6	-	-	-	-	-	-	Panchatantra 10.0	-
15	Kerala	SAANKYA 10.0	Sulekha 4.4	-	Sulekha 10.0	-	SACHITRA 10.0	SANVEDITA 10.0	-	SAKARMA 8.0	-	Sevana - CR 10.0	-
16	Lakshadweep	-	-	-	-	-	-	-	-	-	-	CSC 10.0	-
17	Madhya Pradesh	Panchayat Darpan 7.5	Panchayat Darpan 5.7	Panchayat Darpan 4.9	PanchayatDarpan 10	-	-	-	-	-	-	Panchayat Darpan 10.0	-

18	Maharashtra	-	-	-	-	-	-	-	-	-	-	Sangram Soft 7.8	-
20	Meghalaya	-	-	-	-	-	-	-	-	-	-	CSC 10.0	-
21	Mizoram	-	-	-	-	-	-	-	-	-	-	e-District 10.0	-
23	Odisha	-	-	-	-	-	-	-	-	-	-	Jan Seva Kendra 10.0	-
24	Puducherry	-	-	-	-	-	-	-	-	-	-	Birth and Death portal 10.0	-
25	Punjab	-	-	-	-	-	-	-	-	-	-	e-District 10.0	-
26	Rajasthan	-	-	-	-	-	-	-	-	-	-	e-Mitra 10.0	-
28	Tamil Nadu	-	TNRD 10.0	-	-	-	-	-	-	-	-	e-district	TNGIS 10.0
29	Telangana	-	-	-	-	-	-	-	-	-	-	T Seva 10.0	-

30	Tripura	-	-	-	-	Electronic Record of Residence 10.0	-	-	-	-	-	-	-
32	Uttar Pradesh	-	-	-	-	-	-	-	-	-	-	e-District 10.0	-
33	West Bengal	Gram Panchayat Management System 10.0	GIS based Integrated Planning & Monitoring System 4.0	-	GIS based Integrated Planning & Monitoring System 0.0	-	GIS based Integrated Planning & Monitoring System 7.2	Gram Panchayat Monitoring System 10.0	-	-	Training Management 10.0	Gram Panchayat Management System 10.0	GIS based Integrated Planning & Monitoring System 10.0

***Note: Index: HIGH- Green (7 and above), MEDIUM - Blue (4 to 6.99), LOW Pink (below 4)**

TABLE 27–State/UT Specific Applications Corresponding to PES applications

State	*PRIA SOFT*	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*	*Social Audit*	*Meeting Management*	*Training Management Portal*	*Service Plus*	*GIS*
Andaman & Nicobar Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Andhra Pradesh	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Arunachal Pradesh		✓	✓		✓							
Assam	✓	✓	✓	✓	✓	✓						
Bihar	✓	✓	✓	✓	✓	✓						
Chandigarh		✓	✓									
Chhattisgarh	✓	✓	✓	✓	✓	✓					www.choice.gov.in	
Dadra and Nagar Haveli		✓	✓		✓	✓						
Daman and Diu			✓		✓							
Goa			✓		✓							
Gujarat	www.gujaratgram.in	✓	✓	✓	✓	www.gswan.gov.in ✓						

State	*PRIA SOFT*	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*	*Social Audit*	*Meeting Management*	*Training Management Portal*	*Service Plus*	*GIS*
Haryana	✓	State Website for GPDP ✓	✓	✓	✓	✓						
Himachal Pradesh	✓	✓	✓	✓	✓	✓						
Jammu & Kashmir		✓	✓	✓	✓	✓	✓					
Jharkhand	✓	✓Gram Tantra	✓	✓	✓	✓ Panchayat Bhavan	✓	✓	✓	✓	✓	
Karnataka	www.panchatantra.kar.nic.in	✓	✓	www.worksoft.kar.nic.in	www.panchatantra.kar.nic.in	www.panchatantra.kar.nic.in	www.panchatantra.kar.nic.in	www.panchatantra.kar.nic.in			www.panchatantra.kar.nic.in	
Kerala	www.finance.lsgkerala.gov.in	www.sulekha.lsgkerala.gov.in	✓	www.sochika.ikm.in	✓	www.infokerala.org/sachithra	www.infokerala.org/samveditha	www.infokerala.org/sakarma			www.cr.lsgkerala.gov.in	www.infokerala.org/sachithra
Lakshadweep			✓		✓							

State	*PRIA SOFT*	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*	*Social Audit*	*Meeting Management*	*Training Management Portal*	*Service Plus*	*GIS*
Madhya Pradesh	www.mppanchayatdarpan.gov.in	www.mpdecentralizedplanning.in	✓	www.mppanchayatdarpan.gov.in	✓						www.mponline.gov.in	
Maharashtra	✓	✓	✓	✓	✓	✓					www.sangram.mahaonline.gov.in	
Manipur	✓	✓	✓	✓	✓	✓	✓					
Meghalaya		✓	✓	✓								
Mizoram		✓	✓									
Nagaland	✓	✓	✓									
Odisha	✓	✓	✓	✓	✓	✓					www.edistrictorissa.gov.in	
Puducherry		✓	✓	✓		✓						
Punjab	✓	✓	✓	✓	✓	✓	www.pbrdp.gov.in	✓	✓	✓	✓	

State	*PRIA SOFT*	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*	*Social Audit*	*Meeting Management*	*Training Management Portal*	*Service Plus*	*GIS*
Rajasthan	✓	✓	✓	✓	✓	www.bhuvanpanchayat.nrsc.giv.in	www.rajpanchayat.gov.in	✓	✓	✓	www.emitra.gov.in	www.bhuvanpanchayat.nrsc.giv.in
Sikkim	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
Tamil Nadu	✓	✓ TNRD	✓	✓	✓	✓						www.tngis.tn.gov.in
Telangana	✓	✓	✓	✓	✓	✓	✓					
Tripura	✓	✓	✓	✓	✓							
Uttarakhand		✓	✓	✓	✓	✓	✓	✓	✓	✓		
Uttar Pradesh	✓	✓	✓	✓	✓	✓						
West Bengal	www.wbprdgpms.in	✓	www.gis.wbprd.gov.in ✓	✓	✓	✓	✓	✓			www.wbprdgpms.in	

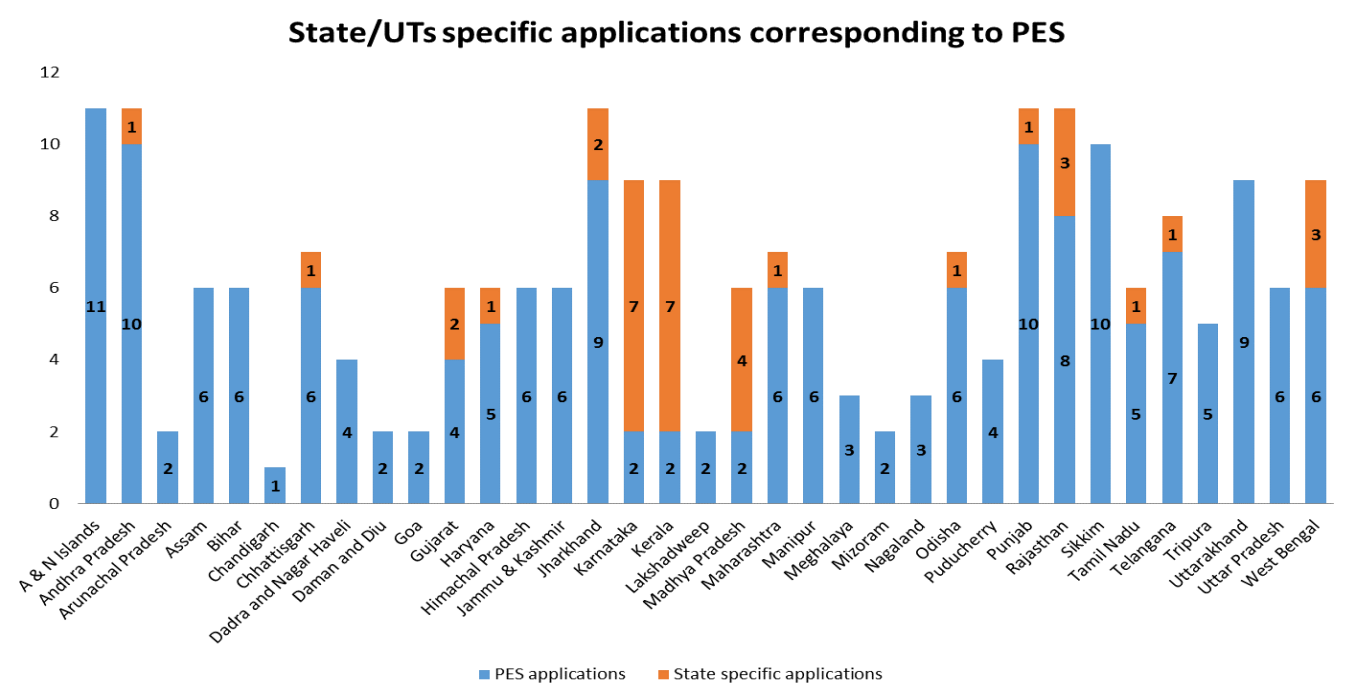


Fig. 25 – State/UTs specific application corresponding to PES

TABLE 28 - Directory of State Specific PES applications with functionality, URL

State	Functionality	State Specific Application Name	URL
Andhra Pradesh	Service Delivery	Mee Seva	http://www.meeseva.gov.in
Gujarat	Accounting	Gram Soft	www.gujaratgram.in
	Asset Directory	Gujarat Asset Management	www.gujaratgram.in/gam
Himachal Pradesh	PRI Representatives Training MIS		http://admis.hp.nic.in/pritrgmis/
Karnataka	Accounting, Asset Directory & Panchayat Websites	Panchatantra	http://panchatantra.kar.nic.in/stat/
	Monitoring of work	Work Soft	http://worksoft.kar.nic.in
	Service Delivery	Sakala	http://sakala.kar.nic.in/
Kerala	Accounting	Saankhya	www.finance.lsgkerala.gov.in
	Planning & Monitoring of works	Sulekha	http://www.plan.lsgkerala.gov.in/
	Asset Directory	Sachitra	http://www.infokerala.org/sachithra
	Service Delivery	Sevana	https://cr.lsgkerala.gov.in/
	Dynamic Website of Panchayats	Samvedhitha	http://www.lsgkerala.gov.in
	Social Audit	Sakarma	http://www.infokerala.org/sakarma

Madhya Pradesh	Accounting	Panchayat Darpan	http://www.mppanchayatdarpan.gov.in
	Decentralized Planning Application		http://164.100.196.97/spc/
Maharashtra	Service Delivery	SangramSoft	http://www.sangram.co.in
Tamil Nadu	Monitoring of works		http://www.tnrd.gov.in
Telangana	Service Delivery	Mee Seva	http://www.meeseva.gov.in
West Bengal	Accounting (for Gram Panchayats)	Gram Panchayat Management System (GPMS)	http://www.wbprdgpms.in/
	(For Panchayat Samities & Zila Parishad)	Integrated Fund Monitoring and Accounting System (IFMAS)	
	Maintaining of beneficiaries for National Social Assistance Program (NSAP)	SEBA	
	Service Delivery	GPMS	http://www.wbprdgpms.in/

Telangana State Specific e-Panchayat applications:

There are 2 Types of State Specific applications. They are:

1. Online Citizen Services
2. Department Modules

1. Online Citizen Services:

As a part of various innovative steps to promote e-Governance and delivery of services to the citizens online in a transparent manner, the PR Department, Government of Telangana has prepared a directory of Telangana State Specific application being used by the State are provided in the below mentioned services which are available on web site – "http://epanchayat.telangana.gov.in".

i. Layout Permission
ii. Building Permission
iii. Property/House Tax Assessment

iv. Building Mutation/ Transfer of building property

v. Trade License –New

vi. Trade License – Renewal

vii. Registration of Births and Deaths and Issuance of Certificates (Available on web site – "http://ubd.telangana.gov.in")

viii. Palle Pragathi (to measure Panchayati performance)

ix. Grama Jyothi (to synergise the developmental activities of the departments by achieving functional and financial convergence through the preparation of GPDPs. & Grama Jyothi intends to strengthen villages in areas like water and sanitation, health and nutrition, education, social security and poverty eradication, natural resources management, agriculture and infrastructure.)

x. Mee Seva/ T-Seva services

2. Department Modules

i. Panchayati Secretaries Performance Report Module

ii. Inspection Module – Inspection of Office of Gram Panchayat by Executive Officer (EO) & District Panchayat Officer (DPO), PR&RD.

iii. GP Expenditure Module

Table 29 - Facilities/functions available in e-Panchayat MMP, Telangana State

S. No	Name of the District	No. of Mandals	No. of GPs	No. of GPs having Computers	No. of GPs having Computers with Working Condition	No. of GPs having Internet Connection	No. of Operators working in the District
1	Adilabad	17	467	180	178	14	33
2	Bhadradri Kothagudem	21	479	190	168	65	55
3	Jagtial	18	380	189	154	33	40
4	Jangaon	12	281	138	121	16	18
5	Jayashankar Bhupalpalli	11	241	97	95	22	22
6	Jogulamba Gadwal	12	255	129	127	5	9
7	Kamareddy	22	526	240	195	62	56
8	Karimnagar	15	313	163	149	66	46

9	Khammam	20	584	374	362	117	75
10	Komarambheem Asifabad	15	334	104	104	24	27
11	Mahabubabad	16	461	193	180	60	28
12	Mahabubnagar	14	441	274	172	18	17
13	Mancherial	16	311	125	92	11	20
14	Medak	20	469	192	148	36	59
15	Medchal Malkajigiri	5	61	68	55	44	47
16	Mulugu	9	174	83	83	12	12
17	Nagarkurnool	20	453	223	210	6	263
18	Nalgonda	31	844	301	300	84	45
19	Narayanpet	11	280	22	19	12	11
20	Nirmal	18	396	149	115	19	44
21	Nizamabad	27	530	274	212	44	65
22	Peddapalli	13	263	134	134	22	32
23	Rajanna Sircilla	12	255	109	99	17	30
24	Rangareddy	21	560	261	202	77	70
25	Sangareddy	25	647	282	282	25	63
26	Siddipet	23	499	207	194	46	49
27	Suryapet	23	475	211	211	60	30
28	Vikarabad	18	565	164	96	43	26
29	Wanaparthy	14	255	130	125	125	20
30	Warangal Rural	16	401	67	67	9	18
31	Warangal Urban	7	130	187	163	20	30
32	Yadadri Bhuvanagiri	17	421	142	132	31	32

Source: PR&RE, Government of Telangana

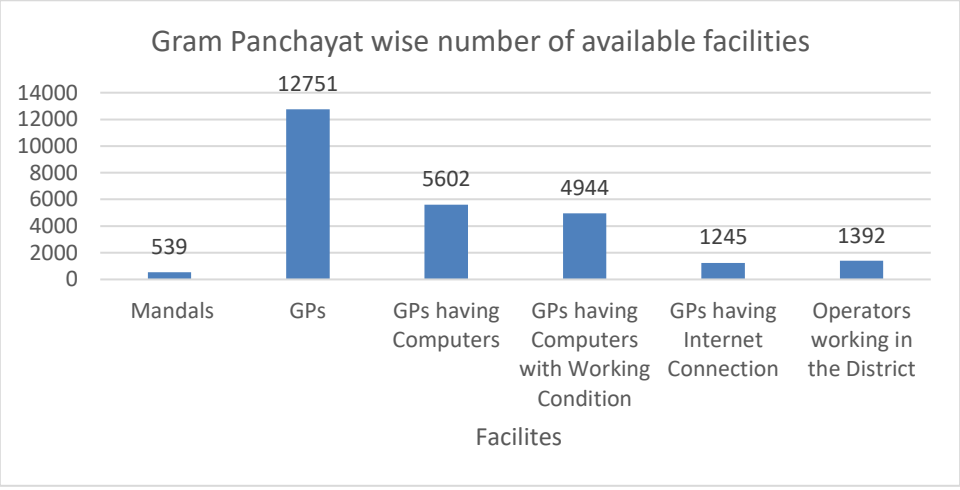


Fig. 26 – Gram Panchayat wise number of available facilities

As per the above figure illustrates that only 10 per cent of Gram Panchayats have sufficient supporting facilities/resources in the State.

Available IT resources at GPs - Telangana State Scenario

1. **Palle Samagra Seva Kendras (PSSK)** initiated to have a digital local governance that the Panchayat shall serve as a single window for providing through branchless banks e-panchayat service. Rural development activities like NREGS payments, SERP services, financial services, etc. at the level of GPs. The objective is to facilitate availment of the above services in the ease and at their door step transparency and removing hassle of approaching different departments/offices to meet their requirements. The model provides impetus to the objective of the National e-Governance Plan that envisages making all the Government services available to the citizens of India via electronic platform. It envisages addressing the present hardships in availing pensions and insurance services , utility payments, and MeeSeva services etc., through 'branchless banking' by opening Palle Samagra Seva Kendralu as service delivery points with appropriate technology and to emerge into a full-fledged "one stop financial services centre" at village itself. One stop shop will serve as an insurance against ignorance of the poor in the villages as then centres can also be used as knowledge disseminates It will bring about a revolutionary transformation in the villages and would ensure availability of the services and also effective implementation. Village Level Entrepreneurs will run the One Stop Shop Centres on self-sustainability model. These centres, usher in a new era in the implementation of all the Government schemes and brings required co-ordination among all the department concerned and thus would be a game changer in rural development in providing services at the village level. The beneficiaries are also will be able to get their grievance redressed without moving from pillar to post. It creates very congenial environment in the villages for the citizen to come out of the ignorance of the various services and schemes available from the Government. There will be absolutely no scope for middlemen who will exploit the gullible poor in the villages.

2. **Palle Pragathi**: Palle Pragathi initiated to have the status of sanitation, cleanliness and the need for greening of the villages has been engaging the attention of the Government of Telangana. Over a period of time, the levels of sanitation, garbage collection and its safe disposal, the status of power distribution infrastructure has fallen, causing avoidable hardships to rural population. With a view to improve the situation in the Gram Panchayats and put in place systems for sustainable cleanliness of villages, the Government of Telangana has launched a state wide Palle Pragathi Program in all Gram Panchayats between 6th September 2019 to 5th October 2019. One of the key objective of Palle Pragathi is to incorporate the availability of internet services through Bharat-Net in the selected Gram Panchayats and its implementation in use of PES applications (Analyze sample for at-least one State).

Internet Services through Bharat-Net in GPs across States

Bharat-Net is a highly scalable network infrastructure accessible on a non-discriminatory basis, to provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households and on demand capacity to Gram Panchayats and all institutions, to realize the vision of Digital India, in partnership with States and the private sector with an objective to facilitate the delivery of e-governance, e-health, e-education, e-banking, e-commerce, Internet and other services to the rural India.

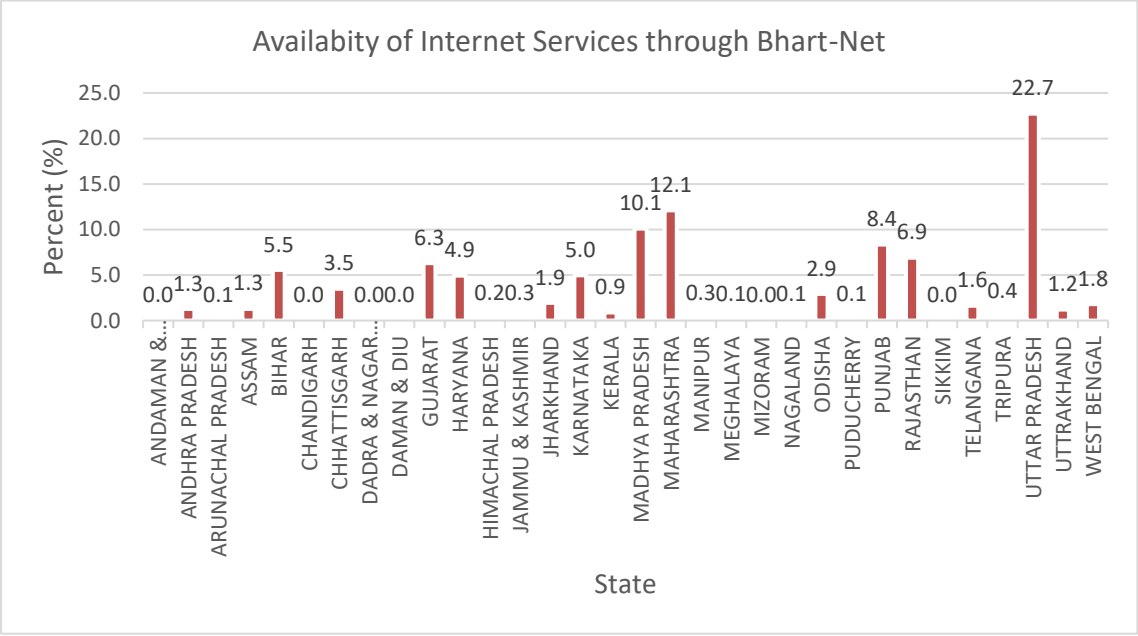


Fig. 27 – State wise availability of internet services through Bharat-Net in GPs

Figure 27 shows that the Uttar Pradesh, Maharashtra, Madhya Pradesh, Punjab, Rajasthan, Gujarat, Bihar, Karnataka, Haryana, Chhattisgarh, Odisha States have availability of internet services through Bharat-Net in the Gram Panchayats when compared to the other States. Consequently, an emergent need of services beyond GPs through 'hot spot' and other broadband technologies for better integration and alignment. Bharat-Net is lagging behind and its full impact on GP level may not be possible to judge at this stage however, glimpse of 'low cost' and reliable broadband as enabler is quite visible with availability of Reliance JIO broadband services in some of the rural areas. During the field visits Gram Panchayats have been found using JIO extensively for GP level data uploading, information search, learning and entertainment.

Telangana State implementation in the use of PES Applications by using Bharat-Net services

As per the discussions with Telangana State officials revealed that at present the State is not using Bharat-Net internet services. In few GPs are using the internet services with a tariff of Rs. 399 per month, 4 Mbps speed, 30 GB per month data usage. Earlier 1200 GPs have connections due to road widening cable damaged and this issue is reported in BSNL they are not responding due to cable prices are increased and more over the long distance cabling connectivity issue are facing in the hilly and remote areas. Computer operators are using JIO hotspot services to update GP wise data.

5. STATE SPECIFIC APPLICATIONS BEST FEATURES FOR ADOPTION INTO PES

5.0 State Specific Applications

Salient features of equivalent state-specific applications being used by the States/UTs in lieu of Plan Plus are discussed below:

West Bengal - GIS Based Integrated Planning & Monitoring System

This State specific application of West Bengal integrates details like planning and monitoring, physical and financial progress of activities, asset mapping and GIS tracking in a Gram Panchayat. In a nutshell, this application covers the features of Plan Plus, Action Soft, NAD and GIS. The salient features of this application include:

i. Tracking the process followed within the given time frame and by designated personnel through planning implementation and operation & maintenance stage of each investment made at GP level.

ii. Tracking physical progress of activities through which assets are being created by GPs.

iii. Preparing asset directory.

iv. Uploading details of each step of the process at each stage i.e., planning, implementation, operation and maintenance including UpaSamiti / Gram Sansad / Gram Sabha / General Meetings with photographs through web based forms and mobile device.

v. Date from each stage of every activity is uploaded and synchronized with the monitoring system.

vi. A dashboard is developed to monitor the physical and financial progress of activities, validating data through geo-positioning technology for decision makers to view and facilitate decision making for course correction and plan linking with perceived needs.

vii. The GPS enabled mobile phones have inbuilt facility of storing data offline and to synchronize with web based online application immediately upon availability of internet connectivity.

Gram Panchayat Management System (West Bengal)

GPMS is an offline Accounting Software, based on cash basis double entry system, for maintaining daily accounts and generating all the statutory books of accounts and need based customized reports form Gram Panchayats. GPMS is compatible with National Accounting Code (NAC) introduced by Ministry of Panchayat Raj, GOI, for imposing model accounting system (MAS) across the country.

Accounting & Financial Management features include:

- Voucher level entry.
- At a glance fund position.
- Tracking of cheque.
- Bank Reconciliation Statement.
- Details of advances.
- Monthly, Biannual, yearly fund position.
- Financial analysis.
- Annual Budget.
- Assesse list for land and house tax.

The verified accounting data of GPs are also fed to the PRIASoft, GOI through an in house developed bridge software-SETU. SETU software dynamically converts the data from GPMS software to XML format as per the PRIASoft architecture.

Integrated Fund Monitoring & Accounting System (IFMAS):

SARAL-IFMAS is an accounting software (Saral Integrated Fund Monitoring and Accounting System), initiated by the West Bengal Government in the year 2003. Out of three tier panchayats, Zillah Panchayats and Block Panchayats are using this software to maintain their Cash Based Accounting System.

This software helps generate different books of accounts and reports as per West Bengal Panchayat Accounting Rules.

Books of Accounts:

i) Triple Column Cash Book

ii) Bank Wise Subsidiary Cash Book

iii) Ledger Book

Reports:

i) Receipts and Payment (Form 27)

ii) Cash Analysis

iii) Appropriation Register

iv) Cheque Register

v) Advance Register

vi) Treasury Advice

vii) Contractor Deduction Register

viii) Liquid Cash Register

ix) Vouchers

The application has implemented NAC (National Accounting Code) in software and the financial data is being uploaded to PRIASOFT.

Kerala: sulekha

The *Sulekha* Plan monitoring software was developed and implemented in Kerala in 2002 by the Information Kerala Mission, Government of Kerala, to facilitate decentralized planning at the local level. The system is a centralized database of plan-related information, containing details of previous plans that can be accessed in a graphical and analytical form by front-end users. It also contains guidelines, government orders and other plan-related information relevant to users. It is a centrally deployed, web-based system that is hosted at the Kerala State Data Centre and accessible to all 1,209 local bodies through the Kerala State Wide Area Network/Virtual Private Network.

Salient Features

i. Facilitates and tracks the entire planning process from plan formulation, approval, appraisal, implementation, monitoring, revision processes and expenditure tracking.

ii. Provides consolidated plan and project data of previous plans.

iii. Validates whether mandated government procedures have been followed in various stages of planning.

iv. Integrates vertical processes.

v. Serves as a centrally deployed system covering all 1,209 local governments in Kerala.

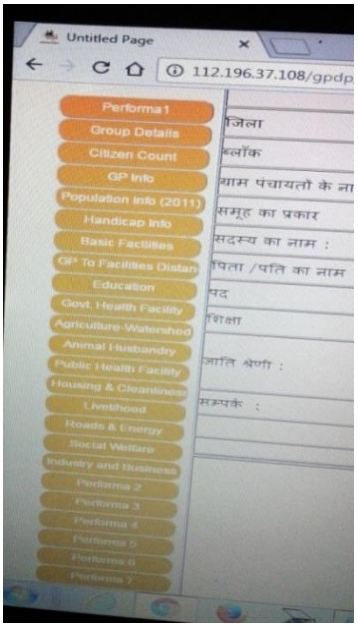
One of the major strengths of Sulekha is its synchronization with various other applications developed by the IKM (Information Kerala Mission). It syncs with applications that perform functions of accrual based double entry accounting (Saankhya), cost estimation (Sugama) and council minutes (Sakarma) thereby effectively combining various aspects of the planning process.

Saankya (Kerala)

Saankhya - launched in 2004 by the Government of Kerala is equivalent to PRIASOFT. It is used at State, District, Block and GP levels. Major online services provided by Saankhya include E payment linkage related to property tax, birth, death and marriage registration, building permit and other payment services, entry of receipts and payments, cash book generation and bank reconciliation. The application features E-Payment service, integration with treasury applications & Finance department applications and Integration with other state specific applications like Sulekha, Soochika and Sanchaya.

Sachitra (Kerala)

Sachitra - launched in 2005 is an equivalent of NAD. It is used at DP, BP & GP. The major online services provided by Sachitra include digitization of asset registers of local bodies which include land, building, roads, lanes, culverts, bridges, irrigation, electricity, drinking water etc.Major advantages of Sachitra include calculation of depreciation of each asset and its integration with Saankhya (accounting application).

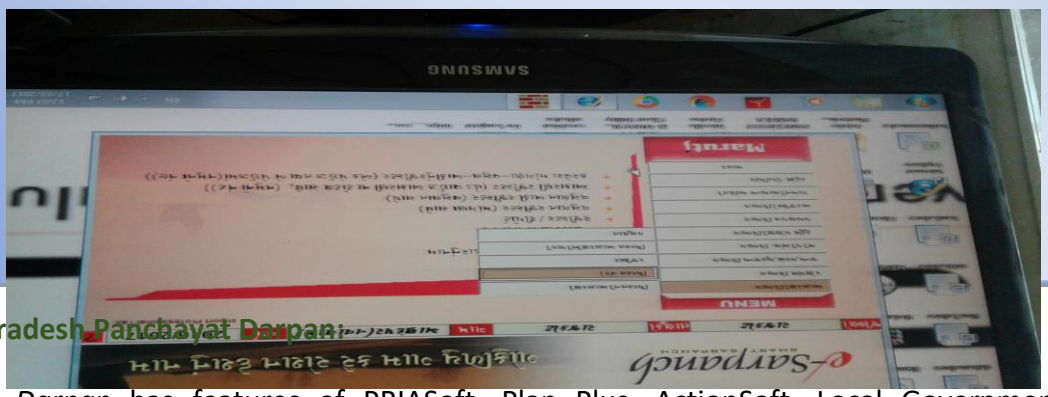


Samvedita (Kerala):

Samvedita was implemented in the year 2002 and is being used at State, District, Block and GP levels.

A website with GP's own resources

The GP Anandpar in Rajkot taluka, Rajkot district, Gujarat has managed to have its own e-Sarpanch – SMART SARPANCH website created from its own resources. The GP engaged a private agency to create the website and has populated it. The CSC operator therein has managed to keep it populated with information. This is a case of usage of own resources to create a web interface for the village panchayat.



Madhya Pradesh Panchayat Darpan:

Panchayat *Darpan* has features of PRIASoft, Plan Plus, ActionSoft, Local Government Directory (LGD) and National Panchayat Portal (NPP). Some of the best features of Panchayat *Darpan* include,

- Scheme monitoring system which includes monitoring of physical and financial progress of activities.
- Scheme wise online receipts and disbursement of funds.
- Linkages with other line department portals. One can view MGNREGA works and individual benefit schemes in *Darpan*

The salient features of Panchayat Darpan (Madhya Pradesh)

Panchayat Darpan has features of PRIASoft, Plan plus, Action soft, LGD and NPP. Some of the best features of Panchayat Darpan include,

- One Gram Panchayat- one bank account, leading to reduction in fraudulent practices.
- E-payment through electronic payment order maintaining both Sarpanch and GP Secretary as signing authority.

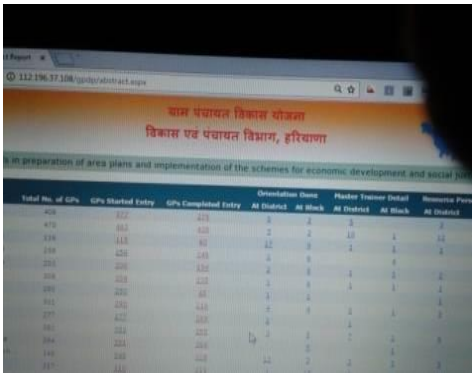
- Scheme monitoring system which includes monitoring of physical and financial progress of activities.
- Scheme wise online receipts and disbursement of funds.
- Employ payroll and tracking system.
- Linkages with other line department portals. Can view NREGA works and individual benefit schemes.

Gujarat: Gram Soft:

Under the Gujarat Rural Accounting Management (GRAM) initiative, a computerized system for preparing and maintaining accrual accounting system is being put in place for Panchayat raj institutions at all levels. Some of the best features of the application include:

- Being double entry accounting system, the application tracks movement of funds for every transaction and monitors how savings are utilized and when with drawls are made, thus leading to greater transparency.
- The application decreased misappropriation of public funds as the accounting entry is passed when the bill is prepared and not at the time of receiving the bill amount.
- It's a web enabled software application and allows automation in report generation and consolidation.
- Because of integration with line departments, the village panchayats are able to account for all the line departments.

State website for GPDPs in Haryana



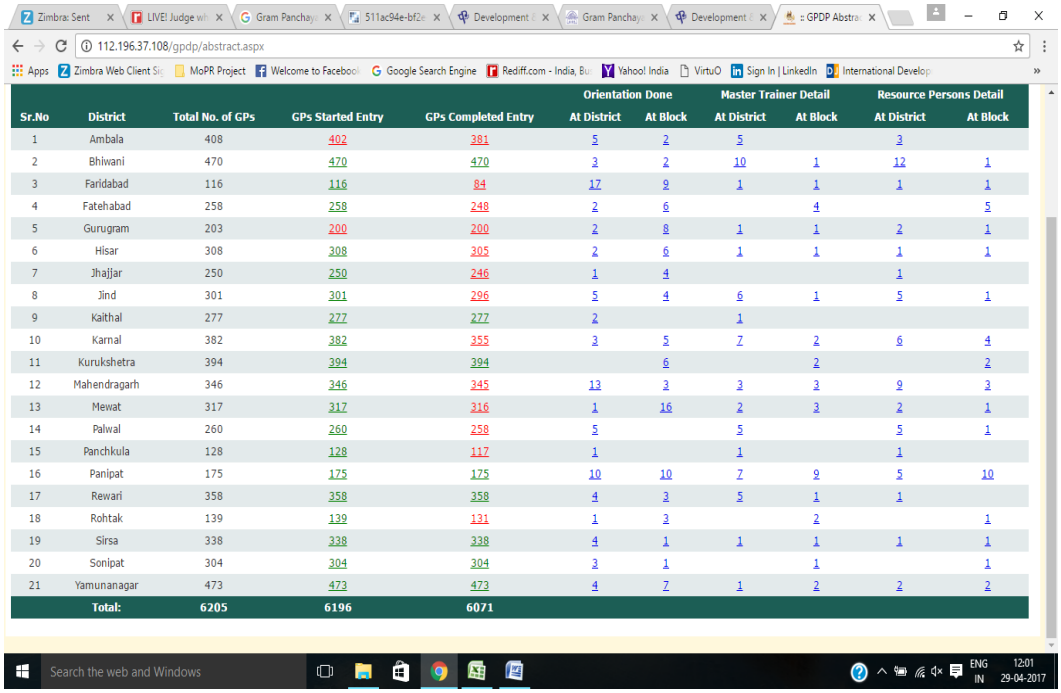
Hamari Yojana, Harama Vikas guidelines for the GPDPs of Haryana are being uploaded on the Haryana GPDP website exclusively created for GPDP uploads. The plans are put together manually first in Hindi and are later uploaded.

The Plans contain 7 Proformas containing the following information

- Proforma 1–Basic information of GP (Basic information of GP, ER details, Population, Literacy, Sub-Committees, Other socio economic details)

- Proforma 2 –Ward-wise details – Household details, Pucca, Kacha house etc., with map
- Proforma 3-Work details–Sector-wise list of demands
- Proforma 4- Sector wise Plan
- Proforma 5 – Financial and Human Resources
- Proforma 6 – Proposal (*Prastaav*)
- Proforma 7 – Final Proposal with Budget

Maps are scanned and uploaded (No GIS uploads)



Sr.No	District	Total No. of GPs	GPs Started Entry	GPs Completed Entry	Orientation Done		Master Trainer Detail		Resource Persons Detail	
					At District	At Block	At District	At Block	At District	At Block
1	Ambala	408	402	381	5	2	5		3	
2	Bhiwani	470	470	470	3	2	10	1	12	1
3	Faridabad	116	116	84	17	9	1	1	1	1
4	Fatehabad	258	258	248	2	6		4		5
5	Gurugram	203	200	200	2	8	1	1	2	1
6	Hisar	308	308	305	2	6	1	1	1	1
7	Jhajjar	250	250	246	1	4			1	
8	Jind	301	301	296	5	4	6	1	5	1
9	Kaithal	277	277	277	2		1			
10	Karnal	382	382	355	3	5	7	2	6	4
11	Kurukshetra	394	394	394		6		2		2
12	Mahendragarh	346	346	345	13	3	3	3	9	3
13	Mewat	317	317	316	1	16	2	3	2	1
14	Palwal	260	260	258	5		5		5	1
15	Panchkula	128	128	117	1		1		1	
16	Panipat	175	175	175	10	10	7	9	5	10
17	Rewari	358	358	358	4	3	5	1	1	
18	Rohtak	139	139	131	1	3		2		1
19	Sirsa	338	338	338	4	1	1	1	1	1
20	Sonipat	304	304	304	3	1		1		1
21	Yamunanagar	473	473	473	4	7	1	2	2	2
	Total:	6205	6196	6071						

- The GPDPs of Haryana are uploaded on their State created GPDP website
- As on the date, 29.04.17, out of the 6205 GPs in the State, 6196 have uploaded their GPDPs and 6071 have done so completely.
- In the screenshot, the numbers of GPs depicted in Green have completed upload of all GPDPs. Those in Red show, either incomplete data entry or that plans are yet to be uploaded.

GRAMTANTRA (Jharkhand)

The Government of Jharkhand have initiated the 'Yojana Banao Abhiyan' in 2015 under which 15 year plans are prepared by the GPs. These plans envisage using funds from multiple sources like Fourteenth Finance Commission, MGNREGS etc. An exclusive portal, 'Gramtantra' has been created on which these plans are uploaded.

Panchayat Bhavan Application (Jharkhand)

In order to monitor the construction of Panchayat Bhavans, the Panchayati Raj Department, Government of Jharkhand has recently developed an ICT application (Url: https://164.100.150.6/8080/Panchayat). It has been reported that the Block Development Officers have been mandated to go to the site of the asset at GP level and upload pictures. The application has been designed duly factoring in a set of pre-defined parameters which need to be fulfilled in order to consider the construction of the Panchayat Bhawan as complete. While this application is exclusive to Panchayat Bhawan, to the extent that it provides for capturing the pictures and maintaining a directory of the Panchayat Bhawan, it could be considered as being similar to NAD, albeit in a limited way.

PANCHATANTRA (Karnataka)

GPDP in Panchatantra contains similar features as Plan Plus. However unlike Plan Plus, there is no provision to port the data to the state specific application equivalent to Action Soft.

Table 30 - STATE SPECIFIC SOFTWARE'S WITH BEST FEATURES FOR ADOPTION OF PES

S. No	State/UT	Best Features
1	Kerala	**Sulekha (Plan Plus):** Synchronization with various other applications developed by the IKM (Information Kerala Mission). It syncs with applications that perform functions of accrual based double entry accounting (Saankhya), cost estimation (Sugama) and council minutes (Sakarma) thereby effectively combining various aspects of the planning process, strengthen the system of project management. **SAANKYA (PRIA Soft):** E-Payment service, integration with treasury applications & Finance department applications and Integration with other state specific applications like Sulekha, Soochika and Sanchaya. **SACHITRA (NAD):** Calculation of depreciation of each asset and its integration with Saankhya (accounting application). **Soochika:** Major advantages of Soochika include front office management system at Panchayat, file management system, paperless office, inward entry through application, receiving payments at Panchayat Level., online grievance redressal, integration with other state specific initiatives like Saankhya (Accounting Software), Sevana-Civil Registration (Citizen Services) etc.

2	West Bengal	**GIS based Integrated Planning & Monitoring System:** A dashboard is developed to monitor the physical and financial progress of activities, validating data through geo-positioning technology for decision makers to view and facilitate decision making for course correction and plan linking with perceived needs. This application covers features of Plan plus, Action Soft and NAD. **GPMS (PRIA Soft):** GPMS is compatible with National Accounting Code (NAC). **SEBA** (**Software for Eligible Beneficiary Accession):** This Application is used to cater the pension to eligible beneficiary under NSAP (National Social Assistance Program) scheme. SEBA software helps to disburse pension monthly basis to the beneficiary Bank/Post Office account using DBT
3	Karnataka	**Panchatantra:** Audit of works executed by the Gram Panchayats is being done by the Taluka Panchayats and District Panchayats before making payments. GIS Coordinates are being used through KSRSAC and photos are being uploaded through mobile apps. So that duplication of works and payments can be avoided and there will be accountability for the expenditure of the Gram Panchayat.
4	Madhya Pradesh	**Darpan:** Linkages with other line department portals. One can view MGNREGA works and individual benefit schemes in *Darpan.*
5	Gujarat	**GRAM SOFT (PRIA Soft):** Being double entry accounting system, the application tracks movement of funds for every transaction and monitors how savings are utilized and when with drawls are made, thus leading to greater transparency. The application decreased misappropriation of public funds as the accounting entry is passed when the bill is prepared and not at the time of receiving the bill amount.
6	Tamil Nadu	**TNGIS:** Tool Managing, Analysing, useful for decision making and seamlessly combining both spatial and non-spatial data.
7	Andhra Pradesh	**MeeSeva:** Web based land records management system and real time monitoring of transaction, digital signature concept.
8	Telangana	**MeeSeva / T Seva:** Seamless transfer of transaction charges, SECR certificate verification
9	Himachal Pradesh	**E-District:** Districts are the de facto front-end of government where most Government-to-Consumer interaction takes place. Citizens are registered through Aadhaar authentication.
10	Puducherry	**Intranet:** Birth and death information system – maintained database of birth and death information since 1901.

State Specific Initiatives

1. **Kerala State**

A. Sevana-Civil Registration:

- The application was implemented in the year 2002 in Kerala.
- The equivalent PES application is Service Plus.
- There is no interoperability between Sevana-Civil Registration and PES applications.
- Sevana- Civil Registration is being used at GP level.
- The main online services of Sevana-Civil Registration include Birth, death, marriage registration & issuing of certificate and sharing of data with the line departments.
- The technology used for Sevana- Civil Registration is PHP and SQL server.
- Main Advantages of Sevana-Civil Registration is Online Birth, death and Marriage certificate issuing.
- Best practices mainly include Birth, Death and Marriage Registration Certificates are made available online within 24hrs of registration. Birth & death registration entries can be made from hospital kiosk.

B. Sanchaya:

- The application was implemented in the year 2013.
- The equivalent PES application to Sanchaya is Service Plus.
- There is no interoperability between Sanchaya and PES applications.
- Sanchaya is being used at GP level.
- The major online services include Payment of property tax, issuing online building ownership certificate and issuing of dangerous & Offensive license for commercial shops in Kerala.
- The technology used for Sanchaya is Asp.net and SQL server.
- Main advantages of Sanchaya include online assessment of property tax and online payment of property tax.
- Best practices of the application include property tax assessment at GP level and online property tax payment.

C. Sevana-Pension:

- The application was implemented in the year2006 in Kerala.
- There is no interoperability between Sevana-Pension and PES applications.
- Sevana-Pension is being used at GP level.

- The major online services include giving pension to beneficiaries and maintaining status of pensioner data.
- The technology used for Sevana-Pension is Asp.net and SQL server.
- Main advantages of Sevana-Pension include direct benefit transfer.
- Best practices of the Sevana-Pension include beneficiaries availing pension at right time through online facility and beneficiaries can know the status of pension.

2. West Bengal State:

A. Gram Panchayat Management System (GPMS):

a. Online Public Service Application:

For issuing Birth, Death, Trade, and Residential Certificate to the citizens of rural areas through Gram Panchayats. This application can operate in offline mode at GP office, where consistent connectivity is constraint.

b. Tax Collection using PDA Machine:

Has been introduced from 2015-16 financial year, 999 GP's has already been delivered with PDA machines. Once the assesse list has been transferred to PDA from GPMS, the tax collector will be able to collect the tax and the money receipt will generate from PDA. At the end of day, the transaction history needs to be export to the GPMS database.

B. Software for Eligible Beneficiary Accession(SEBA):

This State Specific Application Is used to cater the pension to eligible beneficiary under NSAP (National Social Assistance Program) scheme. The different schemes under NSAP are IGNOAPS, IGNWPS and IGNDPS. Software named RHS (Rural Household Survey) maintains the information of rural people like Name, Age, Address, Ration Card No., Score as per livelihood condition etc. Eligible beneficiary under NSAP in SEBA gets populated from RHS without manual intervention as per criteria set by the Government. SEBA software helps to disburse pension monthly basis to the beneficiary Bank/Post Office account using DBT. This software runs in all Block Panchayats (341) of West Bengal. This software is a in house developed software based on Client Server technology. Back end database is Oracle and Application has been developed in Java. It's a offline desktop application running in individual PRI setup.

Suggestion on Possibilities of synchronizing the e-Governance services

- State Government acceptability of synchronizing the e-Governance services is one of the main concern. It is an advantage to integrate with PES application to all the State Specific applications in India as per State needs. Choose best application used by the States can be adoptable by the other States without extra investment in the same application.
- Access to State Specific application of other States can be helpful to some changes or modify the application as per the State requirements to facilitate more number of services to accept all other services. Create bridge software with an integration platform will allows to build PES application to State Specific Application integration in any language with much fewer lines of code will be easily read and text with significant reduction of bugs will be more helpful for better e-governance services.

6. E - PREPAREDNESS

6.1 E-PREPAREDNESS:

Infrastructure is the basic requirement of development and plays a crucial role in successful implementation of any program. For implementation of any e-governance program, primarily the Infrastructure should be made available as per the need. Until it is placed, the project might not reach or head towards its intended results. For implementing the Panchayat Raj Enterprise Suit (PES) applications at various levels like Gram Panchayat, Block Panchayat and District Panchayats, necessary infrastructure like office building, computers, internet, power supply, printer, Xerox should be made available. Unless the above mentioned are in place, the program may not reach it goals in terms of use by the end users. However, the respective States has to take the initiative in arranging the same at different levels for intended usage. As we are dealing with the hardware and software equipment's, it is important that, Annual Maintenance Contract (AMC) should also be in place. Where ever there is a problem with the hardware help, the dedicated AMC team will solve the issue without delay. This helps in proper functioning of the IT infrastructure and helps in running the system without prolonged interruptions.

In the above context, the e-preparedness for the implementation of PES application is assessed among the visited Gram Panchayats across the Country. Details collected on the important movable and immovable infrastructure which plays a crucial role in implementation of PES applications like GP office buildings, computers/laptops, internet, power supply, UPS, printer and scanners.

6.2 Gram Panchayat Infrastructure location and Electricity supply status

For placing the IT infrastructure, a safe and secure place is needed. In most of the places it is placed in the Gram Panchayat premises. From the field survey data, following table gives the status of Gram Panchayats IT infrastructure location:

1. **Power Supply and Infrastructure Location details:**

Following table gives details of GP Infrastructure Location and Power Supply for the Panchayats the team has visited.

Table 31- Infrastructure and Power Supply for GPs

		GP Infrastructure location (%)			Power supply at Gram Panchayats (%)		
Name of the State/UT	No of GPs visited	Own Building	Rented Building	Others	24hrs	12hrs	6 Hrs
Andaman & Nicobar Islands	1	100	0	0	0	0	100
Andhra Pradesh	3	100	0	0	100	0	0
Arunachal Pradesh	2	0	100	0	0	0	100
Assam	5	100	0	0	20	40	40
Bihar	3	100	0	0	0	67	33
Chandigarh UT	1	100	0	0	100	0	0
Chhattisgarh	3	100	0	0	100	0	0
Dadra & Nagar Haveli	1	100	0	0	100	0	0
Daman & Diu	2	100	0	0	100	0	0
Goa	4	100	0	0	75	25	0
Gujarat	4	100	0	0	100	0	0
Haryana	4	100	0	0	100	0	0
Himachal Pradesh	3	100	0	0	100	0	0
Jammu & Kashmir	2	100	0	0	0	0	100
Jharkhand	3	100	0	0	67	33	0
Karnataka	4	100	0	0	50	0	50
Kerala	4	100	0	0	100	0	0
Lakshadweep	1	100	0	0	100	0	0
Madhya Pradesh	4	75	0	25	75	0	25
Manipur	2	50	0	50	100	0	0
Meghalaya	2	100	0	0	0	100	0
Maharashtra	5	100	0	0	100	0	0
Mizoram	2	50	50	0	100	0	0
Nagaland	2	50	0	50	0	50	50
Odisha	3	100	0	0	33	0	67
Puducherry	1	100	0	0	100	0	0
Punjab	3	100	0	0	0	100	0
Rajasthan	3	100	0	0	100	0	0
Sikkim	2	100	0	0	50	0	0
Tamil Nadu	3	100	0	0	100	0	0
Telangana	3	100	0	0	100	0	0
Tripura	3	100	0	0	33	67	0
Uttar Pradesh	5	100	0	0	0	60	40
Uttarakhand	3	100	0	0	100	0	0
West Bengal	3	100	0	0	100	0	0
	99	**96.9**	**3.1**	**3.1**	**65.7**	**18.2**	**16.2**

IT Infrastructure location status:

It can be inferred from the observations that the States of Karnataka, Kerala, Odisha, Maharastra, TamilNadu, Chhattisgarh, Punjab and West Bengal have good infrastructure facilities. States with partial infrastructure include Andhra Pradesh, Assam, Bihar, Tripura and Uttar Pradesh. Rest of the states run with very limited infrastructure facilities. Arunachal Pradesh and Mizoram States operate from rented buildings.

Out of 99 Gram Panchayat visited across the Country, majority of the Gram Panchayats placed their IT infrastructure in their own Building premises. Very less percentage of Gram Panchayats have placed their IT infrastructure in rented buildings and other places.

Electricity/power supply:

In order to function the computers, power supply is very critical. Unless there is sufficient power supply, the placed infrastructure like computer and internet cannot be utilized which results in no updation/progress in PES application implementation and usage. The situation of power supply is different from State to State and place to place. The situation is better in south India compared with rest of India where the study have been conducted.

Around two third of the visited Gram Panchayats have power supply for 24 hours, nearly one fifth of them have 12 hours supply and around 16.2 percent GPs have 6 hours power supply with frequent power cuts showing problem of interruption for implementation of PES applications.

In order to overcome the frequent power cuts and inadequate power supply, the Gram Panchayats are provided with Uninterruptible Power Supply (UPS) systems for providing the power backup to the systems whenever there is a power cut. These UPS systems can supply adequate power supply for the function of computer for about one to two hours depending on the battery capacity and number of years it has been in functioning. To some extent, this helps in doing the work of PES applications even after no power situations. The details of UPS systems across the visited Gram Panchayats is given below:

IT infrastructure Details

IT infrastructure is a key for successful implantation and roll-out of any IT based project. Unless, the required equipment's like computer/Laptops, Internet, printers, UPS, scanners and etc., are arranged, the implementation and usage of IT applications cannot be progressed. Following table gives details of IT Infrastructure available in the Panchayats the team has visited. The details of each State IT infrastructure are given below:

Table 32 - State/UT wise IT Infrastructure Availability

IT Infrastructure availability details (%)										
Name of the State/UT	**No of GPs Visited**	**Computer/Laptop**	**Printers**	**Printer cum scanner**	**Scanner**	**UPS**	**Photo copy**	**Data back-up devices**	**Anti-Virus**	**Have AMC facility**
Andaman & Nicobar Islands	1	100	100	0	0	100	100	0	100	0
Andhra Pradesh	3	100	33	100	0	100	67	0	67	0
Arunachal Pradesh	2	0	0	0	0	0	0	0	0	0
Assam	5	80	60	0	0	20	0	0	0	0
Bihar	3	67	0	33	0	0	0	0	33	0
Chandigarh UT	1	100	100	0	0	0	0	0	100	0
Chhattisgarh	3	100	0	100	0	100	0	0	100	0
Dadra & Nagar Haveli	1	100	0	100	0	100	0	0	100	0
Daman & Diu	2	100	0	100	0	100	0	0	100	0
Goa	4	100	25	75	0	75	0	0	25	0
Gujarat	4	100	100	100	100	0	100	100	0	100
Haryana	4	100	0	0	0	0	0	0	100	100
Himachal Pradesh	3	100	100	100	100	100	0	100	100	0
Jammu &Kashmir	2	0	0	0	0	0	0	0	0	0
Jharkhand	3	100	67	100	67	100	100	33	33	67
Karnataka	4	100	75	100	50	100	75	25	75	0
Kerala	4	100	100	0	100	75	75	0	0	100
Lakshadweep	1	100	100	0	100	100	100	0	0	0
Madhya Pradesh	4	100	50	50	50	25	0	0	100	0
Manipur	2	100	0	50	0	100	0	0	100	0
Meghalaya	2	100	100	0	0	0	0	0	0	0
Maharashtra	5	100	60	100	0	80	80	40	80	0
Mizoram	2	50	0	50	0	50	0	0	50	0
Nagaland	2	50	0	50	0	50	0	0	50	0
Odisha	3	100	100	0	100	33	0	0	67	0
Puducherry	1	0	0	0	0	0	0	0	0	0
Punjab	3	0	0	0	0	0	0	0	0	0
Rajasthan	3	100	100	100	100	0	100	100	67	100
Sikkim	2	100	100	0	50	100	100	0	0	0
Tamil Nadu	3	100	67	0	0	100	0	0	100	0
Telangana	3	100	0	100	0	100	33	0	67	100
Tripura	3	100	33	67	33	67	0	0	33	0
Uttar Pradesh	5	20	20	0	0	20	0	0	0	0
Uttarakhand	3	33	33	0	33	33	0	0	33	0
West Bengal	3	100	100	33	67	100	33	67	33	33
	99	**81.8**	**47.4**	**46.5**	**29.3**	**53.5**	**28.3**	**16.2**	**47.5**	**21.2**

Computer/Laptops:

From the above table, it is clear that, 82% of the Gram Panchayats visited have computer/Laptops for working on the PES applications. The availability of computers/Laptops vary from state to state and region to region. States like Arunachal Pradesh, Puducherry, Panjab, Uttar Pradesh, Uttarakhand, Nagaland, Mizoram, Bihar and Jammu & Kashmir do not have sufficient computers/Laptops at Gram Panchayats, which result in non-usage of PES applications. Whereas, rest of the states have sufficient computers in place for the functioning of PES applications.

Printers:

On the whole, only 47.4% of the visited Gram Panchayats have printers for any usage in the process of PES applications implementation. The availability varies from state to State.

Similarly the availability of various IT infrastructure items in visited Gram Panchayats across the states is Printer cum scanner (46.5%), Scanner (29.3%), UPS (53.5%), Xerox machine (28.3%) and Data back-up devices (16.2%). This clearly shows that there is a huge gap in IT infrastructure at Gram Panchayats, which needed to be full-filled for the effective implementation of PES applications.

One of the critical things in IT Infrastructure is that, having AMC for the computers/Laptops, Scanner and other hardware equipment's available at the Gram Panchayat level. Only 7 out of 35 visited states have some kind of AMC services in place. Whereas, rest of 28 states do not have any kind of AMC services. Overall only one fifth of the Gram Panchayats visited have some kind of AMC arrangements for the IT equipment's. This needs to be changed and ensure that all the Gram Panchayats having IT infrastructure should have tie up with AMC for timely help and troubleshooting during the critical times of non-functioning of equipment's.

Internet Connectivity

Internet facility is very important for functioning of any IT based applications. There are different types of internet connections available across the country and vary from place to place. It is also evident that, internet is not available in most of the places of the country. So far, it is available at District level and to some extent in Block/Mandal level. But there is very minimal internet availability in Gram Panchayats. This internet limitation is stopping the PES applications work progress.

Following table gives details of Internet Connectivity in the States the team has visited:

Table 33 - Internet Connectivity Status at GPs

Internet connectivity status at Gram Panchayats (%)					
Name of the States Visited	**Have Internet connectivity**	**Broadband/SWAN**	**Data card/Mobile**	**Good Internet speed**	**Bad Internet speed**
Andaman & Nicobar Islands	100	100	0	0	100
Andhra Pradesh	100	66.7	33.3	66.7	33.3
Arunachal Pradesh	0	0	0	0	0
Assam	100	20	80	60.0	40
Bihar	0	0	0	0	0
Chandigarh UT	0	0	0	0	0
Chhattisgarh	100	33	67	33	67
Dadra & Nagar Haveli	100	100	0	100	0
Daman & Diu	100	100	0	100	0
Goa	100	50	50	75	25
Gujarat	100	100	0	100	0
Haryana	75	100	0	100	0
Himachal Pradesh	100	100	0	66.7	33.3
Jammu & Kashmir	0	0	0	0	0
Jharkhand	100	0	100	0	100
Karnataka	100	100	0	25	0
Kerala	100	100	0	100	0
Lakshadweep	100	100	0	100	0
Madhya Pradesh	100	25	75	25	50
Manipur	0	0	0	0	0
Meghalaya	100	0	100	100	0
Maharashtra	100	60	40	60	40
Mizoram	0	0	0	0	0
Nagaland	0	0	0	0	0
Odisha	100	33.3	66.7	0	0
Puducherry	100	100	0	100	0.0
Punjab	100	66.7	33.3	66.7	33.3
Rajasthan	100	33.3	66.7	66.7	33.3
Sikkim	50	200	0	0.0	100
Tamil Nadu	100	100	0	66.7	33.3
Telangana	100	100	0	0	0
Tripura	100	0.0	100	0.0	0
Uttar Pradesh	100	0.0	100	0	100
Uttarakhand	66.7	50	50	50	50
West Bengal	100	100	0	100	0
Country	**82.6**	**60.0**	**40.0**	**53.7**	**30.3**

Out of the total states visited, 83% are having internet connectivity and 54% are having good internet speed. Internet connectivity situation in North-Eastern States is very poor to due many constraints. Of the internet connectivity GPs, 60% of the GPs have broadband/swan connections and 40% of GPs have data card/mobile network connections. Internet connectivity speed is bad in rural areas as most of these GPs are operating with data cards or mobile networks. In some places, though they are provided with BSNL broadband, the speed is not up to the mark for the usage level of PES applications.

6.3. Capacity Building Details of Elected Representatives (ER) / Panchayat Functionaries (PF)

Following table gives details of PES application trainings undergone by Elected Representatives and Panchayat Functionaries for the Panchayats the team has visited.

Table 34 - State/UT wise capacity building detail of ER/PFs

Capacity building details of ER/ PFs (%)						
State/UT	**No. of Panchayats Visited**	**Sarpanch**	**Up-Sarpanch**	**PS**	**MPDO**	**EO PR&RD**
Andaman & Nicobar Island	1	0	0	50	0	0
Andhra Pradesh	3	0	0	100	100	100
Arunachal Pradesh	2	25	0	25	0	0
Assam	5	0	0	33.3	0	0
Bihar	3	0	0	0	0	0
Chandigarh UT	1	0	0	100	100	0
Chhattisgarh	3	0	0	0	0	0
Dadra & Nagar Haveli	1	0	0	0	0	0
Daman & Diu	2	0	0	0	0	0
Goa	4	0	0	0	0	0
Gujarat	4	0	0	25	25	0
Haryana	4	25	25	100	100	25
Himachal Pradesh	3	0	0	100	0	0
Jammu & Kashmir	2	0	0	0	0	0
Jharkhand	3	40	0	0	0	0
Karnataka	3	0	0	100	100	100

Kerala	4	100	100	100	0	0
Lakshadweep	1	0	100	100	0	0
Madhya Pradesh	4	0	0	0	0	0
Manipur	2	100	50	0	0	0
Meghalaya	2	0	0	0	0	0
Maharashtra	5	0	20	20	0	0
Mizoram	2	100	50	100	0	0
Nagaland	2	0	0	0	0	0
Odisha	3	0	0	80	20	0
Punjab	3	0	0	100	0	0
Rajasthan	3	0	0	33.3	33.3	0
Sikkim	2	0	0	100	0	0
Tamilnadu	3	50	0	100	0	0
Telangana	3	0	0	66.7	0	66.7
Tripura	3	0	0	0	0	0
Uttar Pradesh	5	100	0	0	0	0
Uttarakhand	3	33.3	33.3	33.3	0	0
West Bengal	3	66.7	100	100	0	0
Country	92	17.5	13.4	42.3	24.7	9.3

For successful implementation of PES applications and proper usage by the Gram Panchayats, it is must that the GP Elected Representatives and Panchayat Functionaries should be trained on these PES applications. Without involving ER/PFs, the intended output of the project cannot be attained. Hence it is must to involve them in successful implementation of PES applications.

Among the total Panchayats visited, 42% Panchayat Secretaries, 17.5% Sarpanch's and 25% MPDO's have undergone training in PES applications. It clearly represents that, capacity building for ER/PFs need to be done a lot for keeping them engaged in the project activities. The education levels of the ERs vary from person to person, place to place and some of them are illiterate, have education less than 10th class and etc. Keeping this in view, it is important that, refresher trainings at regular intervals is needed as the ER/PFs may forget the knowledge on PES applications.

7. INSTITUTIONAL STRUCTURES AND FINANCIAL SUPPORT

7.1 Institutional Structure:

The Ministry vide its Sanction Letter 22.03.2012 transferred funds to States to constitute SPMU, DPMU for roll out of the PES applications. As such, it has identified three categories of States based on the size of the state and thereby the personnel required for the establishment of the support units at different levels. SPMUs are not proposed in UTs. UTs are attached to the nearest allied State. Each District will be housed with a DPMU with two Resource Persons each.

The proposed Deployment structure in States is thus:

TABLE 35 - CATEGORY WISE STATES DEVELOPMENT STRUCTURE

Category I States	Category II States	Category III States
Andhra Pradesh, Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, Rajasthan, Odisha, Chhattisgarh and Telangana (Total 9 states)	Assam, Gujarat, Tamilnadu, Karnataka, Jammu & Kashmir, Haryana, Punjab, West Bengal, Arunachal Pradesh, Kerala, Uttarakhand, Himachal Pradesh, Maharashtra and all UTs (7) (Total 20 including UTs)	Nagaland, Manipur, Mizoram, Meghalaya, Sikkim, Tripura (Total 6 states)
State Project Manager (SPM)-1	SPM-1	SPM-1
Accounts Expert (AE)-1	AE-1	TC-1
GIS and Planning Expert (GIS & PE)-1		
Technology Consultant (TC)-1	TC-1	
Office Assistant (OA)-1	OA-1	OA-1

The Ministry has indicatively given the roles and responsibilities of each position, but left the discretion to States to take its decision based on its need and requirement.

Based on the field visit results, the following table gives details of Institutional Structure to the PRI's for ICT initiatives:

TABLE 36–State/UT wise Intuitional Structures

State/UT	Institutional Structure Availability	
	SPMU	DPMU
Andaman & Nicobar Islands	NA	Yes
Andhra Pradesh	Yes	Yes
Arunachal Pradesh	No	No
Assam	Yes	Yes
Bihar	No	No
Chhattisgarh	Yes	Yes
Chandigarh	NA	NA
Dadra and Nagar Haveli	No	No
Daman and Diu	No	No
Goa	No	No
Gujarat	Yes	Yes
Haryana	Yes	Yes
Himachal Pradesh	No	No
Jammu & Kashmir	No	No
Jharkhand	Yes	Yes
Karnataka	Yes	Yes
Kerala	Yes	Yes
Lakshadweep	NA	NA
Madhya Pradesh	No	No
Maharashtra	Yes	Yes
Manipur	Yes	Yes
Meghalaya	No	Yes
Mizoram	NA	NA
Nagaland	NA	NA
Odisha	Yes	Yes
Puducherry	NA	No
Punjab	Yes	Yes
Rajasthan	Yes	Yes
Sikkim	No	No
Tamil Nadu	Yes	Yes
Telangana	Yes	Yes
Tripura	Yes	Yes
Uttar Pradesh	Yes	Yes
Uttarakhand	No	No
West Bengal	Yes	Yes

Note: NA: stands for Not Applicable

Based on the field visit results, in case of institutional structure 18 number of SPMU are functioning in states like Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Maharashtra, Manipur, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal and UT like Tripura. 20 DPMU's are functioning in States like Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal and UT like A&N Islands, Tripura.

7.2 Financial Support:

The status of the positioning of this institutional structure to take forward e-Panchayat agenda has come to question when the e-enablement fund was subsumed under RGPSA and the States were asked to take the personnel as per their state ICT requirements. With a link to funding support earlier and a subsequent de-link, some States / UTs have prioritized and made their decision to take the same forward. Others have taken time to issue the administrative orders on the same, creating a vacuum of sorts in the process of adoption of PES applications. This time-lag has resulted in a relapse of the State's ICT adoption status back to its original ways with manual records holding fort once again. In a way, the subsuming of the funds under the CSS-RGPSA has given states an opportunity to re-look at the likely outcomes for the State / UT if the PES were to be adopted in its existing form at that time. The status of financial support from various sources is depicted in the table below.

TABLE 37–State/UT wise Financial Support

Sl. No	State/UT	Financial Support			Incentives
		Central	State	GP Own Funds	
1	Andaman & Nicobar Islands	Yes	No	No	No
2	Andhra Pradesh	Yes	No	Yes	No
3	Arunachal Pradesh	Yes	Yes	Yes	No
4	Assam	Yes	Yes	No	No
5	Bihar	Yes	No	No	No
6	Chandigarh	No	No	No	No
7	Chhattisgarh	Yes	No	No	No
8	Dadra and Nagar Haveli	Yes	No	No	No
9	Daman and Diu	Yes	Yes	Yes	No

10	Goa	Yes	No	No	No
11	Gujarat	Yes	No	No	No
12	Haryana	Yes	No	No	No
13	Himachal Pradesh	Yes	Yes	No	Yes
14	Jammu & Kashmir	Yes	No	No	No
15	Jharkhand	Yes	Yes	No	Yes
16	Karnataka	Yes	Yes	Yes	Yes
17	Kerala	Yes	Yes	Yes	No
18	Lakshadweep	No	No	No	No
19	Madhya Pradesh	Yes	No	No	Yes
20	Maharashtra	Yes	Yes	Yes	No
21	Manipur	Yes	Yes	No	No
22	Meghalaya	Yes	No	No	No
23	Mizoram	No	No	No	No
24	Nagaland	Yes	Yes	No	No
25	Odisha	Yes	Yes	No	Yes
26	Puducherry	Yes	Yes	No	No
27	Punjab	Yes	No	No	No
28	Rajasthan	Yes	No	No	No
29	Sikkim	Yes	Yes	Yes	No
30	Tamil Nadu	Yes	Yes	No	Yes
31	Telangana	Yes	Yes	No	No
32	Tripura	Yes	Yes	Yes	Yes
33	Uttar Pradesh	Yes	No	No	No
34	Uttarakhand	Yes	Yes	Yes	No
35	West Bengal	Yes	No	No	No

It is observed from the findings that out of 35 States/UTs, 10 states follow their own state specific applications with a minimum of one to eight for which states extend financial support. The remaining 32 states operate with the finances received from the centre.

A practical difficulty was that each state had its own priorities and record management practices related to assets, panchayat finances, and panchayat functioning, with active involvement of the Block and District Panchayats in the whole process. This meant a local requirement was more practical than putting everything on a site that is not likely to be seen by the local clientele. Hence several States / UTs made an attempt to work towards e-enablement from the perspective of State and its official / client priorities. An exercise in ensuring transparency and accountability at the rural local body (RLB) level will require that the software is developed for local consumption.

Institutional Structure and Sources of Fund:

Panchayati Raj institutions (PRIs) have made some fundamental positive changes in the village cultures, have made the villagers socially, politically and economically empowered. The system has been tremendously beneficial to the villages as it enables the Central and State Governments to allot significant sums of money directly at the Gram Panchayat level, and introduce various social protection and development programmes which could not have been implemented without the existence of a well-functioning local government structure. In absence of such an institutional structure it will not possible to start rights-based initiatives such as MGNREGA.

TABLE 38– Institutional Structure and source of fund assistance in India

Institutional Structure	
SPMU	DPMU
19	20

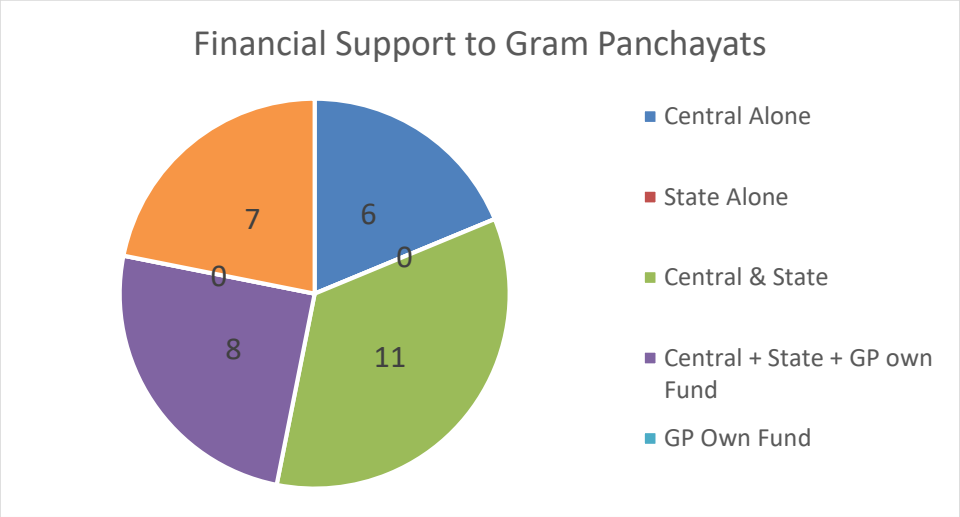


Fig. 28 – Financial support to Gram Panchayats in India

TABLE 39– State wise Financial Assistance

Financial Support (Nos.)					
Central Alone	State Alone	Central & State	Central + State + GP own Fund	GP Own Fund	Incentives
12	0	11	8	0	7

Functioning of SPMU and DPMU in the states will be useful for effective usage of PES applications/State Specific Applications. The states which are giving incentives to Panchayats for ICT promotion include Tamil Nadu, Odisha, Madhya Pradesh, Karnataka, Jharkhand, Himachal Pradesh and Tripura.

TABLE 40– State wise Institutional Structure and Financial Assistance in India

State/UT	Institutional Structure		Financial Support			Incentives	Remarks
	SPMU	DPMU	Central	State	GP Own Funds		
A&N Islands		✓	✓				No SPMU
Andhra Pradesh	✓	✓	✓		✓		
Arunachal Pradesh			✓	✓	✓		No SPMU
Assam	✓	✓	✓	✓			
Bihar			✓				SPMU and DPMU are not functioning
Chandigarh							No financial support for ICT initiatives
Chhattisgarh	✓	✓	✓	✓			
Dadra and Nagar Haveli			✓				No SPMU and DPMU
Daman and Diu			✓	✓	✓		No SPMU and DPMU
Gujarat	✓	✓	✓				
Haryana	✓	✓	✓				
Himachal Pradesh			✓	✓		✓	No SPMU and DPMU
J & K	✓	✓	✓	✓			
Jharkhand	✓	✓	✓	✓		✓	

Karnataka	✓	✓	✓	✓	✓	✓	
Kerala	✓	✓	✓	✓	✓		
Lakshadweep							Not using any PES Application
Madhya Pradesh			✓			✓	As they are using state specific application, they have operators at all level to operate instead of the Inst. Structure present for PES
Maharashtra	✓	✓	✓	✓	✓		The Financial support is shared between Central & State
Manipur	✓	✓	✓	✓			
Mizoram							No Inst. Structure, financial support & Incentives
Nagaland			✓	✓			No Inst. Structure, financial support & Incentives
Odisha	✓	✓	✓	✓		✓	
Puducherry			✓	✓			
Punjab	✓	✓	✓				
Rajasthan	✓	✓	✓				
Sikkim			✓	✓	✓		No Inst. Structure, financial support & Incentives
Tamil Nadu	✓	✓	✓	✓		✓	
Telangana	✓	✓	✓	✓			
Tripura	✓	✓	✓	✓	✓	✓	

Uttar Pradesh	✓	✓	✓				
Uttarakhand			✓	✓	✓		SPMU and DPMU are not functioning
West Bengal	✓	✓	✓				

The above table depicts that, the funding structure at different level and State wise incentives system and few observations are strong commitment to improving Panchayati Raj Institutions (PRIs), backed by several programs and budgetary support required to strengthen. However, this commitment and financial muscle makes change at different levels. It is observed that there are lack of incentives for PRIs and limitations in the capacity (human resources, structure, tools, systems, etc.) (i) weak planning and monitoring systems; (ii) weak implementation and delivery mechanisms at the State, District and GP level; (iii) limited attention to O&M of PRI facilities. These "institutional" factors combine to undermine achievement of lasting outcomes at the local level.

7.3 Fourteenth Finance Commission (FFC)

The FFC has spelt out that local governance institutions may no longer wait for funds. Direct transfers of grants to RLBs & ULBs are to be the norm, and capacities could be built around its proper utilization and maintenance of transparency and accountability in the GP level transactions. The FFC has declared that the grants are given to the GPs directly in 2 instalments of 90% Grant followed by 10% Performance Grant (the latter an incentive grant for achieving the stipulated parameters and milestones[16].

TABLE 41–State/UT wise financial support incentives to the GPs

Financial Support (No.)					
Central Alone	State Alone	Central & State	Central + State + GP own Fund	GP Own Fund	Incentives
12	0	11	8	0	7

[16] http://www.panchayat.gov.in/documents/10198/349332/Guidelines.pdf

7.4 Common Service Centres (CSC)

The concept of Common Service Centre (CSC) has come-up for providing digital access to rural communities in giving necessary services for the upliftment of the rural community. The CSC Scheme is being implemented in a public private partnership by engaging the rural entrepreneurship to provide employment and ownership as well. The CSC are IT enabled retail distribution outlets meant for the service delivery of Government, Private and social sectors in the areas of Agriculture, Health, Education, PDS, financial services, social services and other utility bills etc. These CSC will act as front-end interface between Government and citizens for the service delivery.

The Common Services Centres (CSC) Scheme is being implemented on a Public Private Partnership (PPP) framework. These CSCs are set by private entities called Service Centre Agencies (SCA), who are appointed by the State Governments. The CSCs are run by the Village Local Entrepreneurs (VLEs) who are appointed by the SCAs to run and manage the CSCs at pre-defined locations.

The capital expenditure for setting up the CSC at village level will be borne by the Village Local Entrepreneurs (VLEs) with the support from the SCA. Government will not provide any financial support in establishing the VLE, but provide the technical support through SCAs.

To start a CSC at village, the interested party or client should have adequate space and IT infrastructure for running a CSC. In some places the CSCs are placed in Panchayat building premises upon common understanding between the VLE and Panchayat members. However, in majority of the places, CSCs are placed in private locations depending on the accessibility to the citizens. The CSC centre head or in charge person should have a minimum educational qualification of Matriculation/equivalent to matriculation or above, fluency in reading and writing local language, basic knowledge of English and computer skills.

The income generation for the CSC centre would be from the citizens who access the services from the centre. There is a fixed price for each service being provided from the CSC. Citizens has to pay the fee to get the services. This nominal fee for services will be source of income for the VLE. Since the software is being provided by the SCA a private entity, a small

portion of the service charge collected at VLE will be given to SCA as a cost of maintenance, service support and technical support.

Village Panchayats & FFC - Puducherry

There are 10 Commune Panchayats (five each in Puducherry and Karaikal) besides 98 Village Panchayats in Puducherry. After the term of office of the local bodies ended in 2011 the government appointed special officers to govern them. As per a document sourced from the web on Panchayats in the Union Territory of Puducherry, "*Union Ministry of Panchayati Raj shall assist the Panchayats in Puducherry to establish e-Governance systems in all panchayats to ensure the handling of all services provided by them and other activities. This will include connectivity, provision of software and training for all Panchayats".*

The Puducherry e-Governance Society under the plan of CSCs has set up "Smart Village" through Wi-Fi Choupal. It is likely to be extended to all 98 Village Panchayats in the UT.

The Fourteenth Finance Commission has taken 1971 population as the basis for devolution of taxes. Puducherry hence does not figure in the list of UTs to get the local bodies grant for its Panchayats from the FFC. The UT has time and again urged for 2011 to be taken as the base year for calculation of the population and thereby devolve taxes to its 98 Village Panchayats.

An amendment to Article 280 of the Indian Constitution by the Union Government can include Puducherry in the Central Finance Commission, thereby according them the status to acquire grants made to the Village Panchayats in all other parts of the country.

Rajasthan e-Mitra: It is an integrated version of two separate application called LokMitra (Urban Centric Service) and JanMitra (Rural centric Services) under single umbrella serve the citizens with a multi-services in a single window. The services are delivered via counters known as CSC (Common Service Center) kiosks in rural areas and e-Mitra kiosks in urban areas and also online through e-Mitra portal (www.emitra.gov.in).

The e-Mitra project is being implemented under Public Private Partnership (PPP) across the State to bring efficiency, transparency and accountability at the Government – Citizen Interface. e-Mitra provides various services which includes G2C services like fee collection for PSU recruitment, online payments for various exams, pensions, NREGA, digital land records and B2C services like railway tickets, phone bills, bank transfer, pan card, LPG etc.

This is a cost sharing model between citizens and Government. For utilizing the G2C services, the citizens has to pay the service charges as mentioned by the authority from time to time. For utilizing services of utility bills payment, the respective company or Government will pay some amount to the VLE as service charge. The most important and unique part of e-Mitra is, it provides necessary information to the citizens at a nominal charges. In the form of service charge, the VLE will get money to run the e-Mitra centre. The monthly income of VLE in rural and urban areas is different depending on the service charge difference between rural and urban and the client load.

An e-District project is being implemented in Punjab, Mizoram, Tamil Nadu and Himachal Pradesh States. The e-District implementation states will receive an amount of Rs. 10 lakhs for expansion of e-service centres. Further, to sustain the model, service charge will be collected from the citizens who use the services.

8. COMPLETENESS, QUALITY & RELIABILITY OF DATA CAPTURED IN SOFTWARE APPLICATIONS

Data Completeness, quality and reliability of data captured in software applications:

Data Completeness: The data captured at Panchayat level is sufficient to generate required reports or not. For example, the Panchayats are primarily using the hard copy registers for recording the financial details which includes income and expenditure. The team has assessed whether all relevant indicators or variables has filled-in or not and is the captured data is sufficient for reporting into PES/State specific application. Based on the data check the completeness has been measured.

Data Accuracy: It is a component of data quality, and refers to whether the data values stored for an object are the correct value. Data in the registers or records being maintained at the Panchayat level is cross checked with the online PES data to assess the accuracy between two ends. In any program or project, it is supposed that the data capture in ground level should be transferred online without any discrepancy between two platforms (online and offline). In MoPR evaluation, the physical financial registers of Panchayat is verified with the online PES/State specific data to verify the data accuracy.

Data Quality: A Data Quality (DQ) Dimension is a recognized term used by data management professionals to describe a feature of data that can be measured or assessed against defined standards in order to determine the quality of data.

To assess and measure the quality of data, four key attributes Data Completeness, Data Accuracy, Data Consistency and Real time capturing were looked in. During the field visit to Panchayats, the CGG technical team has looked into the data capturing, frequency of data updation, validation and reporting mechanisms to assess the data quality. Hence the physical registers which are being used at Panchayat level are cross checked with the data that has been reported in PES/State specific applications.

Data Consistency: Any particular transaction data presented or reporting in multiple platforms should be same. It should be different between the various platforms. For example, an amount spent for a particular activity should be reported same in all platforms it is mentioned.

Table 42- State/UT wise software application

Attributes of application data (%)					
State/UTs	**Completeness**	**Accuracy**	**Consistency**	**Real time data capturing**	**Upload attachments**
Andaman & Nicobar Islands	100	100	100	0	100
Andhra Pradesh	0	100	100	0	100
Arunachal Pradesh	0	0	0	0	0
Assam	60	20	20	0	20
Bihar	0	0	0	0	0
Chandigarh UT	0	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0
Daman & Diu	0	0	0	0	0
Goa	0	0	0	0	0
Gujarat	100	100	0	0	100
Haryana	100	100	25	0	100
Himachal Pradesh	100	100	100	100	100
Jharkhand	66.7	66.7	0	0	0
Karnataka	0	100	100	0	100
Kerala	100	100	100	100	100
Lakshadweep	0	0	0	0	0
Madhya Pradesh	0	0	0	0	0
Manipur	50	100	100	50	50
Meghalaya	0	0	0	0	0
Maharashtra	60	60	80	0	20
Mizoram	0	0	0	0	0
Nagaland	0	0	0	0	0
Odisha	100	33.3	33.3	0	0
Puducherry	0	0	0	0	0
Punjab	0	0	0	0	0
Rajasthan	100	100	33.3	0	100
Sikkim	0	0	50	0	0
Tamil Nadu	100	100	100	100	100
Telangana	100	33.3	100	0	0
Tripura	66.7	66.7	0	33.3	0
Uttar Pradesh	100	100	80	0	80
Uttarakhand	100	100	100	0	100
West Bengal	100	100	100	100	100
Grand Total	**53.2**	**55.3**	**44.7**	**16.0**	**44.7**

Note: Chhattisgarh and Jammu & Kashmir states are presently not using any of the applications. Hence these states data is not included in above table.

Real time data capturing: As and when the transaction takes place, it should be recorded or registered in the register or online PES/State application. The transaction can be an activity and financial transaction etc. In MoPR study, it is observed whether all transactions as mentioned above are being recording properly or not.

From the above table, it is clear that, 53.2% of visited GPs have completely entered the data, which is available in the records/registers into PES/State specific applications. When entered data is cross checked between online PES/State specific application portal and registers/records for data accuracy, only 55.3% of the visited GPs found entered correct data which is tallying between physical data in records/registers and online data.

Similarly, 44.7% of the visited GPs following "Data Consistency" and "Uploading the attachments" relevant to transaction or activity.

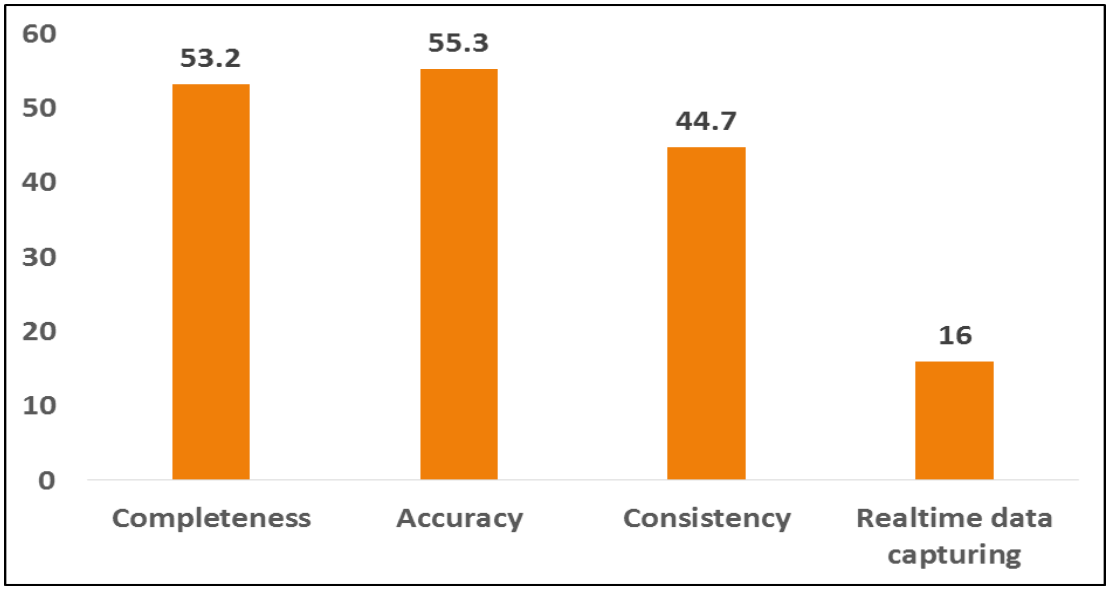


Fig. 29 – State/UT wise completeness, accuracy, consistency and real time data captured in software application

Ideally, the transactions or activities taking place at GP should be captured on a real time basis. But, in practical, only 16% of the visited GPs are capturing the "Real time data" as and when the transaction or activity takes place. Hence, there should be proper monitoring and review mechanisms should be in place to ensure key data attributes are followed.

Data Validation Mechanism

In order to highlight the process adopted by State a case of Telangana is provided. The Panchayat Secretary review and validate the data on a random sample checks at the Gram Panchayat and simultaneously mandal, divisional, district and state level verifications with a data quality is certified by the concern officer/supervisor. In addition to data quality authentication by the officer of PES applications, the data would also be subjected to offline built-in scrutiny will be done by the supervision and data quality is certified by the supervisor and the State Government officials to undertake sample physical inspection. After this scrutiny, the data will go to the central server. Monitoring and supervision reports/dashboard would be created on the basis of this data.

The States adopted the PES applications, the work/activity of GP is coded with LGD and the same could be entered in all the applications for further actions and transactions. Then it is easily trackable and validate the data by using MIS.

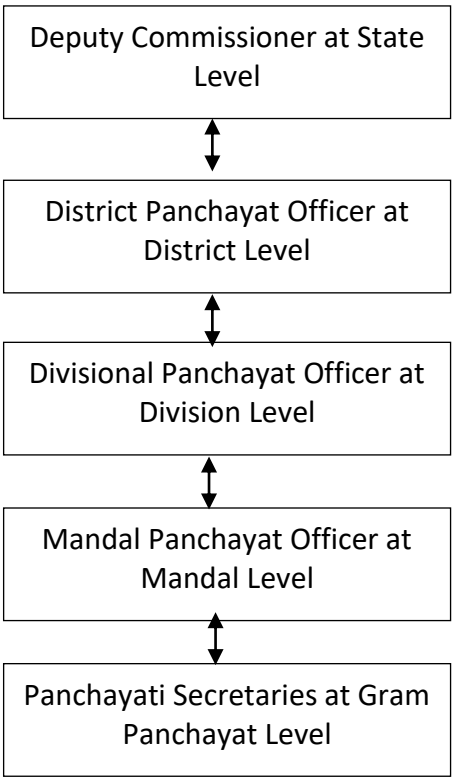


Fig. 30 –Data validation mechanism in Telangana State

Quality, availability and source of technical manpower at GPs

In terms of quality, availability and source of technical manpower at GP level majority of the states are not performing well. Less than half of the GPs care about data consistency and uploading the attachments relevant to transaction or activity. Only less than one-fifth of the GPs across states capture the “Real time data” as and when the transaction or activity takes place.

Telangana State Scenario

Maintenance of UPS and printers are given to AMC on a contractual basis. Since 1 year contract tenue completed till date not renewed. For better execution and implementation of e-Panchayat application in GPs the Telangana State Government has given a manpower contract to KARVY Global service Ltd., computer operators and system administrators are engaged on a contractual basis due to completion of their contract term facing problems in case of quality of service delivery, lack of availability and technical manpower and fund release delays from MoPR are some of the real-time challenges.

9. USAGE/CONSUMPTION OF DATA

9.1 PES Usage and Consumption of Data

The following table presents the application wise updation and usage of PES as found in the survey:

TABLE 43 – Usage of PES Applications

S.No	PES Application*	Panchayats with up-to-date data on application (%) (N=99 GPs)	Panchayats implementing all key attributes (%)
1	Plan Plus	40.4	19.2
2	PRIASoft	30.3	44.4
3	Action Soft	22.2	16.2
4	National Asset Directory	21.2	12.1
5	National Panchayat Portal	28.3	17.2
6	Local Government Directory	28.3	13.1
7	Area Profiler	26.3	5.1

**Inclusive of State Specific application where applicable*

Panchayats with up-to-date data on PES applications:

Number of GPs (N=99) using Plan Plus application are considered under this variable. This is with respect to data updation in the application either complete or incomplete. For example: A Plan Plus application is said to be up to date, if any of the attribute of this application is updated.

Panchayats Implementing all key attributes: In continuation to above this variable captures how many Gram Panchayats are implementing all key attributes of an application out of GPs that are updating data. For Example: In Plan Plus from above table,it is clear that 40.4%Gram Panchayats has up-to-date data on application. In addition to the status of data updation it is also looked at the implementation of key attributes for the complete usage of application. Though 40.4% GPs are updating the data regularly, only 19.2% GPs are implementing all the key attributes of the application which was mentioned in above sections. Here 19.2% GPs implementing all the key attributes may or not be from the

40.4%GPs which are updating data regularly. In directly it reveals that, though some of the GPs are implementing all the key attributes, they are not updating the data on a regular basis. Similarly, when we look at PRIASoft application updation status, 30.3% GPs have up-to-date, but when it comes to implementation of all key attributes, about 44.4% GPs are implementing it. GPs in both the categories up-to-date and implementation of key attributes are independent of each other.

9.2 PES Usage

A mix of GPs using the PES applications to at least a considerably acceptable level (as defined in the table below) and those using it sub-optimally were attempted to be selected as part of the sample. For making this selection, the survey team depended on the feedback and inputs given by the State / UT appointed Nodal Officers and took their suggestions.

The following criteria were the basis for defining the GPs to be visited – GPs with 'Acceptable' and 'Poor' usage levels of PES suite:

Table 44 - PES Application wise usage definition at GP Level

S.No	PES Application	Definition of Usage
1	Plan Plus	GP should have uploaded at least 1 Annual GPDP in the last 2 years on the portal
2	Action soft	Physical and Financial progress of works at GP level are entered in the portal for at least one of the last 2 years
3	Service plus	At least one service in the GP is delivered through Service Plus
4	Social Audit and Meeting Management (SAMM)	GP should have uploaded on the portal, at least 1 Social Audit report or one Minutes of the Meeting document in the last 1 year
5	Area profiler	The socio-economic, public infrastructure, tourist places information of the GP is available for public access on the portal.
6	Training Management Portal –TMP	GP has uploaded the details of trainings conducted at least in the last 1 year on the portal
7	National Asset Directory (NAD)	GP has uploaded on the portal, the details of assets created in at least one of the last 3 years

S.No	PES Application	Definition of Usage
8	PRIASOFT	GP should have freezed at least one Year Book in the last 3 years using the portal. During pre-testing of the questionnaire in few select GPs it was found that some of the GPs have not updated their account books for years. Due to which the criteria for last three years is being kept.
9	National Panchayat Portal (NPP)	The names and other details of elected representatives of the GP, currently holding office, are available for public access on the portal

Definition of GP with 'Acceptable' Usage:

PES and State IT applications being used by the GP, together cover FEATURES of at least 5 of the above listed IT applications of PES, NECESSARILY INCLUDING PRIASoft, as per the above usage definitions.

Definition of GP with 'Less' Usage:

PES and State IT Applications being used by the GP, together cover FEATURES of at least 1 and not greater than 4 of the above listed IT applications of PES, as per the above usage definitions. To decide the proportion of GPs with 'Acceptable' and 'Less' usage to be selected in the sample, where the number of GPs is same as that of blocks in the sample, all the GPs to be selected were attempted to be in the 'Acceptable' usage category.

Where the number of GPs is greater than that of blocks in the sample, the number of 'Acceptable' category of GPs was equal to that of the sample blocks and the number of GPs and the number of GPs exceeding that of blocks, have been attempted to be from the 'Less' usage category.

States/UTs were requested to provide the names of at least 5 GPs each in the 'Acceptable' and 'Less' usage categories so that the required number of GPs for the sample could be picked up randomly from the list suggested, duly following the above criteria.

The actual selection of Panchayats for the sample was at slight variance from the plan, based on the suggestions given by the States. An abstract of the same is given below. The detailed State / UT wise, list of Panchayats in which the study was conducted is given at Annexure 2.

Table 45 - State / UT wise selection of GP by Acceptable/Less PES usage or State Specific Usage

S. No	State	*PRIASoft*	*Plan Plus*	*LGD*	*Action Soft*	*Area Profiler*	*NAD*	*NPP*
1	Andaman & Nicobar Islands	2	1	1	2	1	1	2
2	Andhra Pradesh	1	1	1	2	1	1	1
3	Arunachal Pradesh	2	1	1	2	2	2	2
4	Assam	1	1	1	2	1	2	1
5	Bihar	2	2	1	2	2	2	2
6	Chandigarh	2	2	1	2	2	2	2
7	Chhattisgarh	2	1	2	2	2	2	2
8	Dadra & Nagar Haveli	2	2	1	2	2	2	2
9	Daman and Diu	2	2	1	2	2	2	2
10	Goa	2	2	1	2	2	2	2
11	Gujarat	3	1	1	1	1	1	1
12	Haryana	1	3	1	1	1	1	1
13	Himachal Pradesh	1	1	1	2	1	1	2
14	Jammu & Kashmir	2	1	1	2	2	2	2
15	Jharkhand	1	3	1	2	1	3	1
16	Karnataka	3	3	1	1	1	1	1
17	Kerala	3	3	1	3	1	3	3
18	Lakshadweep	2	2	1	2	2	2	2
19	Madhya Pradesh	3	3	3	3	2	2	1
20	Maharashtra	1	1	1	1	1	1	1
21	Manipur	1	1	1	1	1	1	1
22	Meghalaya	2	2	2	2	2	2	2
23	Mizoram	2	2	1	2	2	2	2
24	Nagaland	2	2	1	2	2	2	2
25	Odisha	1	1	1	2	2	2	2
26	Puducherry	2	2	1	2	2	2	2
27	Punjab	1	2	1	2	1	1	1
28	Rajasthan	1	1	1	1	1	1	1
29	Sikkim	1	1	1	2	1	1	1
30	Tamil Nadu	1	3	1	1	1	1	1
31	Telangana	1	1	1	2	1	1	1
32	Tripura	1	1	1	2	3	2	1
33	Uttarakhand	1	1	1	2	1	1	1
34	Uttar Pradesh	1	1	1	1	1	1	1
35	West Bengal	3	3	1	3	1	3	3

***Note: ACCEPTABLE USAGE (Using PES) – 1, LESS/Not Using PES – 2, State Specific USAGE - 3**

10. ENHANCING ICT ACCESS FOR RURAL TRANSFORMATION/ FUTURISTIC E-GOVERNANCE TECHNOLOGIES

10.1 Introduction

The Internet is one of the most important inventions of the modern era which facilitate quicker reach and connects citizens and the government in simple means without any barrier for enhancing service delivery as well as digital transformation. In today's world the Internet has a become part of human life like oxygen, water, food, electricity and fuel. The number of Internet users in India was estimated to be 432 million in December 2016 and the users are expected to grow to 450-465 million by June 2017[17]. Urban India boasts of an estimated 62% or 269 million Internet users in December 2016, while rural India there were 38% or 163 million Internet users. Though less in numbers, rural India needs a greater share of the returns that internet can bring about due to its reach. Current global estimates mention that only 40% of people around the globe have access whereas rural India is claimed to have leapfrogged to mobile technology with lower penetration of computers as a medium to access Internet.

Rural India, with an estimated population of 906 million[18], has 163 million Internet users. There is a potential 750 million users still in rural India that remain unconnected. It is also find that 51% of urban Internet users use Internet daily while in rural India, 48% or around 78 million are daily Internet users. India is the second largest average number of mobile apps actively used by mobile Internet users that is 7.4 next to France 7.9 on a monthly basis as per the global survey conducted for selected countries[19].

The Ministry of Panchayati Raj (MoPR), in its an endeavor to narrow the gap between the policy-makers and the practitioners with its constituency, is leveraging Open Source technology stack and tools for development and maintenance of Panchayat Enterprise Suite (PES) applications, especially through web technologies. It made available 10 Core Common Applications of Panchayat under its E-Panchayat Mission Mode Project, to all Gram Panchayats across in India through PES. The PES is a centralized web based application and users access various services through a web browser.

[17] http://tech.economictimes.indiatimes.com/news/internet/indias-internet-user-base-to-cross-450-million-by-june-2017-iamai/57411523

[18] Census 2011

[19] https://www.statista.com/statistics/301185/average-active-app-usage-worldwide/

As a part of evaluation study of the implementation of E-Panchayat Mission Mode Project formulated under NeGP, Centre for Good Governance would like to propose to MoPR the following news areas / domains for enhancing ICT access for rural transformation for better penetration and reach of the PES applications and services for the rural users of India. The proposed services and tools for enhancing ICT access envisaged in table – 1 below are classified into two categories known as Server front (or Server side) and Field level:

Table 46 – New Areas/domains for ICT intervention

No.	Description Tool/ Service	Category
1.	Data Analytics and real time dash boards	Server front
2.	Panchayat Network Analysis (PNA)	Server front
3.	Panchayat Open Government Data	Server front
4.	Knowledge Kiosks	Filed level
5.	Multi Device Enabled PES Application	Field level

10.2 Data Analytics and Real Time Dashboards

In today's environment Governments would like to understand systems and people for better governance for this data is essential. The acceptance and importance of data analytics is growing day-by-day not only in business but also in Government too. Analytics can help in decision-making domain for Government executives, and other Government officials for policies development and implementation. Extracted information after analyzing the existing data or data sets of various Panchayats will help the officials to understand functioning of Panchayat for better planning and development purposes of the available funds as well as resources. From extracted Panchayat's data, the functionalities like Characterization, Discrimination, Association, Classification, Prediction, and Clustering analysis with real time dash boards

Figure. 1 Analytics and Visual Dashboards

may be arrived which further helps the officials not only for better understanding functioning of Panchayat but also in decision making. Most of Gram Panchayats data is already available with MoPR, this work may be entrusted to third party/ agencies for development of analytics as well as to fill data gaps if any by coordinating with the corresponding Panchayats.

Advantages

- Reporting shall be based on real time transactional data.
- Helps to measure how much of mission statement is accomplished.
- Habitation wise Analysis of data by integrating with silos of departmental databases like census, House hold data, Aadhaar, etc.
- Allows for the identification of important trends.
- Helps better for identification of performance problems which require some sort of action.
- Can be viewed in a visual manner, which leads to faster and encourages smart decision making.

10.3 Panchayat Network Analysis (PNA)

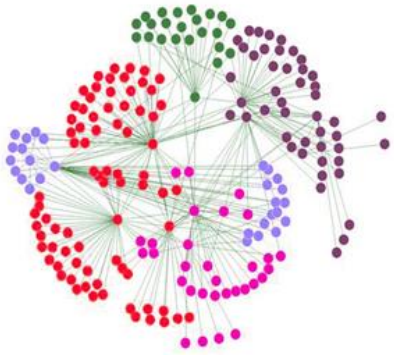


Figure. 2 Sample Panchayats Network Analysis

In connected world, it is important to carry network Analysis on various Panchayats in terms of social connectivity of Panchayat with other. The PNA tool will process Panchayat's data and provide both quantitative and qualitative analysis of a Panchayat network functioning, performance, size, population, various major groups of people and their working and funds spending that are allotted under various projects and schemes. The PNA will measure and maps the flow relationships and relationship changes between Panchayats. It characterizes networked structures of Panchayat in terms of nodes and the ties, edges, or links that connect them. PNA shall provide both a visual and structural analysis of Panchayats in terms of their size –population, transportation, agricultural, houses, and literacy. The PNA will be carried subjected to the availability of valid network data availability or being feed in the system with necessary checks and balances. The PNA analysis shall be holistic in nature for constructive development and

building a better Panchayats in the country as **Smart Panchayat like Smart Cities** in the India. This PNA tool will facilitate the users to understand social aspects of Panchayat in connected social India.

Advantages

i. Allows how Panchayats are connected, typical graphical connections.

ii. Understanding structures and relationships of Panchayats.

iii. Understanding patterns of social relations between these Panchayats.

iv. Various groups' of citizen migration from one Panchayat to other.

v. To understand social aspects of Panchayat.

Figure. 3 Panchayats Data Sets

10.4 Panchayat Open Government Data

According to **Open Government Data** (OGD)[20] - data produced or commissioned by government or government controlled entities; data which is open as defined in the Open Definition – that is, it can be freely used, reused and redistributed by anyone. The OGD should be open for public for the following three main reasons:-

Transparency - In a well-functioning, democratic society citizens need to know what their government is doing. To do that, they must be able freely to access government data and information and to share that information with other citizens. Transparency is not just about access, it is also about sharing and reuse — often, to understand material it needs to be analyzed and visualized and this requires that the material be open so that it can be freely used and reused.

Releasing social and commercial value - In a digital age, data is a key resource for social and commercial activities. By opening up data, government can help drive the creation of innovative business and services that deliver social and commercial value.

Participatory Governance - Much of the time citizens are only able to engage with their own governance sporadically — maybe just at an election every 4 or 5 years. By opening up data,

[20]https://opengovernmentdata.org/

citizens are enabled to be much more directly informed and involved in decision-making. This is more than transparency: it is about making a full **"Read/Write" Society**, not just about knowing what is happening in the process of governance but being able to contribute to it.

MoPR may provide data sets of various Panchayats of different states under Open Government Data Platform India for open public, universities, research centres, non-government organizations, societies for research activities for further study and analysis on functioning of Panchayats for better development and growth.

Figure. 4 Typical Knowledge Kiosk

10.5 Knowledge Kiosks

There is no free solution available for common people and students especially in villages for acquiring knowledge about their own village/ Panchayat and other Panchayats. Thus, there is a need of Knowledge Kiosks in Panchayats for facilitating the benefits of information and communication to the rural people, women and poor and children in need of knowledge. These knowledge kiosks will act as hub for public in need of knowledge and this become a common place for accessing of newspapers, news feed, and details of various MoPR resources. These Knowledge Kiosks may be deployed in selected Panchayat to begin with and may be rollout and these kiosks to be operated by the citizens in rural areas on self-service basis and these kiosk will support both online and offline modes which provides touch of ICT to a common citizen and builds confidence on them.

Advantages

- **Digital Library** - These knowledge kiosks may act as Digital Libraries to the citizen for reading of daily newspapers and special news bulletin from MoPR/GoI.
- **News Feed** - The various inputs received from citizens of home and non-home Panchayats will be processed at central server, filtered and classified on standard categories for access and display of information to the users in the form of news bulletin on daily basis.

- **Self Service Delivery** – Access of list of PES services and support for various transactions as well as information providing roles.

10.6 Multi Device Enabled PES Application

The Internet is becoming more and more mobile driven that is capable to support a wide range of new applications and services which were not foreseen in its original design. Nowadays, the mobile penetration is drastically increases in Rural India[21], now MoPR can suitably identify and launch mobile enabled Panchayat Enterprise Suite in short **mPES** for better access, and reach of PES services to the village users. The functionality of mPES will be in the similar lines of PES but access of PES services through variety of mobile devices – Tablets and Mobiles. The given table summarizes the proposed PES Applications to be made available to support Tablets and Mobiles for high adaptability and faster penetration of PES applications to the users in the field.

Figure. 5 Tablet based PES Application

Table 47 - Multi Devise enabled PES

S.No.	Type of Functionality	Module Name	Desktop Based	Proposed	
				Tablet Based	Mobile Based
1.	Existing PES Functionality	Local Government Directory	✓		
2.		Area Profiler	✓	✓	✓
3.		National Panchayat Portal	✓		✓
4.		PRIA Soft	✓	✓	
5.		Plan plus	✓		
6.		Action Soft	✓	✓	

[21] http://www.smartinsights.com/mobile-marketing/mobile-marketing-analytics/mobile-marketing-statistics/

7.		National Asset Directory	✓		
8.		Service Plus	✓	✓	✓
9.		Social Audit	✓	✓	
10.		Training Management Portal	✓	✓	
11.	**Additional PES Functionality**	Tax Collection by Panchayat		✓	
12.		Tax Payments by Citizens			✓
13.		Self Service Based Citizen Application			✓
14.		Citizen feedback			✓

Mobile PES applications and services can access through Tablets PCs (or Tablets) instead of conventional PCs and laptops as currently being used for access of PES applications and services in Panchayat. The operation of Tablet is similar to a smart phone which does not require any intense training for accessing of mobile PES applications. Several survey reports have been identified that the usage of mobiles (or mobile based devices) are much faster as compared to Personal Computers or Desktops. So, deployment of Tablets in the field will definitely improve the usage of PES applications and their services with higher adoption in the villages

In Panchayat, both tax and non-tax collections can be carried from the citizen by the use of Tablets by tax collectors. These tax collection entries may be suitably linked to the corresponding accounting software being used in those Panchayats to reflect entries in the books. This model of revenue collections may bring lot of transparency and accountability in the system in the villages but also improves timely collection of amount from the citizens. These Tablets will communicate data to the Central PES Application (or Server) as and when connectivity available through GPRS and these transactions will reflect in PES database without any need of reposting entries in account books at later point of time. Similarly, all

payments transaction to the citizens will also be made through Tablets devices which will facilities transform of rural India into a true Rural Digital India.

Advantages

- Citizens and Panchayat officials can use the PES Services on the go anywhere at any time.
- The Government can connect better with citizens and Panchayat officials.
- Mobile Apps attracts the Citizens and Officials which help in creating a bond between the Government and Citizens/Officials.
- The usage of the PES application(s) boosts exponentially.

11. SERVICE DELIVERY MODELS[22]

11.1 Citizen Service Delivery – An Overview

Computerization and automation of government departments and processes does not alone make a government an e-Government unless they use ICT to deliver the services to the citizens in an efficient, fast and hassle-free manner. A major pre-requisite for an ICT enabled effective service delivery mechanism is to have the necessary infrastructure in place. There has to be access nodes, which can serve as one-stop centres for people to get access to a host of government services and information and thus escape the need to travel to different locations for interacting with different government departments – thus saving precious time and money of the citizens.

Government of erstwhile Andhra Pradesh pioneered the single window service delivery system in 1999, through its initiative of e-enabled kiosks or e-Seva centres that began in the twin cities of Hyderabad and Secunderabad. It has an objective of providing electronic services to its citizens at a single kiosk. Following this, several initiatives began in other states like Maharashtra and Karnataka. These one-stop kiosks were designed to leverage a range of government, education, entertainment and other revenue generating services.

They are termed differently by different governments and departments in different States. E-Common Service Centres (as mentioned in NeGP), Information Kiosk, Information Centres, Village Knowledge Centres (as mentioned in Mission 2007), Tele centres, Citizen Service Centres, are some of them. All of them can be defined singularly as "ICT-enabled outlet set-up to bring access to a range of services, content and information to citizens in the village or town, in which it is located".

Urban and rural areas in India have different needs and service requirements. Service delivery to all 6,40,000 villages of India with a poor infrastructure makes it a formidable task for the government. Government and other organizations are taking a lead to bring ICT

[22]As per the communication sent by the Additional Secretary, MoPR to all the States, it was requested that the new version CSCs 2 must be co-hosted in the premises of the Gram Panchayat so as to enable the Panchayat functionaries partake in the e-enabled services and discharge their responsibilities of service delivery. An empowering step for the Panchayats and its functionaries to actively engage in delivery of timely, quality services to the rural citizens, within an accessible distance.

enabled service delivery benefits to rural India. Citizen services in rural level are mainly provided by the Gram Panchayats and Common Service Centres (CSC).

11.2 Common Service Centre (CSC)

Common Service Centre is a strategic milestone of Digital India programme. CSCs are the access point of delivery for various electronic services to all the villages in India, thereby contributing to a digitally and financially inclusive society. CSCs enable the three vision areas of the Digital India. They are:

a) Digital Infrastructure as a core utility to every citizen.

b) Governance and services on demand.

c) Digital empowerment of citizens.

The idea of CSCs[23] was approved in 2006 as part of the National e-Governance Plan. CSCs are set up in a public-private partnership mode, with a designated state agency being a franchisor of sorts for village level entrepreneurs (VLEs) to set up centres. CSC operators scan documents and upload them through a portal to the relevant government office that will then send back a completed certificate or card. They are like cyber cafes, except they connect only to Digital India.

11.3 CSC 2.0 Scheme[24]

Under the Digital India programme, at least one CSC (preferably more than one) is envisaged in 2.5 lakh Gram Panchayats for delivery of various electronic services to citizens across rural India. This would include strengthening and integrating the existing 100,000 CSCs under the CSC scheme and making operational an additional 1.5 lakh CSCs in Gram Panchayats. CSC 2.0 is a service delivery oriented entrepreneurship model with a large bouquet of services made available for the citizens through optimum utilization of infrastructure already created in the form of SWAN, SSDG, e-District, SDC, and NOFN/ BharatNet.

[23] http://www.thehindu.com/news/national/A-leap-into-the-digital-world/article16785727.ece
[24] https://csc.gov.in/index.php?option=com_content&view=article&id=174&Itemid=331

Stated objectives of CSC 2.0

i. Non-discriminatory access to e-Services for rural citizens by making CSCs complete service delivery centres, utilizing the infrastructure already created in terms of other Mission Mode Projects.

ii. Expansion of self-sustaining CSC network till the Gram Panchayat level – 2.5 Lakh CSCs, i.e. at least one CSC per Gram Panchayat, more than one preferred.

iii. Empowering District e-Governance Society (DeGS) under the district administration for implementation.

iv. Creating and strengthening the institutional framework for rollout and project management, thereby, supporting the State and District administrative machinery and handholding of VLEs through local language Help Desk support.

v. Enablement and consolidation of online services under single technology platform, thereby making the service delivery at CSCs accountable, transparent, efficient and traceable, with a technology-driven relationship between all stakeholders.

vi. Providing Centralized Technological Platform for delivery of various services in a transparent manner to the citizens.

vii. Increasing sustainability of VLEs by sharing maximum commission earned through delivery of e-services and encouraging women to join as VLEs.

e -Transaction

An e-transaction is a transaction delivering public service using ICT tools to improve access, enhance transparency and reduce response time while also satisfying all of the following four conditions:

i. Service is requested through electronic means (self-access or assisted access) including mobile devices.

ii. Workflow/approval process is electronic

iii. Database is electronic/digitised

iv. Service delivery is electronic

In order to improve access, enhance transparency and reduce response time is termed as an e-Transaction. CSCs are more than service delivery points in rural India. They are positioned as change agents, promoting rural entrepreneurship and building rural capacities and livelihoods. They are enablers of community participation and collective action for engendering social change through a bottom up approach with key focus on the rural citizen.

COMMON SERVICE CENTRE – SPECIAL PURPOSE VEHICLE (CSC-SPV)

To facilitate the successful implementation of the CSC Scheme, a Special Purpose Vehicle (SPV) named "CSC e-Governance Services India Ltd" (CSC-SPV) had been incorporated under the Companies Act 1956, under the administrative control of DeitY. It may be noted that CSC 2.0 is entirely based on an entrepreneurship model, with no viability gap funding from Govt. of India for the CSCs. A local Village Level Entrepreneur (VLE) is expected to bear the entire capital and operational expenditure involved in making the CSC operational and deliver various services to citizens as per the direction of the State/UT Administration. Hence State/UT administration is expected to define their own implementation mechanism, in coordination with CSC-SPV (the implementing agency), State IT dept. and the District e-Governance Society (DeGS). Support from any third party may also be taken for the operationalization of the CSCs, under appropriate Government control.

The CSCs are also imparting training to citizens on basic IT literacy under the National Digital Literacy Mission. More than 30,000 CSCs have already been provided these trainings. It is understood that in many places, the CSCs are also co-located in Gram Panchayat premises or are situated in close proximity to the Panchayat premises. Thus, the CSCs can be used to continuously impart trainings to Elected Representatives and Panchayat Functionaries at Panchayat level. The States may also consider leveraging the computing infrastructure and technical skill set of the CSC/VLE for various IT-related activities. The arrangements of this partnership can be worked out at State level.

Besides the Common Service Centres, some states have started their own panchayat service delivery model, housed in the Gram Panchayat building with the focus of providing services to the gram panchayat citizens in a quick and efficient manner. They are customized services made to cater to the needs of the state. Focus in on providing working hardware and software, handholding and payment gateway.

11.4 Service Delivery Models in different States

MeeSeva: Telangana and Andhra Pradesh

MeeSeva means “at your service” in Telugu, which extrapolates to being at the service of the citizens. It is a good governance initiative that incorporates the vision of National e Governance Plan - “Public Services Closer to Home” and facilitates single entry portal for entire range of G2C and G2B services.

The objective of MeeSeva is to provide smart, citizen centric, ethical, efficient and effective governance facilitated by technology. The initiative involves universal and non-discriminatory delivery of all government services to citizens of all strata with improved efficiency, transparency and accountability of the government. The initiative features transform government-citizen interface at all levels of administration along with a shared governance model.

The project brings in a digital public key infrastructure (PKI) enabled integrated architecture through multiple service delivery points by fusing in various pre-existing state initiatives with the Mission-Mode Projects like State Data Center (SDC), State Wide Area Network (SWAN) and Common Service centers (CSCs) of the National e-Governance Plan (NeGP) of the Government of India.

MeeSeva adopts the concept of central pooling of all land records, registration records and records of socioeconomic survey, digitally signing them with the digital signature certificates of the authorized officer, storing them in the database and rendering them using a web service. All the documents rendered are digitally signed and electronically verifiable making them tamper proof. The project brings in strict adherence to citizen charter time limits and ushers in a whole new paradigm of across the counter services to ostensibly work flow services through massive porting and bulk signing of databases.

The kiosks, spread across the state, are run by self-employed youth, who besides eking their livelihood provide a decentralized self-governance backbone to the administrative system. Multiple service delivery points run by citizens competing with each other redefine governance and bring in strict adherence to citizen charter time limits.

MeeSeva also ended the 'tyranny of ink signatures'. Most of the functionaries ranging from Tahsildars to Police SHOs to municipal commissioners have been using digital signatures to clear MeeSeva requests, making it the country's largest such system.

The process of aligning with MeeSeva has become a guiding philosophy of governance in the state which has come in as a silent wave and with its sweep, revamped many moribund processes and approaches. Its effectiveness can be measured in the satisfied eyes of the citizens strengthening the democratic foundations of our country and bringing citizen centricity to the forefront.

With MeeSeva in place, the stage is all set to implement and monitor the impending Right to Services Act in its true letter and spirit.

Palle Samagra Seva Kendralu: Telangana-Panchayat Service Delivery Model:

Palle Samagra Seva Kendram[25] (PSSK) or One Stop Shop (OSS) is a new initiative of the department of Panchayat Raj and Rural Development, Government of Telangana, supported by Telangana Rural Inclusive Growth Project (TRIGP) - a World Bank initiative - to enable digital local governance. It envisages that the Panchayat shall serve as a single window for providing branchless banking services. The aim is to improve the coverage and service delivery of social protection entitlements (particularly to the poor and vulnerable) to 5 lakh poorest households mainly belonging to SCs / STs[26]. Panchayat services for rural development activities like NREGS payments, SERP Services, financial services etc., to be available at the Gram Panchayat level, making it cost and time effective for the citizens. Implementation of such systems includes development of an integrated application suite which gives access to the kiosk operators to execute the services.

The current ICT systems provide a good start as most of the departments have their own digitized/electronic platforms on which they provide their services. While having the back end architecture is important, it is also equally vital to have an effective and established management to run the one stop services. Coordinating with various agencies and line departments to provide services with integrated service delivery for the community requires the management agency to have previous experience in running similar models for

[25] http://oss.telangana.gov.in/OSSPORTAL/userinterface/DeliveryChannel/SDPUserLoginForm.aspx
[26] OSS Operational Guidelines

benefitting the community. Coordinating with service providers who offer technological services to the project is crucial as it impacts the final delivery and effectiveness of the project.

Service development for each scheme is important to understand the service delivery part of the one stop service. Each department has different ways of working, and follows different protocols in delivering services to the entitled. Integrating such services into the service protocol with a sophisticated background is important. One such protocol that shall be worked upon includes establishment of a Direct Benefit Transfer (DBT) cell that enables a smooth transfer of financial services for the entitled.

PSSKs were launched on 2nd October, 2015 with 105 centres across the state of Telangana. PSSKs are being run on a commercial mode by Village Level Entrepreneur (VLE) who is selected from SHGs. These VLEs are earning remuneration ranging from Rs.1000 to Rs.8000 per month in the form of commission from citizen services, banking correspondent activities etc. At present the services are rendered through BSNL connectivity in 105 centres. Sixteen services are provided through PSSKs from five departments.

M-Panchayat (Andhra Pradesh – Panchayat Service Delivery Model)

The Commissioner Panchayati Raj and Rural Development, Andhra Pradesh has initiated Digital Panchayat, a flagship G2C project, for computerization and online issuance of citizen centric certificates.[27] After a detailed study by NIC, the department prioritized the applications to be automated at the GP level. The application areas are Birth and Death Registrations, House Tax Demand Collections, Trade Licenses, Property Valuation, mutations, water tap connection, NOC, building permissions, layout permissions and MGNREGA. These applications provide an end to end solution for all gram panchayats in the state. The software facilitates generation of certificates, payment gateways for citizens, e-Sign facility for panchayat functionaries, SMS and email alerts. Computerization of all three tiers of PRIs is also done.

A robust MIS is in place. Dashboard is visible to the general public. Data is displayed for all the services across all the districts. It can be drilled down upto the GP level. The number of

[27] http://mpanchayat.ap.gov.in/

applications applied, pending, rejected and approved is visible. The name of the applicant per services is also visible on the dashboard.

A mobile app is also available for the availing the services. Service can also be tracked online. Citizen can login at their convenience or go to the GP to avail the services. A grievance can also be lodged online. This shows that the model is accountable, transparent, responsive and participatory, qualifying it to be a good governance model.

The model is housed in the GP and is supported by the Gram Panchayat. So far, 4000 such centres have started across the state of Andhra Pradesh. Training to the operators is given by the PMU – which is trained by NIC. The operator gets a fixed salary and the revenue collected through providing services is collected by the Panchayat.

Sevana- Civil Registration (Panchayat Service Delivery Model), Kerala

Sevana-CR registration which is a service delivery software application at Gram Panchayat level to citizens was implemented in the year 2002. Some of the online services available through the application include birth, death and marriage registration. Through the hospital kiosk, within twenty-four hours of registration, birth and death certificates are available online. The website is regularly updated with the number of births and deaths along with their birth sex. Marriage certificate is also available online to citizens within twenty-four hours of registration. The civil registration data is also shared with the line departments like health department, economics and statistics department, regional cancer centre and passport offices.

Akshaya Centres (CSC Model), Kerala

Akshaya is an innovative project implemented in the state aimed at bridging the digital divide. It addresses the issues of ICT access, basic skill sets and availability of relevant content. *Akshaya* Centres are set up within a maximum radius of two kilometers for any household. They provide quality ICT dissemination and service delivery facilities and leverage on networked entrepreneurship. With more than 2600 Centres in urban and rural areas, Akshaya Centres are taking e-governance to the door steps of the citizen.

Akshaya is acting as an instrument of rural empowerment. The project is a catalyst in creating economic growth and creation of direct and indirect employment in the state by focusing on the various facets of e-learning, e-transaction, e-governance etc. Thus, the

project is having a long standing impact on the social, economic and political scenario of the state. Some of the key services that are delivered through Akshaya centres are Aadhaar Enrolment, Banking & Insurance Services, CHIAK-under Rashtriya Swasthya Beema Yojana, Online applications (e-Grantz, Entrance Examination, Ration Card, election id etc.), Utility Bills/Fee Payment services, Online application for CM's Public Grievance, Data digitization & Aadhaar seeding, KNRK (Kerala Non Resident Keralites Welfare Board) services, Income certificate, Caste certificate, Widow/Widower certificate, residential certificate, encumbrance certificate, dependency certificate, domicile certificate, Nativity certificate, solvency certificate, Valuation certificate etc.

Gram Panchayat Management System (Panchayat Service Delivery Model), West Bengal

There are two modules existing in the Gram Panchayat Management Systems related to citizen service delivery in West Bengal. They are:

i. **Online Public Service Application:** This application is used for issuing birth, death, trade and residential certificate to the citizens of rural areas through Gram Panchayats. This application can operate in offline mode at GP office, where consistent connectivity is constraint.

ii. **Tax Collection using hand held PDA Machine:** This module was introduced in the financial year 2015-16. 999 GPs already have their PDA machines delivered. Once the assessed list has been transferred to PDA from GPMS, the tax collector will be able to collect the tax and the money receipt will generate from PDA. At the end of day, the transaction history needs to be export to the GPMS database

Sahaj Tathya Mitra Kendra, (CSC Model), West Bengal

Sahaj Tathya Mitra Kendra, in collaboration with private partners and Government of West Bengal has been promoting e-governance initiatives in the state for the past three years. From helping the rural population to pay electricity bills, download mark sheets, fill application forms or file e-tenders, these centers have done wonders in recent times.

Run under the supervision of the West Bengal State Rural Development Agency (WBSRDA) under Panchayats & Rural Development Department, Government of West Bengal, the

Tathya Mitra Kendras of the State are located across 6000 locations. They also help passport seekers file applications online for a nominal fee so that nobody has to depend on a tout.

Tathya Mitra Kendras are government aided centres set up under public private partnership model by rural entrepreneurs to provide basic information technology related services to villagers. Bengal has 6,339 *Tathya Mitra Kendras*, some located in the block offices, others at the gram panchayats headquarters. Each such centre is manned by at least one village level entrepreneur with basic infrastructure comprising at least one computer and a printer.

A *Tathya Mitra Kendra* helps a customer download and fill in education and employment related forms, apply for a government scholarship, file an online application for an electricity connection, apply for SC/ST certificates and search land records among other things. Personnel manning the *Tathya Mitra Kendras* have had to undergo training to be eligible for the new service.

BapujiSeva Kendra (Panchayat Service Delivery Model), Karnataka[28]

Karnataka became the first State in the country to launch a unique scheme, Panchayat-100 *Bapuji Seva Kendra*, to help rural people avail themselves of 100 different utility services on their doorstep. Delay in delivery of services to the common people amounts to corruption and harassment. This particular scheme will help the people to avail social, economic and commercial services on their doorstep. As of now, 4023 *Bapuji Seva Kendras* are established in the state. All the Panchayat-100 *Bapuji Seva Kendras* would be located in gram panchayat offices. Villagers could avail 40 services of the Revenue Department, 43 services of the RDPR Department and 17 other services, including electricity, land line telephone, insurance, mobile recharge. The idea is to expand to 6019 gram panchayats soon.

There is a PMU set up for the smooth implementation of the project. At District level DPMU unit is working and at each Taluka level there is one Coordinator to provide technical support to the GPs. Wherever there is a problem for GP Operator, Taluka level Coordinator will provide technical support.

[28]http://www.thehindu.com/news/national/karnataka/100-utility-services-now-on-the-doorstep-of-village-residents/article14466223.ece

Aaple Sarkar Seva Kendra (CSC + Panchayat Service Delivery Model), Maharashtra

Under e-Panchayat Mission Mode project, Maharashtra government has formulated an innovative program called SANGRAM[29] (*SanganakiyaGramin* Maharashtra) meaning Computerized Rural Maharashtra, envisioning online delivery of all the possible e-services in G-G, G-C, B-C realm and Financial Inclusion Protocol, Direct Benefit/Entitlement Transfer of the development schemes of GoI& the state government at the door steps of the Village Community in the most transparent, speedy and efficient manner. Funds provided to the Panchayat under the 13th Finance Commission have been allocated on a priority for roll out and stabilization of the SANGRAM project. SANGRAM was declared first in e-governance for three consecutive years by MoPR. Though SANGRAM was developed as an Entrepreneurial model, it lacked in creating enough awareness due to VLE's misconceptions, Panchayat's inhibitions and RRD's perceptions. With the withdrawn of the 13th Finance Commission in 2015, the model collapsed. Keeping in mind the lessons learnt from SANGRAM, *Aaple Sarkar Seva Kendra* (ASSK) was modeled. On November 18th, 2016, a MoU was signed between the Government of Maharashtra (RDD), Directorate of Information Technology (DIT) and CSC e-Governance Services India Ltd (CSC-SPV) to roll out the usage of PES Applications and the CSC centres.

In *Aaple Sarkar Seva Kendra* (ASSK), the concept is to house both CSC and Panchayat Service Delivery at the same point. The same operator is going to provide both the tasks. The entire operations of the PMU are outsourced to CSC-SPV who is responsible right from recruitment of the resources operators called Kendra Challaks (KC), block managers, district managers, project experts and state managers), to make them complete the work on time, monitor their work regularly, address software and hardware issues, credit the operator's salary into his account, setting up a technical call centres, providing hardware maintenance etc. They provide handholding support for four years, during which the State government support them by paying a fixed salary of Rs. 6000. GP provides all infrastructures – including computer, electricity, internet, stationery etc. The following is the amount paid by the State government to the CSC-SPV per month:

[29] Agreement for implementing of e-governance & services offered by CSC-SPV through Aaple Sarkar Seva Kendra of Rural Development Department & Panchayat Raj, Government of Maharashtra

Table 48 - Amount paid to CSC-SPV by state

S. No	Activity	Amount (in Rs.)
1	Salary of the operator	6000
2	Hardware maintenance and stationery	2700
3	Training and capacity building	1300
4	Project management charges	450
	Total	10450

Of the Rs. 10450, Rs.4450 will go to CSC-SPV per month.

Since the GP is already paying a sum of Rs.6000 per Kendra, all payments received on account of service delivery of G2C Gram Panchayat Services will go 100% to the gram panchayats. Revenue from delivering G2C services of the other departments (developed by DIT and hosted by State Data Centre) will be shared among the stakeholders including ASSK Kendra Chalak and GP as determined by DIT subject to fixed component of 5% to GP. For B2C services, revenue will be shared in the ratio of 80:20 by the KC and CSC-SPV respectively. The expenses on electricity and internet charges will be borne by the GP during the project period. CSC-SPV will take the entire responsibility of supplying hardware as and when required to be replaced. CSC-SPV would submit a centralized invoice per month to the RDD and the RDD should ensure centralized payment to them.

However, it is envisaged that after four years, the Kendra Chalak shall bear all the charges including electricity, internet charges, consumables, minor repairs, maintenance charge of infrastructure, etc. and independently provide all the services. This model is still in the proposed state and is yet to be implemented in a full-fledged manner to see the results.

Services on offer at GP level

Based on the survey conducted it is found that the most sought after service from among the services on offer from the Gram Panchayat are Death and Birth Certificate, followed by schemes that disburse economic and social security services, followed by payment of House Tax, AADHAAR enrolment and issuance of ration card in that order.

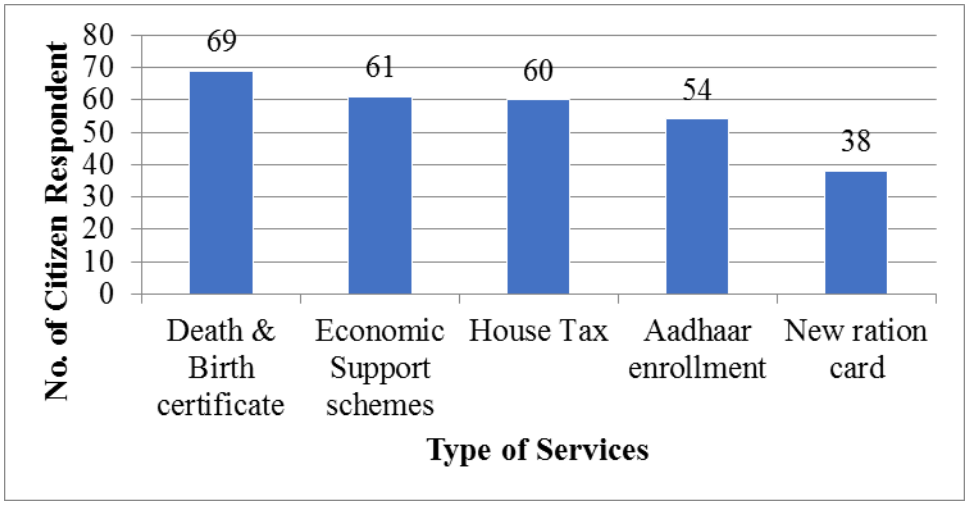


Fig. 31 – Top 5 Citizen Services provided at GP Level

The citizen respondents pointed to the overwhelming ease with which they can now avail of schemes at their accessible reach through the Citizen Service Centres. In fact the CSC is a pride of place to showcase in the Panchayat building. Co-location of the two means that the Panchayat services are channelized through the CSC now. An examination of the services for which citizens approach the CSC (at the time of the survey!) were Aadhaar enrolment, followed by Death and Birth Certificate, payment of utility bills, residence and other general services and student scholarship.

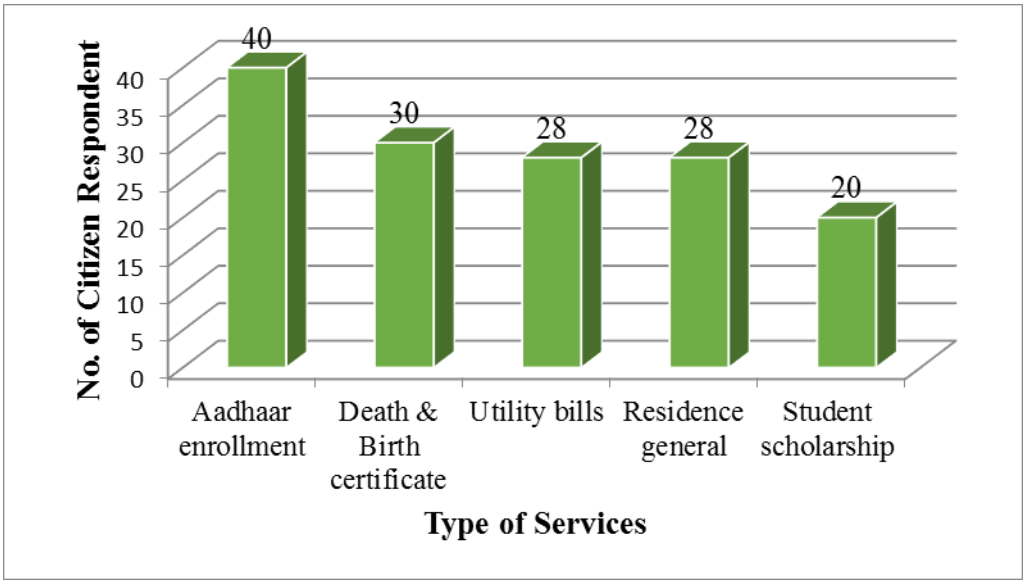


Fig. 32 – Top 5 Services available at CSC level

From among the services provided by the CSCs at the Gram Panchayat level, there are such services that come under the purview of other line departments, other than Panchayati Raj. Here it is seen that the top 5 such services are Utility bills and agricultural inputs, land mutation and pattadar passbooks, student scholarship, agriculture land value certification.

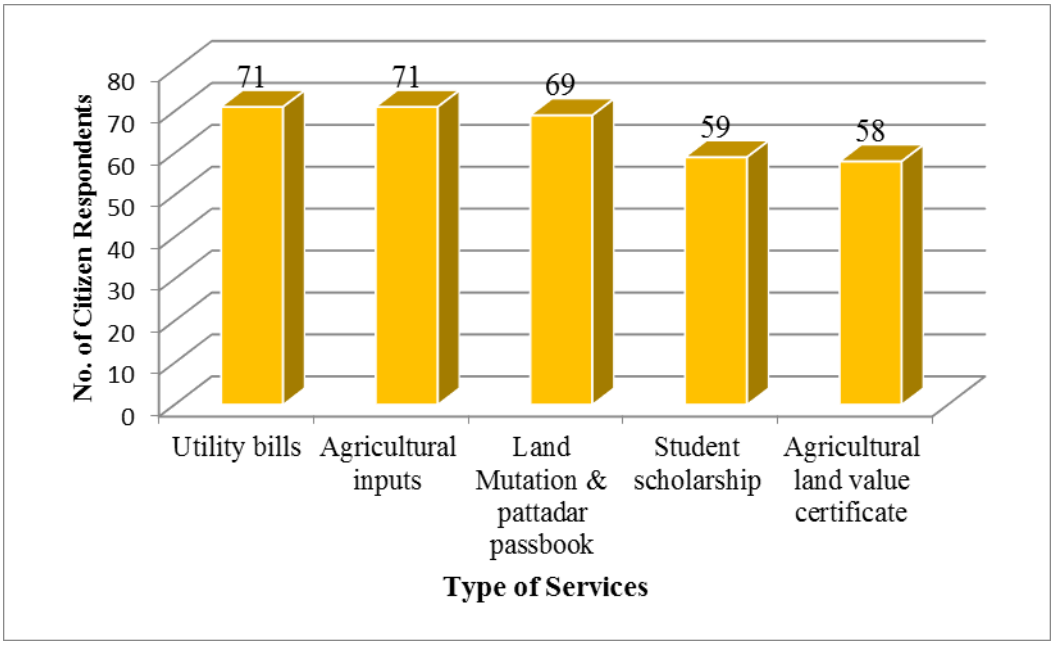


Fig. 33 - Top 5 Citizen Services provided at Line Department Level

While it would be prudent to say that CSCs handle services over and above the mandated Panchayat services, they are potential centres for the Panchayats to conduct the service delivery seamlessly and in a concerted and coordinated manner, in close collaboration with the line department. The Panchayat functionaries in many States / UTs, make it a point to converge their services with the other line departments under the same roof, at least once a week / month. This helps a citizen to come to a single centre for all kinds of local level citizen services and save their valuable time and resources. In Gujarat, due to the heavy work-load on the *TalatievamMantri* (Panchayat Secretaries), separate *Talatis* have been recruited for Revenue related works. This new appointment relieves the *Talati* of the *Panchayats* from discharging the revenue works. The *Talatis* for Revenue are housed under the same roof in order to ensure that there is continuity in work, adequate Knowledge Transfer (KT) occurs from the old to the new and experienced to the new inductee, and smooth transition of work happens, with least disturbance to the citizen.

CSC- Panchayat convergence

It is found from the survey that when the CSC is co-located in the Gram Panchayat's own building / GP office, it tends to be under the direct monitoring of the Elected Representatives. A casual walk in by the village elders / women and other village communities to the Panchayat to greet the elected representatives / sort out issues, the experience can be e-empowering. This is so because there is a likely exchange about the nature of services being rendered by the CSC now and a possible interaction with the operator to know how the computer and other aides operate to generate certificates, reports etc.

The VLEs of CSCs could be made as resource persons to enlighten and empower elected representatives on matters pertaining to conduct of Gram Sabha and keeping of the minutes of the meeting on the SAMM website. *A summary of the services on offer in all the States / UTs is given in Annexure4.*

Concept wise the model proposed by Maharashtra seems to be a workable model because the revenue model is more sustainable. Multiple kiosks in the same vicinity, providing similar or different services, would require a room – its rent, a computer system, printer (fixed cost) and internet, electricity and maintenance (variable cost). Opportunity cost of the operators would probably not be remunerative. If all services will be available at one point, the initial investment on infrastructure and operating costs will reduce. More services, delivered in a hassle free process will see more demand. Economies of scale increases making it viable. Return on investment will be good and the kiosk might break even soon. It could be a One Stop destination for all services, and the portfolio of services can also be increased, thanks to the effort going into digitalizing all monetary transactions. Transport tickets (bus, rail, and air), mobile recharge, DTH recharge, online shopping, etc. can also be provided to the citizens at a nominal commission, subject to the demand and willingness of the Kendra Chalak.

As per the directions given by the Ministry of Panchayati Raj, most of the CSCs visited in Rajasthan, Haryana, Gujarat, and Karnataka are co-located in the Gram Panchayat and are functioning from GP premises and with GPs investment. GPs are proving rent-free premises to the VLEs and also providing stationery for their functioning.

12.STATUS OF EFFECTIVE ROLLOUT

The rollout of the software application and effective implementation of the same at grass root level depends on availability of various factors and support systems at the field level. In the context of PES an enabling environment can only contribute to the effective and efficient use of the application. Following are the major factors which influence the rollout and implementation:

1. Availability of infrastructure which includes computer, uninterrupted power supply, printer and UPS.
2. Availability of internet connectivity with good signal strength.
3. Trained and efficient human resources who can handle the software requirements.
4. The states willingness to use the software and efforts towards provisioning the above.
5. Regular monitoring on the usage of PES/State Specific application from Gram Panchayat to the State level.
6. Using the data and information uploaded on the 11 core applications makes it more relevant.
7. Integration of State specific software with the PES.

During the study the above parameters/factors were observed to ascertain the status and level of implementation of PES across the States. Following table depicts the status of use of PES/State Specific applications, barriers in effective implementation experienced by the states and suggestions for improving the use of application.

Table 49 - Challenges for complete adoption of PES application

Factor	States
Infrastructure	Himachal Pradesh, Maharashtra, Daman & Diu, Uttarakhand, Chhattisgarh, Lakshadweep, Andaman & Nikobar Islands, Sikkim
Manpower	Bihar, Haryana, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Assam, D&N Haveli
Monitoring	Meghalaya, Jammu & Kashmir
Technical support	Nagaland, Odisha, Punjab
Training & capacity building	Manipur, Mizoram, Puducherry, Arunachal Pradesh, Goa, Tripura
Server capacity	Kerala
e- Literacy	Andhra Pradesh
Community involvement	Tamil Nadu

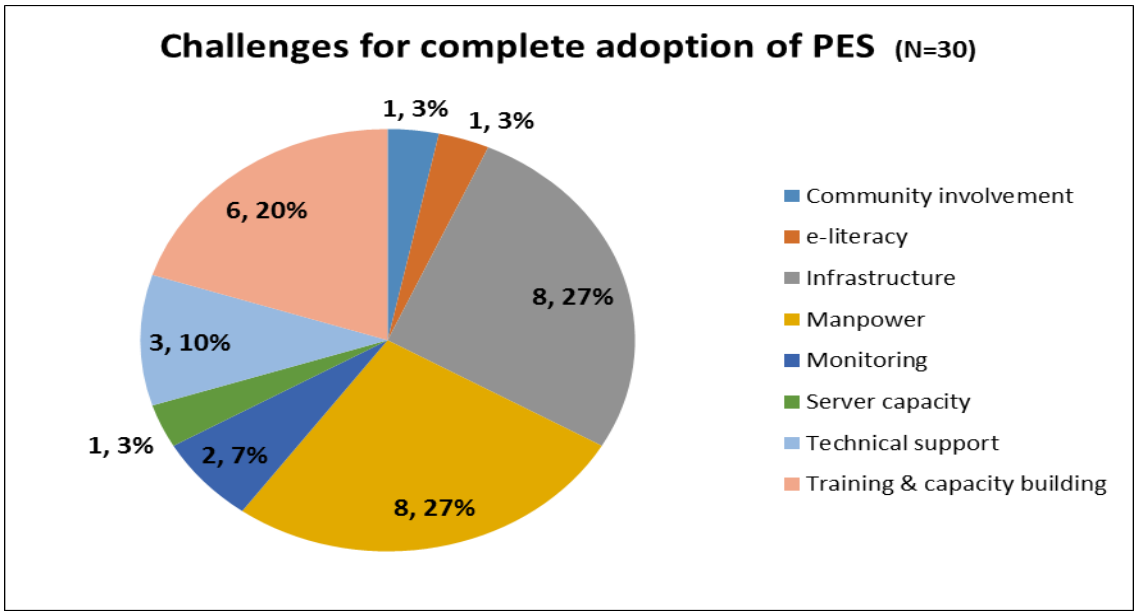


Fig. 34– Challenges for complete adoption of PES

Table 50 - PES rating by States and UTs

S No	State/UTs	Perception on PES by Nodal Officers
1	A & N Islands	8
2	Andhra Pradesh	9
3	Arunachal Pradesh	7
4	Assam	8
5	Bihar	6
6	Chhattisgarh	10
7	Dadra and Nagar Haveli	6
8	Daman & Diu	5
9	Goa	8
10	Gujarat	7
11	Haryana	8
12	Himachal Pradesh	9
13	Jammu & Kashmir	8
14	Jharkhand	6
15	Karnataka	6
16	Kerala	1
17	Lakshadweep	NA
18	Madhya Pradesh	8
19	Maharashtra	9
20	Manipur	8
21	Meghalaya	8
22	Mizoram	7
23	Nagaland	5
24	Odisha	9
25	Puducherry	7
26	Punjab	9
27	Rajasthan	7
28	Sikkim	10
29	Tamilnadu	8
30	Telangana	7
31	Tripura	8
32	Uttar Pradesh	8
33	Uttarakhand	5
34	West Bengal	NA

Source: Data provided by respective state nodal officer

To a question on PES applications rating on a scale 1-10 (1 being least and 10 being most useful) with respect to usefulness, quality of data and future adoption status, the respective state nodal officers has responded with a rating ranging between 5 & 10. The average rating on PES applications given by all states is 7. Majority of the states quoted that, Priasoft and PlanPlus are the most useful applications than other PES applications. Very few mentioned NAD is also useful and important.

With respect to the possibilities for adoption of PES applications instead of replacing the state specific applications, the respective state nodal officer has expressed that, it is better to look at the possibilities for integration of existing state specific applications with relevant PES application. With the proper integration between state specific and PES applications, the data being entered into state application will reflect into the PES applications automatically. During the field survey, it is observed that Gujarat state has developed an application to bridge up the state specific and PES application. Similarly, the states which are using state specific applications need to integrate with PES applications for data integration. Ministry should take an initiative by involving NIC and state specific application developed agency to come together for integration of both applications.

Table 51 -Enabling Environment

S. No	Questionnaire for State Nodal Officers (SNOs)	Total Number of GPs in your State	Computers	Power supply	Printer	UPS	Number of GPs have Internet connectivity
1	A & N Islands	70	100.0	100.0	100.0	100.0	35.7
2	Andhra Pradesh	12920	28.6	100.0	28.6	28.6	28.6
3	Assam	2200	100.0	100.0	72.7	100.0	72.7
4	Bihar	8463	60.0	40.0	30.0	30.0	16.1
5	Chhattisgarh	10971	36.1	96.3	26.8	26.8	21.9
6	Dadra and Nagar Haveli	20	100.0	100.0	100.0	100.0	80.0
7	Goa	189	100.0	100.0	100.0	100.0	0.0
8	Gujarat	14263	100.0	100.0	100.0	100.0	100.0
9	Haryana	6203	24.2	24.2	24.2	24.2	16.1

10	Himachal Pradesh	3226	100.0	100.0	100.0	100.0	86.8
11	Jharkhand	4402	50.5	50.5	50.5	50.5	50.1
12	Kerala	940	100.0	100.0	100.0	100.0	100.0
13	Lakshadweep	10	100.0	100.0	100.0	100.0	100.0
14	Maharashtra	27901	100.0	100.0	100.0	100.0	85.0
15	Manipur	161	70.2	69.6	67.1	69.6	
16	Nagaland	1238	100.0	96.5	28.0	0.0	30.0
17	Odisha	6801	100.0	100.0	100.0	100.0	50.0
18	Punjab	13028	99.7	100.0	3.8	3.8	66.0
19	Sikkim	176	100.0	100.0	100.0	100.0	45.5
20	Telangana	8684	66.4	100.0	28.1	60.2	15.4
21	Tripura	1178	85.5	85.6	67.1	85.6	16.6
22	West Bengal	3341	100.0	100.0	100.0	100.0	99.1

Source: Data provided by respective state nodal officer

Availability of infrastructure like computers, printer, UPS and power supply are the key for successful roll-out or implementation of any ICT application. India, rural areas caters to more than 70%, the electricity power supply is a big challenge. Though there is power supply, the quality of power supply is a big challenge.

Only 22 out of 35 States/UTs has responded with State/UT wise information related to IT infrastructure availability at Gram Panchayat level for the effective roll-out of PES applications.

The above table depicts that, almost four fifth of Gram Panchayats have been provided with computers; which means 4 out of every 5 GPs have computers to carry out the required task of feeding the data into PES applications. More than four fifth of the GPs across the country have some kind of power supply which enables the local staff to use the provided computers and IT equipment's. We also know that in most of the rural areas, the quality of power supply varies from state to state and region to region. To overcome the quality of power situations like frequent power cuts, lower power supply and power breaks for a long time, we need Uninterruptible Power Supply (UPS) systems in place as a power back-up in

crisis situations. In the above mentioned 22 states, averagely, 70% of the GPs have provided with UPS equipment's to manage power supply issues.

Another key factor implementation of PES applications is internet connectivity. To update the PES applications, as like computers and power supply, internet connectivity is also crucial. From the above table it clear that, almost two third GPs has some kind of internet facility to operate the PES applications. The type of internet connectivity varies from place to place and state to state. The situation is better in urban areas compared to rural villages. Most of the GPs have mobile or data card based internet connectivity with very low speed of 128 kbps. This is resulting in poor usage and updation of PES applications. However, the situation is a bit better in places near to District headquarters where they have the facility of getting broadband which has higher speed compared to the rural areas. Overall, type of internet connectivity plays an important role in successful implementation of any ICT application.

Out of the 11 core applications under PES, maximum usage has been found to be in Plan Plus and PRIASoft. This is owing to prioritisation given to streamlining of the accounts of Panchayats and preparation of bottom-up plans for execution.

In addition, the fund disbursement under the Fourteenth Finance Commission (FFC) directly to the Gram Panchayats warrants streamlining of the processes of fund utilisation so that the desired outcomes of fund disbursement are met to the satisfaction of the primary stakeholders and with the spirit of good local governance intact.

Study findings reveal different opinions/perception of States and rating towards the 11 core applications in PES. States that are using PES have expressed that not all 11 core applications are useful/relevant for the panchayats. (0-10 Rating table)

Wherever State specific applications are in use respondents stated that only PRIA Soft, Plan Plus, Action Soft and LGD are relevant for them.

Manpower Deployment at Gram Panchayats across States

States needs to look at the availability of manpower for better execution of e-Panchayat Mission Mode Project, enhance capacity of Gram Panchayats through manpower deployment.

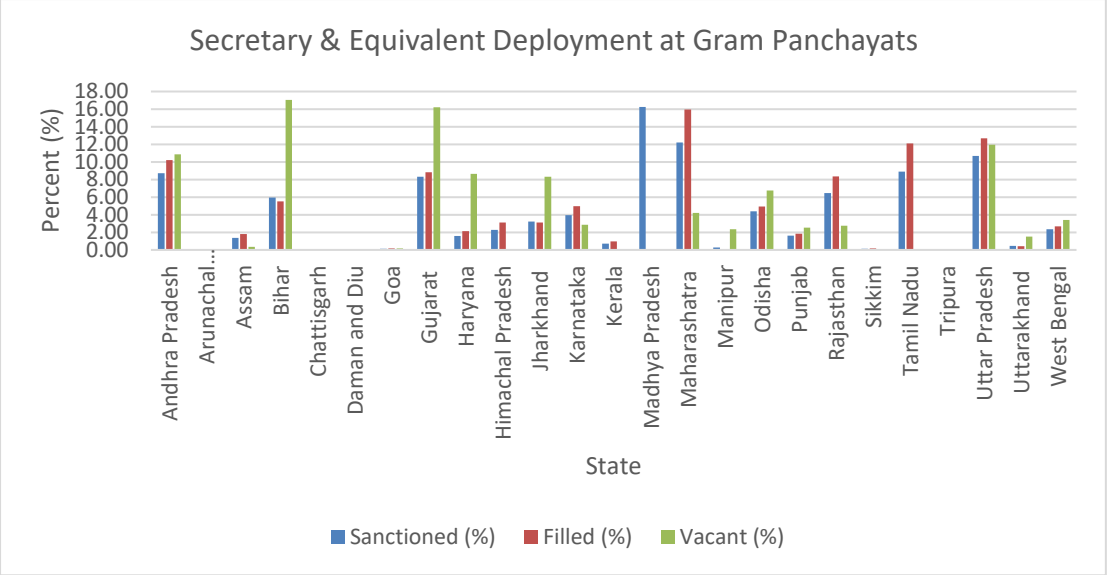


Fig. 35 – Secretary and equivalent manpower deployment at GPs across States

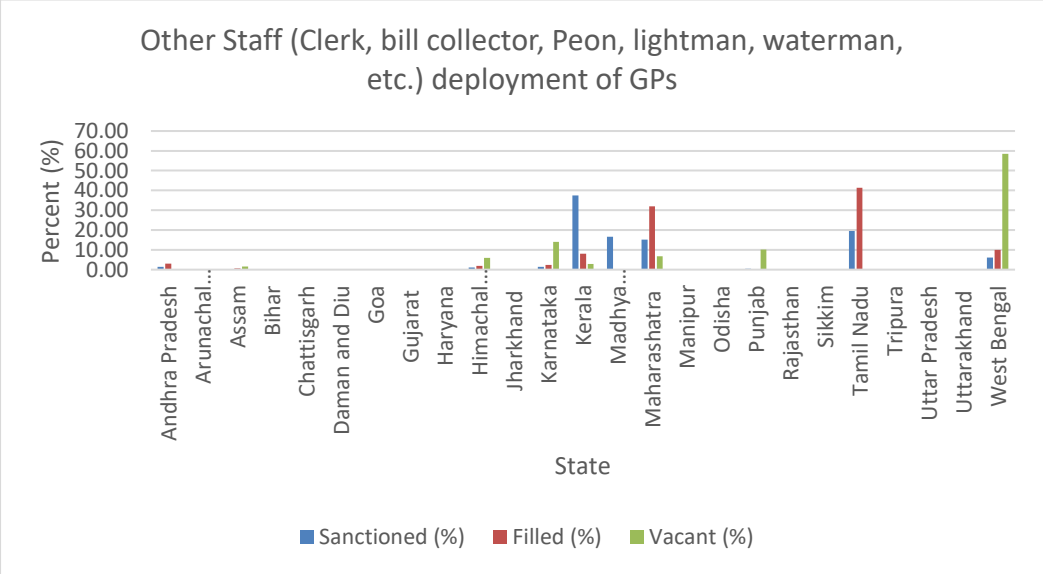


Fig. 36 –Other Staff (Clerk, bill collector, peon, lightman and waterman, etc.) manpower deployment at Gram Panchayats

The above Figure 35 and 36 show that Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Damn and Diu, Goa, Haryana, Jharkhand, Kerala, Manipur, Odisha, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand are less manpower available states in the country.

Human resources are of paramount importance in achieving the desired impact of e-Panchayat Mission Mode Project on a sustainable basis. However, there is very little State-level data/information available with respect to human resources. Hence, it becomes difficult to arrive at a comprehensive strategy. Therefore, the State Government and MoPR could collect and analyse as much as data possible and place this issue before the Fifteenth Financial Commission.

Manpower deployed for e-Panchayat applications - Telangana State

As per the resolution of GPs it is decided by the Government every 500 population 1 manpower Gram Panchayat can engage (Telangana PR Act. G.O.No.51), the main source of fund is GPs own fund and State Government Grant in the form of State Financial Commission (SFC) and MoPR is releasing funds based on 14th Financial Commission.

At present no permanent employees are available at GP level but Panchayati Secretary looking the activities. Mandal level all the operators are contractual and outsourcing as per the GP resolutions based recruitment processing is following based on the requirement and fund availability in GPs. Based on the previous experience it is noticed that when compared to the regular staff and the manpower deployed for e-Panchayat applications i.e., contractual staff are contributing good implementation of Panchayats in the State with a specified timeline. It is recommended that at Panchayat level regular staff recruitment with supporting capacity building will be helpful to GPs for better implementation of PES at GP level.

Reasons for Slow Implementation of PES

As per the study it is observed that the slow implementation of PES in Telangana State are lack of skilled manpower, insufficient training programs to staff at different level need of impart basic ICT literacy to PRI representatives, over load on Panchayat Secretaries due to insufficient manpower, operators salaries, data uploading delays, internet connectivity issues in remote areas, lack of computers/ UPS/ Printers and its maintenance is a major issue, contract renewal of AMC are some of the key concerns. Lack of internet connectivity, power, hardware and insufficient number of trained manpower at Gram Panchayat level are contributing factors in the slow progress of computerization of Panchayats.

State needs MoPR support in case of capacity building on Plan Plus and GPDP plan preparation, etc. Even though, only post-dated data is entering by the GP operators in the PES applications and day-to-day online updated information is more effective and efficient when compared to post-dated data uploading in PES application which not happening in the State. But due to technical issues, large data operators are not in a position to enter the data. Panchayat Financial Management System (PFMS) entry of data linked with release of payment so people are following.

Various Source of Funds

At present Government of Telangana operating Rashtriya Gram Swaraj Abhiyan (RGSA) scheme funds are using for the salaries to GP operators Rs.8000 to Rs.15000 and for District Panchayat Officers Rs. 12000/- is paying to cater the State needs which is very nominal amount to operators and DPOs needs to revise the salaries for better service delivery.

Most states have reported difficulty in identifying the source of funds for IT infrastructure and salaries of computer operators since the Fourteenth Finance Commission (FFC) does not provide clear head of account for these expenditure heads. The distribution of funds available under various sources to cater the State needs are given as follows:

Table 52-Distribution of funding under State Finance Commission (SFC) and FFC

States	SFC	FFC	Remark
A&N Islands			No finance commission constituted
Andhra Pradesh		✓	
Arunachal Pradesh		✓	
Assam	✓		
Bihar	✓		
Chandigarh			No finance commission constituted
Chhattisgarh	✓		
Dadra and Nagar Haveli			No finance commission constituted
Daman and Diu		✓	
Goa		✓	
Gujarat		✓	
Haryana		✓	
Himachal Pradesh		✓	

Jammu & Kashmir (J&K)		✓	
Jharkhand		✓	
Karnataka		✓	
Kerala	✓		
Lakshadweep			No finance commission constituted
Madhya Pradesh		✓	
Maharashtra		✓	
Manipur	✓		
Mizoram	✓		
Nagaland	✓		
Odisha	✓		
Puducherry	✓		No finance commission constituted
Punjab	✓		
Rajasthan	✓		
Sikkim	✓		
Tamil Nadu	✓		
Telangana	✓		
Tripura		✓	
Uttarakhand	✓		
West Bengal		✓	

Note: Fourteenth Finance Commission, SFC – State Finance Commission

PES application performance is measured indicator wise like number of GPs adopting PES, data updation, cash book updation, record maintenance, number of Gram Sabha meetings conducted, Gram Panchayat revenue, etc.

Telangana State Specific Scenario

In Telangana, State Specific applications are more in usage along with 7 major PES applications like LGD, PRIASoft, Plan Plus, Area Profiler, Action Soft, NAD, NPP. However, during 2019 only a few GPs have used Area Soft application.

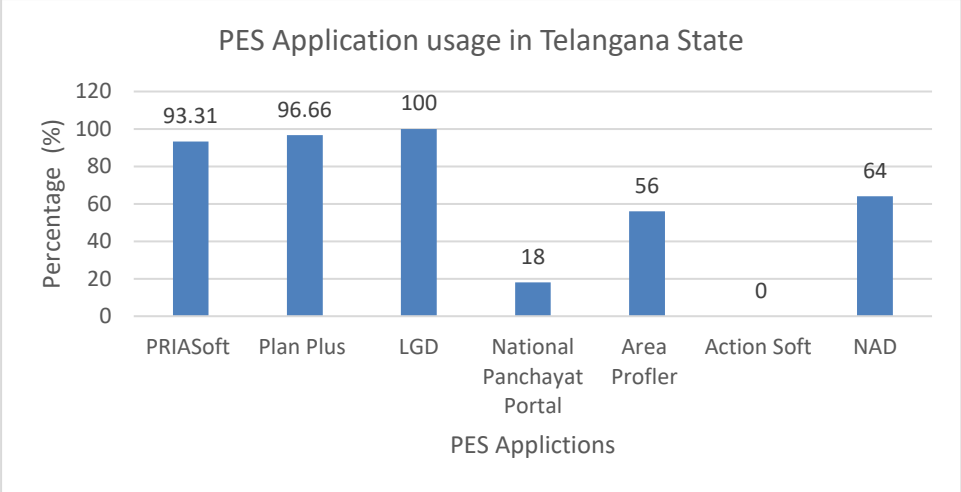


Figure 37: PES Application usage in Telangana State

Reasons for Slow Implementation of PES: As per the study it is observed that the slow implementation of PES in Telangana State are lack of skilled manpower, insufficient training programs to staff at different level need of impart basic ICT literacy to PRI representatives, over load on Panchayat Secretaries due to insufficient manpower, operators salaries, data uploading delays, internet connectivity issues in remote areas, lack of computers/ UPS/ Printers and its maintenance is a major issue, contract renewal of AMC are some of the key concerns.

Lack of internet connectivity, power, hardware and insufficient number of trained manpower at Gram Panchayat level are contributing factors in the slow progress of computerization of Panchayats.

State needs MoPR support in case of capacity building on Plan Plus and GPDP plan preparation, etc. Even though, only post-dated data is entering by the GP operators in the PES applications and day-to-day online updated information is more effective and efficient when compared to post-dated data uploading in PES application which not happening in the State. But due to technical issues, large data operators are not in a position to enter the data. Panchayat Financial Management System (PFMS) entry of data linked with release of payment so people are following.

Various Source of Funds: At present Government of Telangana operating Rashtriya Gram Swaraj Abhiyan (RGSA) scheme funds are using for the salaries to GP operators Rs.8000 to Rs.15000 and for District Panchayat Officers Rs. 12000/- is paying to cater the State needs

which is very nominal amount to operators and DPOs needs to revise the salaries for better service delivery.

Factors affecting on PES slow Implementation

i. Ninety three percentage of GPs surveyed have reported having their own Panchayat building;

ii. Internet connectivity at the GP level was found to be a factor affecting implementation of the applications in the present survey. While the ground work for National Fibre Optics Network (Bharat Net) appears to be in place, its operationalization is yet to begin. As such, in many States/UTs surveyed, the entry of GP level data is carried out at the Block level Panchayat (which has better internet connectivity);

iii. Sixty five percentage of the GPs have reported having 24 hours power supply, including through alternate power sources (like solar plant, inverter etc.);

iv. There is an acute shortage of functionaries critical to PES implementation viz. Panchayat Secretary and Computer Operator;

v. Awareness of PES among elected representatives is low. Only thirty four percentage of them were aware of PRIASoft. The proportions are much lower for the other PES applications;

vi. Citizens' awareness of PES was poor; only 20% of the surveyed persons were aware of the existence of a website of their GP; 70%of the citizens surveyed reported participating in the Gram Sabhas; however, only 27% of them reported verifying GP plans against their implementation status and only 17% reported verifying the assets against those reported by the GP.

Suggestions:

1. Where ever State specific applications are in use, it increases the burden of data entry in to PES as well as State specific application. Hence, there is a need for making the applications interoperable.

2. Since the States have different schemes and operational procedures at the GP level PES does not cater to all the State specific requirements. Hence, PES needs to be made flexible and suitable for such entries.

3. The study findings call for a need to issue State specific guidelines while using PES.

4. Short falls are reported by many states with respect to availability of continuous/ on time technical support while implementing PES. Hence, it is suggested to promote mechanisms that can provide continuous technical support at all levels.

5. There have been concerns raised on limited server capacity affecting the use of PES which needs to be addressed.

6. 65 per cent of the States reported usage of PES/State specific applications by citizens. This comes with a caveat of limited usage in places where literacy levels are low, absence of computer infrastructure and internet connectivity. Promoting awareness through IEC material and campaigns is suggested to improve the usage by citizens.

7. Capacity building of functionaries till gram panchayat level needs a boost to improve the usage of applications. It is suggested that extensive training need to be prioritized and promoting digital transactions at State, District, Block, and Panchayat levels.

8. Promote adoption of ICT driven initiatives at Panchayat level so that they can better perform their legislatively mandated functions for more efficient local governance.

13. NEW AREAS OF APPLICATIONS AND TOOLS FOR ICT INTERVENTIONS

Information and Communication Technology solutions make it much easier to capture, integrate and analyze data and much more meaningful for decision makers at all levels. It will helps to enable better recording of budget, prioritizing works, linking to budget, generating, modifying, finalizing plans, develop and monitoring of implementation. Most importantly, ICT can throw open the entire planning process to public view and bring life to the ideal of decentralized database, planning, budgeting and accounting, implementation and monitoring of Gram Panchayats, individuals, elected representatives, official functionaries, etc. The key focus of PES applications is on improving the governance though the use of ICT in delivering the services to the citizens of India, i.e., improving efficiency, accountability and transparency and reducing bribe in delivery of services.

13.1ICT Interventions

An ICT can be used in diverse applications to accelerate information dissemination, improve efficiency of public services, increase the transparency and accountability of government administration, to reduce corruption, and facilitate citizen participation in local governance. Since e-panchayat activity in India is at best at a moderate level, so there is scope to expand the deployment of e-panchayats. It is important to understand the full potential of positioning ICT all over India to improve the delivery of services. It is equally important to understand the challenges in harnessing this potential by identifying the critical success factors for wide-scale utilization.

13.2 New Areas of Applications and Tools for ICT Interventions

The Panchayati Raj Enterprise Suite (PES) is a platform which is an offering from MoPR, GoI for better landscape of Panchayats in India as Digital Panchayats. The PES is developed by NIC, Government of India, comprises of the core software applications which leverages the Panchayat Raj functionary and covering all activities pertaining to Panchayats in India.

Observations from studies

The following few observations are made by Centre for Good Governance (CGG), Hyderabad from the evaluation study of implementation of E-Panchayat Mission Mode Project/State Specific ICT initiatives in India to MoPR, GoI, New Delhi.

a) Lack of wide reach to target users

b) Domination of state specific applications usage

c) Data void in application/modules of PES

d) Mobile enablement of PES application(s)

e) Monitoring Tools

a) Lack of wide reach and publicity to target users

It is primarily observed from the interactions of various users of PES echo system such as Citizens, Panchayat Elected Representatives, Panchayat Operators, Blocks and District level users that there is a lack of awareness among the users about PES modules. The second observation is that there is low level understanding to use PES modules in their panchayats. Further, it is observed that the users who are using the PES system could not able to leverage over all functionality of modules as lack of functional understanding on the system.

b) Domination of state specific applications usage

It is observed that the usage of all PES modules/applications in all states is not uniform, few modules of PES have better usage and adaptability whereas other modules are not even take off. The reason for this could be that states have their own applications / modules which are closely similar (or equivalent) functionality to one or two modules of PES. These state specific applications have a better operational leverage and use in the states as they are home grown over several years of existence and the users are accustomed to use. This is resulting as effect on the corresponding modules of PES not being well taken off. The second observation is that there is no common structure and function of these state specific modules/applications as they were developed by the local players.

c) Data void in application/modules of PES

Although states have better adoption for selected PES modules and the similar momentum was not observed for the rest of PES modules which results a data void in few modules of PES in the states. This is leading to a major gap in the central database repository of PES echo system. This data gap within the PES modules is very much limiting to arrive Single Source of Truth (SSoT) from the existing PES system for decision making purpose to the officially of MoPR, GoI.

d) Mobile enablement of PES application(s)

The following table summarizes the proposed mobile based PES applications for faster reach and better access.

Table. 53– Mobile enablement of PES applications

S.No.	Type of Functionality	Module Name	Desktop Based	Proposed	
				Tablet Based	Mobile Based
1.	Existing PES Functionality	Local Government Directory	✓		
2.		Area Profiler	✓	✓	✓
3.		National Panchayat Portal	✓		✓
4.		PRIA Soft	✓	✓	
5.		Plan plus	✓		
6.		Action Soft	✓	✓	
7.		National Asset Directory	✓		
8.		Service Plus	✓	✓	✓
9.		Social Audit	✓	✓	
10.		Training Management Portal	✓	✓	
11.	Additional PES Functionality	Tax Collection by Panchayat		✓	
12.		Tax Payments by Citizens			✓
13.		Self Service Based Citizen Application			✓
14.		Citizen feedback			✓

e) Monitoring tools

The existing PES suite comprises of core functional modules of Panchayats on day to day operations which do not include any monitoring tools to the officials at various levels

like district, state as well as national for continuous monitoring and governing the echo system of PES.

From the above observations of the evaluation study of implementation of E-Panchayat Mission Mode Project/ State Specific initiatives in the India, CGG would like to propose to the MoPR, GoI the following new areas of applications and tools as envisaged along with the order of priority for implementation from the evaluation study. The proposed new areas of applications and tools will rejuvenate the existing PES platform for faster reach and better implementation and facilitate to monitor the system from time to time.

Table. 54- Observations from evaluation studies and proposed strategies

S.NO	CGG Observations from evaluation studies	Proposed Strategy/Solutions/Tools	Order of Priority
1.	Lack of wide reach to target users.	Digital literacy through MOOC Training programmes	High
2.	Domination of state specific applications usage.	a) Structure and functional compliance of state specific applications with corresponding PES modules.	Medium
		b) Conducting Integrating workshops at state level	High
3.	Data void in few application modules of PES.	a) Identification of standard data exchange formats	High
		b) Developing tools for data upload.	High
4.	Mobile enablement of PES application(s).	Mobile version of PES for possible modules	Medium
5.	Monitoring tools.	a) Defining KPIs	Medium
		b) Data monitoring tools	Low
		c) Performance monitoring tools.	Medium

13.2.1 Proposed Strategy / Solutions

1. **Massive Open Online Course (MOOC) training program in industry**

a) Under Digital India initiatives this MOOC training program for Panchayat Raj may be taken up which will penetrates the understanding of PES modules at the gross root levels of the panchayat. This MoPR MOOC assignment may be coined as "*MoPR Digital Literacy*".

b) This MOOC training program may be offered through the existing Training Management Portal of PES.

c) Holistically PES system can be broadly classified into 3 or 4 category of users and for each category of users an online training videos may be provided.

d) Broadly, the various types of PES applications users are classified into General Public (or Citizens), Panchayat Operators, Elected Representatives, Blocks and District level users etc. For each category of users the training program may be classified into multiple levels like Basic, Intermediate, and Advanced.

e) The training videos shall also be made available over mobile devices in addition to the conventional web for faster reach and instant access.

f) The training program(s) can be made available in major languages like Hindi and English.

g) Each category of training program will be divided into limited number of hours not more than 2 to 3 hours that includes 1 to 2 hands-on training exercises for better use of module /application that has been identified based on category of users and level of course. Each category of training will be divided into 6 to 8 small videos each of 10-15 minutes of duration.

h) The users who are interested to undergo MoPR-MOOC training program will register their details over online by just entering their AADHAAR number and choose course type along with level of course.

i) At the end of the training program a simple online test may be conducted and upon the successful completion of the test with minimum grade (or marks) say 65% or above then the user will be awarded of his/her with a certificate.

Advantages

This MoPR-MOOC training programme will improve not only understanding of the PES application module to the user community but also better use of the PES system.

Table. 55 - PES module wise summary of the MoPR-MOOC training program summary

Course Name	User Type	Level of course	Languages		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
			Hindi	English	PRIA Soft (PS)	Plan Plus (PP)	National Panchayat Portal (NPP)	Local Govt. Directory (LGD)	Action Soft (AS)	National Asset Directory (NAD)	Area Profiler (AP)	Service Plus (SP)	Social Audit & Meeting Management	Training Management Portal	GIS	Audit Online
Course #1	Citizens	Basic	✓	✓	-	L	H	-	-	-	M	H	M	-	L	-
		Intermediate	✓	✓	-	L	M	-	-	-	L	M	L	-	L	-
Course #2	Panchayats Operator	Basic	✓	✓	M	H	H	M	H	L	H	H	M	-	L	-
		Intermediate	✓	✓	H	M	M	L	M	L	M	M	L	-	L	-
		Advanced	✓	✓	L	L	L	L	L	L	L	L	L	-	L	-
Course #3	Block level users	Basic	✓	✓	M	M	M	M	M	M	M	M	M	-	L	-
		Intermediate	✓	✓	L	L	L	L	L	L	L	L	L	-	L	-
		Advanced	✓	✓	L	L	L	L	L	L	L	L	L	-	L	-
Course #4	District level	Basic	✓	✓	L	L	-	M	M	H	-	M	-	-	L	-
		Intermediate	✓	✓	L	L	-	M	L	M	-	L	-	-	L	-
		Advanced	✓	✓	L	L	-	L	L	L	-	L	-	-	L	-
Course#5	Elected Representatives	Basic overview of Panchayat Raj Enterprise Eco System													High Priority	
		Advanced overview functionality of PES modules and their usage													Low priority	

Legend: L – Low Priority; M – Medium Priority;H – High Priority

2. Structure and functional Compliance of state specific applications

a) MoPR may recommend the states to identify the structure and functional gap in their applications that are equivalent to PES modules for upload of data into Central database repository of PES system as per the data exchange format(s) to be published by MoPR, GoI.

An upward compatibility of data from the state specific application(s) into central database repository of PES to be maintained without any data loss and quality of information.

b) Data integration workshops may be conducted at state level on State specific Application(s) for Integration of state specific applications to corresponding module(s) of PES.

3. Seamless integration between Horizontal System and Vertical System

A seamless integration between horizontal systems i.e., (state specific applications) vertical systems i.e., (PES modules) may be achieved by the following approach

3.1 Identification of Standard Data Exchange Formats

MoPR may publish a standard data exchange format to the states for forward data integration between state specific applications with respect to the equivalent module of PES.

3.2 Developing Tools for Data Upload

MoPR may provide data tool to the states for upload of data pertaining to state specific module(s). For this a user friendly GUI self-operated tool may be provided to the states for upload of data that is related to state specific modules of PES on a regular interval of time period. This tool has to support features like Excel upload, CSV .txt file formats. This data upload tool will have an in-built feature to load data into an intermediate environment, get validate data before to load data into Central repository of PES, for any error found and will be prompted.

Advantage

The Single Source of Truth (SSoT) of data of PES can be achieved by the use of seamless data integration between state specific and PES modules.

4. Mobile Enablement of PES application(s)

More than 70% of the Indians have been using internet through their mobiles. This is the hit time to MoPR to introduce PES applications whichever is possible for accessing existing PES application URLs over mobile devices as well as there is a need to identify and develop mobile based PES modules for faster access and better reach.

MOOC trained personnel details module wise usage, utilization of services by the citizens, data integration between state specific applications and corresponding PES modules.

5. Performance Monitoring and Tools

As looking into the size of the PES project, the project implementation officials at districts, states and national levels will require a monitoring tool to get bird's eye view of the system from time to time. The following are proposed for better monitoring of the PES system in simple means.

5.1 Identification of KPIs

The use of PES applications in blocks/ districts / states can be defined based on certain key performance indicators based on the objectives of the MoPR system. The indicative key performance indicators are like module wise usage in states, This MOOC trained personnel, data completeness on usage of mobile / web module wise etc. This performance monitoring tool can be made available to the concerned project implementation officials in both mobile and Web applications.

5.2 Data Monitoring Tools

Data monitoring tool will have to provide the data findings from the central database repository of PES system details like module wise data completeness, Data integration status, Data quality and Data usage.

5.3 Performance monitoring Tool

This performance monitoring tool will provide the defined KPI with respect to the set values by MoPR to the states on periodical basis for every six months in a year about the progress achieved by the states.

Monitoring and evaluation is a powerful public management tool that can be used to improve the government officials of MoPR at Central and State governments to achieve set targeted results. Monitoring and evaluation tools will help of PES implementation officials from traditional based approaches towards result–based approaches. PES should be seen as a strong monitoring tool which support decision making at all levels. Hence during the study the response form the states reiterates the need to link various applications in PES as well as relevant State Specific application to PES. The review mechanisms at all levels (State, district, block, panchayat) should be based on a dashboard that provides insights into the performance status of each GP level activity and effective fund utilization.

Governing Tools

A Data monitoring tool will provide for finding the data completeness and usage of PES modules / applications by the states in terms of data fulfilments. Integration status of state specific application with PES, MOOC training status along certified persons and Data usage measurements.

14. IDENTIFIED ISSUES & RECOMMENDATIONS

14.1 Issues and Recommendations

There are several barriers mentioned and issues discussed which are presented here.

The following table draws from the issues and provides corresponding recommendations for effective implementation of the PES applications and interoperability with State Specific Applications; for a healthy give and take of data / information and as a matter of policy to follow transparent processes in Gram Panchayat transactions all over the country.

The responsible agency has been identified for the purpose and it may plan ahead based on the short and long term gains to be accrued through e-enablement of the Panchayats.

Table 56 - Issues & Recommendations - Critical

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
Administrative Issues		
There are no official instructions for implementation of PES by the panchayats in certain states/UTs	1. Necessary administrative steps may be taken for issuance of the required instructions	MoPR, GoI
In Mizoram, District and Village Councils (GPs) are under the jurisdiction of Local Administration Department (LAD) and blocks are under the jurisdiction of Rural Development (RD) department. This results in issues pertaining to coordination and funds monitoring	2. All the 3 tiers of the Panchayat may be brought under a single controlling department, as is the practice in the other States/UTs of the country	State Panchayati Raj Department of Mizoram
Presently PRIASoft records are not considered valid for audit purposes. If the same continues to be the case, maintenance of manual records will be mandatory, resulting in, double work load for the Panchayat functionaries/computer operators.	3. Necessary steps may be taken for according acceptance to PRIASoft records for the purposes of audit.	MoPR, GoI
It is reported that MAS formats are not in concurrence with the Himachal Pradesh Panchayati Raj Act.	4. Necessary steps for reconciliation between the MAS and the State Act may be taken	HP Panchayati Raj Department

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
Usage of Service Plus at Gram Panchayat Level is minimal which is due to lack of awareness. Due to lack of usage of the service plus application in most of the States quality of the data cannot be ascertain at this stage	5. The Gram Panchayats should start using Service Plus more effectively and also there is need for awareness, trainings on Service Plus for effective usage.	
Finance Commission Guidelines		
Most states have reported difficulty in identifying the source of funds for IT infrastructure and salaries of computer operators since the 14th Finance Commission does not provide clear head of account for these expenditure heads.	6. A subhead for IT infrastructure and for salaries of computer operators maybe specified.	MoPR
As per 14 Finance Commission guidelines, states (like Arunachal Pradesh) having population disproportionately lower relative to the geographical area are at a disadvantage.	7. The Finance Commission may be approached for suitable revision in the guidelines to accommodate legitimate exceptions.	MoPR
Internet Connectivity		
Internet Connectivity is either non-existent or exists with frequent disruptions at the Gram Panchayat Level	8. Operationalization of National Optical Fiber Network (NOFN), for which ground has already been laid, needs to be expedited on a mission mode basis.	MoPR, in consultation with MEITY
	9. With a view to ensuring that lack of internet connectivity does not impede the PES implementation, creation of offline modules for all PES applications, with a provision for auto synchronising upon availability of internet connectivity, may be considered.	NIC, New Delhi
	10. For effective implementation of the aforementioned offline modules of PES, instructions maybe issued for syncing of offline data with the server	MoPR
	11. Until such time that NOFN is not fully operational and where there is a requirement to use SIM card based	State/U T Panchayati Raj Departments

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
	internet connection (eg. mAsset), considering the fact that the signal strengths of service providers varies from one area to another, the flexibility of having multiple service providers based on signal strength may be considered.	
Vacancies in critical manpower posts		
There is an acute shortage of Panchayat Secretaries and in many states a Panchayat Secretary is seen to be holding the charge of multiple GPs ranging from 2-10 GPs.	12. The vacant posts of Panchayat Secretaries maybe filled expeditiously.	State/U T Panchayati Raj Departments
	13. Basic computer literacy maybe made a part of the eligibility criteria for the post of PS.	
Computer Operators are not yet in place in many states/UTs	14. Considering the central role played by the Computer Operators in PES implementation, they may be recruited expeditiously. Based on the feedback received from the survey, it would appear that one operator would be required for every 3 GPs, if s/he is exclusively working on the data entry of PES. If s/he is also undertake the data entry of other Panchayat schemes like MGNREGS, perhaps every GP would require an operator.	State/U T Panchayati Raj Departments
		State/UT Panchayati Raj Departments
Training		
Training of stakeholders on PES is found to be insufficient.	15. Exclusive head of account may be created and annual budget may be earmarked for training on PES.	MoPR
	16. The demo site reportedly has much room for improvement. The same may be updated so that it acts as a simulator of real PES in all respects in the local language. It must reflect from time to time, the changes resulting from version updates and other alterations	NIC, New Delhi

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
	17. The training calendar of States must include not merely induction and refresher trainings but must also factor in:a. Training of newly recruited computer operators, SPMU and DPMU staff (as often as new recruitment happens, considering the manpower turnover in computer operators, SPMU and DPMU)b. Training of elected representativesc. Training on updated versions	MoPR, NIC State Panchayati Raj Departments
	18. Training on basic accounting, including inter-alia, classification of vouchers, may be made mandatory for Computer Operators and Panchayat Secretaries. This will aid glitch-free reporting on PRIASoft	MoPR, NIC State Panchayati Raj Departments
	19. Experience sharing workshops may be organized at the central and state/UT levels every quarter. Funds for the same may also be earmarked within the 'Training' head	MoPR, and State Panchayati Raj Departments
Citizen Awareness		
Citizens in many states surveyed were not aware of key applications having citizen interface like Plan Plus, NAD etc.	20. Successful PES implementation and more importantly its sustainability is a function of how useful it is for the citizens. In this direction, it is imperative that citizens' awareness on PES needs to be improved in local language through, among others: a. Radio jingles b. TV programmes c. Information, Education and Communication (IEC) campaigns d. Dissemination to and through Self Help Groups etc.	MoPR and State/UT Panchayati Raj Departments

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
Accessibility		
Lack of local language interface is an impediment in PES Usage, especially at GP and BP Levels	21. Local Language interface must necessarily be made part of all PES applications, including the 22 languages recognized in the Schedule VIII of the Constitution.	NIC, New Delhi
PES is inaccessible to visually impaired persons	22. PES User interface must be operable and accessible by visually impaired Citizens/Panchayat Functionaries. For the same the guidelines published by the Ministry of Electronics and Information Technology, Government of India vide http://guidelines.gov.in/tools.php maybe followed.	NIC, New Delhi
Integration		
Many State specific applications are yet to be integrated with PES.	23. Bridge between the state specific applications and PES may be developed duly adopting, among others, the best features of the bridges built by states like West Bengal (Setu). 24. For States using State Specific Applications, the aforesaid bridge may provide for translating the content from local language to English	NIC, New Delhi and Respective State/U T Panchayati Raj Departments
Data on payments to vendors is manually entered into PRIASoft, leaving scope for errors of omission	25. There could be a software integration between the banks/Treasury where the Panchayat funds are parked and PRIASoft so that there is real time updation of receipts and payments data on PRIASoft	MoPR and NIC, New Delhi

CRITICAL ISSUES		
Issue	**Recommendations**	**Action to be taken by**
	26. PRIASoft generated voucher is mandatory to execute payments. Similarly, for making any payment to works done, pictures of the work done or work progress may be made mandatory to be updated in Action Soft and Asset Directory for executing the payment.	MoPR
Digital Payments		
	27. In keeping with the Government of India's thrust on digital payment, internet banking facility may be provided to all the panchayats, including GPs.	State/U T Panchayati Raj Departments
Review		
There is a need for designing PES review modalities	28. Monitoring of PES by MoPR, including interaction with officers to understand the good & replicable practices as also the reasons for non-implementation, at least every quarter and in turn by the States/UTs every month may be institutionalized	MoPR
	29. Certain key attributes may be identified for each PES application and timelines be stipulated for completion of the same by the panchayats. Examples include: a. Daybook on PRIASoft may be stipulated to be closed within 2 working days b. Month book may be stipulated to be closed within the fifth day of the succeeding month 30. A dashboard may be created for monitoring the completion of these stipulations	MoPR, in consultation with State/UT Panchayati Raj Departments

Table 57- Issues & Recommendations - Subsidiary

SUBSIDIARY ISSUES		
Issue	**Recommendations**	**Action to be taken by**
The NIC server for storage of state PES data for Manipur is outside the boundaries of state and in Guwahati, Assam. As a result the state has concerns of data security.	Dedicated server for PES may be established in Manipur	State Panchayati Raj Department of Manipur
In certain states, the technical knowledge of and support on PES by the state NIC team has room for improvement.	It may be ensured that State NIC teams' technical knowledge of PES is complete and they may be advised to extend necessary support to the states/UTs	NIC, New Delhi
Multiple user credentials for each application necessitate maintenance of hundreds of them at the state and district levels. The problem is exacerbated owing to: a. Need to change the credentials whenever a staff who has been using PES resigns b. frequent change of credentials when the previous ones are inadvertently lost/forgotten. In certain states, user credentials have not been provided to GPs	Since only a single computer operator uses the PES at the panchayat level, a single login may be enabled for the whole of PES. Each Panchayat must be given unique user credentials	NIC, New Delhi

14.2 Application Specific Recommendations

The following technical and operational issues were observed during the field survey. Issues have been listed PES application wise. Necessary steps may be taken by NIC (National/State/UT) to address these issues:

PRIASoft

a. PRIASoft provides for Budget estimates for five years. However, in the panchayats in certain states, budget estimates are prepared every year and hence the panchayats are not uploading the budget estimates. Flexibility may be provided to upload Budget estimates as per the respective periodicity followed by the panchayats in different States/UTs

b. Heads of Budget in PRIASoft and those used by Panchayats are at variance. They may be aligned.

c. Lack of clarity on classification of vouchers at the time of entry, presenting an incorrect picture of Panchayat accounts. This is due to the data entry being done by fresh, ill-qualified Data Entry Operators who do not understand the accounting nuances.

d. Not all schemes/ sources of funds are being captured in PRIASoft, especially if expenditure on an asset created is sourced from 2 different funds like central and MLA grant.

e. Security is a concern. The application was hacked a few months ago in one of the states.

f. Selection of Head (major and minor heads) is difficult in the case of receipt and expenditure vouchers

g. Suspense account was dysfunctional

h. Stock register was dysfunctional

i. Eight series Head (deduction head) was dysfunctional

j. Month Book was not opening at district level

k. Kind option (used for construction works, stock, material cost amount for civil works) was dysfunctional

l. Bulk data is very difficult to upload from offline mode.

m. User interface is complicated; needs simplification

Action Soft

a. Each icon on the screen takes a long time to open
b. Error message is thrown frequently, necessitating an intervention by the administrator
c. Porting issued between Plan Plus and Action Soft have been reported by certain states

National Panchayat Portal

a. The existence of the GP level website on NPP is not known to many Panchayat Functionaries.
b. The data is not being populated because of lack of awareness and also because the operators have not been told to populate the same
c. Well-endowed GPs have a GP level website developed by a private vendor and maintained sometimes by a local youth. The need for populating NPP generated website was not felt. The local site gives a local language interface.

Area Profiler

Family Register details are presently a mandatory requirement in Area Profiler. Getting this data is cumbersome especially in panchayats with large population. The usage of Area Profiler, as a result, is impeded.

Service Delivery Model

Intuitional place: Most of the CSC in majority of the states are placed in the private places limiting only few in Gram Panchayat buildings. If these CSCs were placed in Panchayat buildings, the service uptake will increase as more citizens come to Gram Panchayat.

Man Power: In order to encourage the VLE, more incentives should be provided through central/state funds. As a result people show much interest in running CSCs at ease.

Training/Capacity building to VLE: Education qualifications and knowledge levels of people who run the VLEs will be different from place to place and state. However, there should be concrete induction training on citizen services, processing and the building the capacity of individuals to run the centre confidently. For any programme or project implementation

regular trainings and on site capacity building should be provided. Similarly, the VLE who deal with the IT infrastructure and technical components should also be trained and get knowledge updated periodically. Additionally, onsite support supervision and mentoring help them in better executing the service delivery to the needs of the people. Constitute a CSC network at District and State level to encourage cross learning.

Awareness programs: Awareness programs and activities should be conducted in the Panchayat level to pass on the availability of cascade services at CSC. Posters and banners about CSC services and availability of kiosk including timings can be spread in public gathering places like weekly market, bus stop and Gram Panchayat etc.

Branding: Priority should be given for branding the CSCs which play a key role in delivering the government to Citizen Services and Business to citizen services.

Citizen charter should be placed in all the CSCs. Discuss with stakeholders, especially the VLEs, the services to be brought under the Charter and write the final set of standards.

a) Developing a shared understanding of key actions, timelines, purpose, responsibilities and duties aligned with the VLEs in ensuring service level guarantee and adherence of standards outlined in its own Citizen Charter;

b) Creating a sense of pride, expectation and engagement in the minds of citizens, who use the services offered for their ingenuity, authenticity and acceptance as well as enhancing participation among parties and systems that stand to testify the set of services availed by citizens at the CSCs

Monitoring: The Gram Panchayat sarpanch/pramukh, Mandal/Block supervisor and State level Service Centre Agencies (SCA) should monitor the performance of the CSCs regularly.

Table 58 - PES Application Wise Functionalities, Drawbacks and Improvement

S. No	PES Application	Functionalities	Drawbacks	Improvements
1	Action Soft	Works Physical/ Financial Progress monitoring	1) Each Work Data has to entry again – Funds entry, Physical or Financial progress	1) Logins for every Gram Panchayat shall be created 2) This module can be converted in to Transaction based Accounts Package for Expenditure said and Receipts can be drawn from PRIA Soft – Payments through this transaction based on Transaction based Software shall be developed. With integration of Treasury/Bank Online confirmation of Pay Orders or FTO and manual submission of Pay orders payments shall be made mandatory. This will dynamically updates PRIA Soft, this will reduce human drudgery and enhance accuracy and reflect Real Time Data 3) Like Panchayat Darpan of Madhya Pradesh State Software is to be developed for Expenditure through Geo Tagging of Works and Generation of Pay Orders
	TAXATION – RECIEPTS -Soft			1) House tax Software in Telangana is to be as base and it will be developed with all Receipts with Kiosk Payments / Gate Way Payments / Hand Held Machines
2	Area Profiler		1) Every Data of Mapping of Panchayats is manual entry only, as there is no co –relation between Departments	1) Logins for every Gram Panchayat shall be created 2) Data uploaded by GP is verified by Admin User at Block / Mandal, then only this will be published. 3) Profile shall be captured bas

			2) There is no need to collect Family data by GPs, as they collected data as there is no department is using this data and as lack of manpower, it is burden on GPs 2) Census Data mapped with LGD, again what is need to enter demographic or census again	Latitudes and Longitudes of LGD Map tagging Neighboring and Tourist Places and facilities etc. 4) Elections Details shall be captured from State Election Commission Data with accuracy 5) Employees Data of all line Departments shall be used with LGD Codes by Departments as they line departments as to update their Employees, shall be authenticated with AADHAR Data 6) Family Register – Every Construction House Number must be declare Unique and Shall be GEO Tagged. Then Family Members Data will be linked with Census Department also can be directly linked from State Govt. Survey Data or Civil Supplies Data with AADHAR Data, 7) BSLLD (Basic Statistic for Local Level Development Data) – These data can be Ported through Line Departments Mandatory but not Through PRIs officials 8) Meetings - Agenda made dynamic and Agenda through E Mail or SMS alert facility also enabled along with traditional Notices - Members Attendance shall made through Bio – Metric - Minutes capturing Must made dynamic and make available in Portal

3	Local Government Directory	1) Three tier PRIs and Urban Local Governments allotted unique Number and Mapped with Census	1) Every Data of Mapping of Panchayats is manual entry only, as there is no correlation between Departments or accuracy of Revenue Department / Land Administration of State Government or Election Commission of India Data	1) Habitations shall defined by State and Mapped to Villages 2) Villages from dynamically linked from Revenue Department or Land Department Data where ever possible. 3) Along with LAC/ MP LS Constituencies shall be mapped dynamically from ECI Data 4) Every Physical House with H No in Gram Panchayat Shall be given Unique ID and it will be Geo-Tagged and that will be used by all Departments including Revenue/Administration/Police/Welfare/ Preparation of Voter list etc. 5) MAP will be generated automatically by using ISRO – Bhuvan as per mapping of Habitations and Villages Data 6) LGD Code of Gram Panchayat shall be used by all Departments to implement their activities, so that every department progress can be access dynamic data from respective sources.
4	National Asset Directory		1) This was not dynamic Data, again they need to enter data again in this module 2) No dynamic Link between other PES Applications	1) Logins for EVERY Gram Panchayat shall be created 2) Data uploaded by GP is verified by Admin User at Block / Mandal, then only this will be published. 3) After Confirmation of Payments in Expenditure Software. PRIA Soft, Material can be generate Stock, Assets like Movable or Immovable Assets can be ported with Geo tagging before Payment. 4) All Line Departments Must provide Logins in this module and must upload

				their assets with LGD Code and update their ASSETS through thus NAD
5	National Panchayat Portal	Ever Rural PRI – allotted Web page	1) except Events, Press Notes all other Data can be ported dynamically from all other PES Applications	1) Dynamic Data from LGD and Maps shall be automatically displayed 2) Based on Geo – Mapping from MNAD, Transport Facilities, Places of Interest, shall be displayed 3) Area Profiler Data 4) Accounts Data from PRIA Soft 5) Assets Data from NAD will be automatically linked with no human interface 6) At Block / Mandal Level posted Data can be verified and make visible to Public.
6	PRIASoft	Financial Data Capturing and Model Accounting System Reports as per defined by 12th Finance Commission	1) This was not dynamic data 2) No dynamic Link between Banks or Treasury or Data Shrinking 3) After preparation of Manual Accounts, only Data Entry is available. As this provision no dynamic Data or reliable data is available in Real Time	1) Receipts - Tax, Non-Tax Demand Preparation, other Collection must be monitor through Online or Hand Held Devices and adjustments from Government – Treasury must be shrinked, so that Dynamic Entry of Receipts can made dynamic, again need to entry again in PRIA soft 2) Expenditure – All Expenditure – transaction based on Transaction based Software shall be developed. With integration of Treasury/Bank Online confirmation of Pay Orders or FTO and manual submission of Pay orders payments shall be made mandatory. This will dynamically updates PRIA Soft, this will reduce human drudgery and enhance accuracy and reflect Real Time Data 3) Budget Preparation of PRIs with State Rules can be incorporated and make it mandatory

7	Plan Plus	Participatory Planning process capturing	1) Funds Data Entry and Works data entry again needed as it may duplication 2) GPDP is Mandatory for Gram Panchayats, but how to use Intermediate and Zillah Panchayats	1) Logins for EVERY Gram Panchayat shall be created 2) Funds Availability must draw from Budget Module in PRIA Soft for their OWN Funds, 14th FC, SFC Funds 3) UNDER GPDP – all available devolved funds must be incorporated, so if no state Funds devolved to PRIs, as there no meaning of Decentralized Planning 4) Works must be defined like in Gram Jyothi –TSPRI in Telangana State with State specifications 3) For Line Departments Must Transfer their Funds to PRIs- without devolution of funds, functionaries – no fruit full results will come of Integration of Plan 4) A Suitable Plan Module for Block / Zillah Panchayats may be developed 5) after GP User Approval – Block level user can verify and approve Plans as per Norms

15. CONCLUSION & RECOMMENDATIONS

15.1 Conclusion

It is a finding of this evaluation survey that the PES applications are not being uniformly used in all States / UTs. The varied usage is owing to several factors such as – inadequacy of infrastructure at the GP level, the lack of competent personnel at GP level to handle ICT, turnover among the operators. Further barriers like erratic power supply, connectivity (slow server), outdated equipment, inability of local staff or ERs to use the deployed hardware, non-functioning system etc. Further, some States had deployed their own State specific (state customised) ICT which was serving similar purpose as PES, combining one or more core applications under PES into one single State application. These ICTs were being utilised optimally as they were designed by the local team, with the local level usage in mind.

Based on the findings from this survey, the following conclusions may be drawn:

- Those States / UTs that are up to date on their accounts by putting up data / information on PES / State specific application on a real time basis are showing signs of more openness and greater disclosure. This is an indication of greater trust in ICT.
- The States / UTs that are still managing their record keeping in a manual format need more support not only in adequate provisioning of infrastructure, but also in supporting the State / UT administration to build ICT into its work culture at all levels within. A macro-level ICT culture in Government can percolate into deployment and usage of ICT at local level Administrative orders will follow thereafter.
- Some States / UTs have a genuine problem of GPs being dispersed across a difficult terrain. This is true of the North Eastern States and some UTs like Andaman & Nicobar, Lakshadweep etc. In fact the deployment of ICT in these locations is more important because information / communication reaching out to such rural locations promptly and adequately is of paramount importance. Here, in quantitative terms, investment required may be more and returns less, but the latter would be significant for the functionaries and citizens and impactful.
- Customisation of PES to the State / UT local needs may be explored. The State NIC team may create the localised context for PES application at Panchayat level.

- Aiming for last mile connectivity can help greater usage of PES and better reach of citizen services.
- Co-opting the ERs into Digital India can create greater felt need for PES and its effective operation at the GP level.
- Newly recruited panchayat functionaries (PFs) and newly elected ERs at the GP level, are a big resource group that can be tapped in to promote ICT deployment at GP level, can be trained to accomplish the goal of ICT enabled GPs. Skilled local youth at GP level (or VLEs) may be incentivised to populate the NPP, NAD (mASSET), SAMM etc.
- Innovative local ICT exercises leading to greater transparency and accountability at GP level may be encouraged, awarded and rewarded.

The evaluation report gives a sequential narration of the findings. It concludes with pertinent issues that emerge from the survey. Constructive recommendations are made to take forward the initiative and possible areas to explore in future are indicated.

15.2 Recommendations

Recommendations have been made along with an indication of the agency responsible for the action. They have been categorised into three heads viz. those addressing certain Critical issues, those addressing subsidiary issues and those addressing PES application specific technical and operational issues. Critical recommendations have been made in the areas of:

i. Administrative issues
ii. Modification to Fourteenth Finance Commission Guidelines
iii. Internet connectivity
iv. Deployment of Critical Manpower
v. Training
vi. Citizens' awareness
vii. Accessibility
viii. Integration
ix. Digital Payments
x. PES Review and
xi. New Areas of ICT Intervention

The field survey, sample questioning (Tamilnadu), sample raw data and present status of PS/States specific application observed during field study or given Volume II.

Suggestions & Recommendations

1. States like Kerala, Madhya Pradesh, Karnataka, West Bengal, Gujarat and Rajasthan has developed specific applications which resembles the same functionalities of PES. NIC has developed the bridge software to port the data from state specific applications to PES, it is noticed that most of the times bridge software is non-functional and due to various technical reasons data will not be ported into the PES applications. As a result, these states data is missing in the PES applications. It is recommended that a separate resources will be allocated to look after the technical issues in porting the data to PES from state specific applications.
2. Most of the states has appointed the SPMUs and DPMUs for functioning and technical support of PES. Capacity Building for these staff is required in time to time in making PES more update and successful. In some states SPMUs and DPMUs are non-functional as a result no one is there to guide and support the down line. Most of the GPs in the states are not having the manpower to use PES. It is recommended that MoPR has to take several measures at the GP level as GP is the main source of capturing the data for PES.
3. MoPR has to take several initiatives to strengthen the PES that no state has to develop any specific applications on par with the same functionalities. Service Plus application should be more strengthen and all the services should be provided and made available at GP level and it is should be more customizable to states to use and implement.
4. Under Rashtriya Gram Swaraj Abhiyan (RGSA), funds will be allocated to GPs for technical and manpower resources to make more strengthen of PES for updating live data.
5. Strengthening of Panchayati Raj System across the country has to address the critical gaps through promotion of devolution of powers, facilitating democratic decision making through peoples participation, accountability in Panchayats, strengthening the institutional structure for knowledge creation and capacity building of Panchayats.

ANNEXURE

ANNEXURE 1

NUMBER OF FIELD SITES PER STATE / UT IDENTIFIED FOR THE SURVEY

Sr. No	State	Number of PRI sites for field visit			
		DP / ADC	IP/BP/MP/Tehsil	GP	Total
1	Andaman & Nicobar Island	1	1	1	3
2	Andhra Pradesh	2	2	3	7
3	Arunachal Pradesh	2	2	2	6
4	Assam	1 DP + 1 ADC	3	2 GPs + 2 ADC	9
5	Bihar	3	3	3	9
6	Chandigarh	1	1	1	3
7	Chhattisgarh	2	2	3	7
8	Dadra & Nagar Haveli	1	-	1	2
9	Daman & Diu	1	-	1	2
10	Goa	1	-	2	3
11	Gujarat	3	3	4	10
12	Haryana	2	2	3	7
13	Himachal Pradesh	2	2	3	7
14	Jammu and Kashmir	-	-	2	2
15	Jharkhand	2	2	3	7
16	Karnataka	3	3	4	10
17	Kerala	2	3	4	9
18	Lakshadweep	1	-	1	2
19	Madhya Pradesh	4	4	4	12
20	Maharashtra	3	4	5	12
21	Manipur	1	-	1 GP+ 1 ADC	3
22	Meghalaya	1	-	2	3

Sr. No	State	Number of PRI sites for field visit			
		DP / ADC	IP/BP/MP/Tehsil	GP	Total
23	Mizoram	1	-	2	3
24	Nagaland	1	-	2	3
25	Odisha	2	2	3	7
26	Puducherry	-	1	1	2
27	Punjab	2	2	3	7
28	Rajasthan	3	3	3	9
29	Sikkim	1	-	2	3
30	Tamil Nadu	3	3	3	9
31	Telangana	1	2	3	6
32	Tripura	1	2	1 GP + 1 ADC	5
33	Uttar Pradesh	4	4	5	13
34	Uttarakhand	2	2	3	7
35	West Bengal	2	2	3	7
	Grand Total	**63**	**60**	**93**	**216**

Abbreviations

DP – District Panchayat

IP – Intermediate Panchayat

BP – Block Panchayat

MP – Mandal Panchayat

Tehsil – Tehsil Panchayat

GP – Gram Panchayat

ADC – Autonomous District Council

ANNEXURE 2

STATE/UT WISE LIST OF DISTRICT, BLOCK AND GRAM PANCHAYATS COVERED IN THE SURVEY

Sl. No	State	District	Block	Gram Panchayat
1	Andaman & Nicobar Islands	South Andaman	Prothrapur	Govind Nagar
2	Andhra Pradesh	Kurnool	Kurnool	Dinnedevarapadu
		Kurnool	Panyam	Panyam
		Visakhapatnam	Kasimkota	Kasimkota
3	Arunachal Pradesh	Papumpare	Doimukh II	Rono
		Upper Subansiri	Sigin	Sigin IF
4	Assam	Marigaon	Bhurbandha	Kaonwargaon
		Marigaon	Mayang (Marigaon)	Ahatguri (Marigaon)
		Khamrup Metro	Dimoria	Khetri
		Kokrajhar	Dotma	Dotma GP
		Kokrajhar	Kokrajhar	Kokrajhar GP
5	Bihar	Vaishali	Lalgunj	Ghataro Middle
		Bhojpur	Ara	Rampur Sanadiya
		Bhojpur	Ara	Dhamaar
6	Chandigarh UT	Chandigarh	Chandigarh	Behlana
7	Chhattisgarh	Raipur	Dharshima	Tinda
				Akoli-2
		Dantewada	Kuwakonda	Plnad
8	Dadra & Nagar Haveli	Silvassa		Rakholi
9	Daman & Diu	Daman		Kachigam
				Bhimpore
10	Goa	North Goa		Candolim
				Merces
		South Goa		Savade Village Panchayat
				Bhati Village Panchayat
11	Gujarat	Gandhinagar	Gadhinagar	Uvarsad
		Vadodara	Sinor	Sadhli
		Rajkot	Tankara	Anandpar

Sl. No	State	District	Block	Gram Panchayat
		Banaskanta	Palanpur	Malan
12	Haryana	Mewat	Nuh / Sohna PS	
		Gurugram	Gurugram	Alipur
				Bhondsi
				Babupur - Model e panchayat
13	Himachal Pradesh	Shimla	Mashobra	Mashobra
		Chamba	Chamba	Draman
				Duwara
14	Jammu & Kashmir	-	-	Janakha
				Chandiloora
15	Jharkhand	Ranchi	Namkum	Lal Katanga
		Deogarh	Devipur	Ramudih
		Ranchi	Namkum	Hardag
16	Karnataka	Bangalore Rural	Doddaballapura	MajaraHosahalli
		Davangere	Davangere	Belavanur
		Dharwad	Navalgund	Ibrahimpur
				Gummagol
17	Kerala	Thiruvananthapuram	Vamanapuram	Nandiyodu
			Adhiyanoor	Adiyanoor
		Palakkad	SriKrishnapuram	Srikrishnapuram
				Velinezehi
18	Lakshadweep	Kavratti		Village Dweep Panchayat
19	Madhya Pradesh	Bhopal	Berasia	Harrakheda
		Rajgarh	Narsinghgarh	Berasia
		Dhar	Badnawar	Khandigara
		Indore	Depalpur	Kali Billod
20	Manipur	Imphal East		Torbung
				Khundrakpam
21	Meghalaya	Ribhoi		Jyntru
		East Kashi Hills		Mawklot
22	Maharashtra	Aurangabad	Paithan	Dawarwadi
		Amravati	ChandurBz	Nanuri
		Pune	Mulsi	Hinjawadi
			Haveli	Dhayari
				Shriramnagar
23	Mizoram	Aizwal		Thingsulthliah
				Seling
24	Nagaland	Kohima		Jakhama
		Peren		Dunki

Sl. No	State	District	Block	Gram Panchayat
25	Odisha	Cuttack	Kantapada	Badapatasundarpur
				Postal
		Mayurbhanj	Udala	Bahubandh
26	Puducherry		Kottucherry	Kottucherry East
27	Punjab	Bhatinda	Bhagta Bhai Ka	MalukaKhurd
				Adampura
		Hoshiarpur	Hoshiarpur I	Adamwal
28	Rajasthan	Udaipur	Mavli	Dabok
		Ajmer	Kishangarh	Arain
		Jaipur	Jothwara	Kalwar
29	Sikkim	East Sikkim		34 Rey Mendu
				25 Namcheybong
30	Tamil Nadu	The Nilgiris	Coonoor	Ithalar
		Kancheepuram	St. Thomas Mount	Thimmasamuthiram
		Nagapatinam	Thalanayar	Pradhamaramapuram
31	Telangana	Warangal Rural	Sangem	Gavicherla
				Sangem
			Atmakur	Atmakur
32	Tripura		Jirania	PurbaBarjala
			Jirania	Maddhebari Village Committee
			Manu	Kanchancherra
33	Uttar Pradesh	Kanpur Nagar	Patara	Kevadia
			Patara	Sanchitpur
		Jalaun	Kadaura	Akbarpur
		Hardoi	Pihani	Ahemi
		Varanasi	Harhua	Lamhi
34	Uttarakhand	Tehrigarhwal	Chamba	DewariTalli
		Dehradun	Vikasnagar	Khadarwala
		Dehradun	Doiwala	Rani Pokhri Grant
35	West Bengal	South Paraganas	Bariupur	Belagachi
		Hoogly	Dhaniakhalli	Dhaniakhalli-II
				Dasghara-II

Where the cell is left blank, no selection of the block was required in the sample

ANNEXURE 3

STATUS OF YEAR BOOK CLOSURE ON PRIASOFT*

State	Level of PRI	2010-11			2013-14			2016-17		
		Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%
AP	DP	22	21	95.5	22	17	77.3	13	0	0.0
	BP	1098	1089	99.2	1098	892	81.2	660	11	1.7
	GP	21692	21548	99.3	21680	20541	94.7	12920	55	0.4
Assam	DP	21	21	100.0	21	21	100.0	21	12	57.1
	BP	208	191	91.8	208	191	91.8	196	74	37.8
	GP	2355	2201	93.5	2354	2200	93.5	2245	1679	74.8
Bihar	DP	38	38	100.0	38	36	94.7	38	0	0.0
	BP	534	525	98.3	534	502	94.0	534	0	0.0
	GP	8483	8290	97.7	8483	8049	94.9	8407	0	0.0
Chhattisgarh	DP	27	19	70.4	29	18	62.1	29	1	3.4
	BP	146	146	100.0	146	145	99.3	146	8	5.5
	GP	9812	10486	106.9	9869	10478	106.2	10846	720	6.6
Dadra and Nagar Haveli	DP	1	1	100.0	1	0	0.0	1	0	0.0
	BP	0	0	0.0	0	0	0.0	0	0	0.0
	GP	11	10	90.9	11	0	0.0	20	0	0.0
Daman and Diu	DP	2	0	0.0	2	0	0.0	2	0	0.0
	BP	0	0	0.0	0	0	0.0	0	0	0.0
	GP	14	0	0.0	14	0	0.0	14	0	0.0
Gujarat	DP	26	0	0.0	26	0	0.0	33	0	0.0
	BP	224	0	0.0	224	0	0.0	224	0	0.0
	GP	13894	0	0.0	13915	0	0.0	14062	0	0.0
Haryana	DP	21	21	100.0	21	21	100.0	21	3	14.3
	BP	123	120	97.6	126	120	95.2	126	6	4.8
	GP	6032	6105	101.2	6080	6184	101.7	6207	291	4.7

110229/2020/1003

State	Level of PRI	2010-11			2013-14			2016-17		
		Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%
Himachal Pradesh	DP	12	11	91.7	12	11	91.7	12	2	16.7
	BP	77	68	88.3	77	68	88.3	77	13	16.9
	GP	3243	3084	95.1	3243	3078	94.9	3243	1080	33.3
Jharkhand	DP	24	24	100.0	24	24	100.0	24	0	0.0
	BP	260	259	99.6	260	259	99.6	260	0	0.0
	GP	4433	4423	99.8	4433	4423	99.8	4434	24	0.5
Madhya Pradesh	DP	50	2	4.0	50	0	0.0	50	0	0.0
	BP	321	1	0.3	321	0	0.0	321	0	0.0
	GP	23038	0	0.0	23032	0	0.0	22833	0	0.0
Maharashtra	DP	33	33	100.0	33	33	100.0	34	0	0.0
	BP	352	351	99.7	351	351	100.0	351	0	0.0
	GP	27699	27959	100.9	27913	27955	100.2	27937	864	3.1
Manipur	DP	4	3	75.0	4	3	75.0	4	0	0.0
	BP	0		0.0			0.0			0.0
	GP	107	54	50.5	171	54	31.6	167	0	0.0
Odisha	DP	30	30	100.0	30	30	100.0	30	0	0.0
	BP	314	314	100.0	314	314	100.0	314	26	8.3
	GP	6250	6232	99.7	6250	6232	99.7	6237	227	3.6
Puducherry	DP	10	5	50.0	10	5	50.0	10	0	0.0
	BP	0	0	0.0	0	0	0.0	0	0	0.0
	GP	98	4	4.1	98	4	4.1	98	0	0.0
Punjab	DP	20	21	105.0	24	21	87.5	24	1	4.2
	BP	139	144	103.6	146	144	98.6	147	5	3.4
	GP	12254	4555	37.2	13167	4221	32.1	13080	17	0.1
Rajasthan	DP	33	33	100.0	33	33	100.0	33	1	3.0
	BP	256	259	101.2	256	259	101.2	301	4	1.3

110229/2020/1003

State	Level of PRI	2010-11			2013-14			2016-17		
		Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%	Number	PRIs Closed YRBK	%
	GP	9208	9281	100.8	9184	9272	101.0	9901	28	0.3
Sikkim	DP	4	4	100.0	4	4	100.0	4	0	0.0
	BP	0	0	0.0	0	0	0.0	0	0	0.0
	GP	166	175	105.4	176	175	99.4	176	28	15.9
Tamil Nadu	DP	31	31	100.0	31	31	100.0	31	16	51.6
	BP	385	385	100.0	385	385	100.0	385	30	7.8
	GP	12538	12524	99.9	12538	12524	99.9	12538	3368	26.9
Telangana	DP	0	0	0.0	0	0	0.0	38	0	0.0
	BP	0	0	0.0	0	0	0.0	447	26	5.8
	GP	0	0	0.0	0	0	0.0	8701	2485	28.6
Tripura	DP	8	8	100.0	8	8	100.0	8	8	100.0
	BP	26	35	134.6	35	34	97.1	35	34	97.1
	GP	512	1134	221.5	608	1133	186.3	596	1112	186.6
Uttarakhand	DP	13	13	100.0	13	13	100.0	13	4	30.8
	BP	95	94	98.9	95	76	80.0	95	1	1.1
	GP	7548	8045	106.6	8200	8035	98.0	7993	152	1.9
Uttar Pradesh	DP	72	75	104.2	75	75	100.0	75	40	53.3
	BP	839	821	97.9	839	819	97.6	839	14	1.7
	GP	51825	59453	114.7	52234	59441	113.8	59125	1309	2.2
West Bengal	DP	18	0	0.0	18	0	0.0	18	0	0.0
	BP	333	0	0.0	333	0	0.0	333	0	0.0
	GP	3240	0	0.0	3240	0	0.0	3234	0	0.0

ANNEXURE 4

CSCs AND PANCHAYATS

S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
1	Andaman and Nicobar Islands	CSC		24	86	13	no info available	VLE	no	Yes
2	Andhra Pradesh	*MeeSeva*	https://onlineap.meeseva.gov.in/CitizenPortal/UserInterface/Citizen/Home.aspx	5573	329	37	no info available	VLE	no	Yes
2.1	Andhra Pradesh	Digital panchayat	http://mpanchayat.ap.gov.in/	4000	11	1 (only panchayat raj)	73553	Gram Panchayat operator	no	Yes
3	Arunachal Pradesh	not there	no CSC model available						Yes (2)	Yes
4	Assam	apnacsc	no information available	No info	no info	no info	no info	no info	Yes (1)	Yes
5	Bihar	not there	no CSC model available							No

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S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
6	Chandigarh	*Gram Sampark* Centre	http://sampark.chd.nic.in/	39	49	12	Approx. 2lakh/ month	VLE	no	Yes
7	Chhattisgarh	Choice	https://edistrict.cgstate.gov.in/PACE/login.do		56		2459193	VLE	Yes (6)	Yes
8	Dadra & Nagar Haveli	apnacsc	no information available	No info	no info	no info	no info	no info	no	no info
9	Daman & Diu	*SaralSeva Kendra*	https://edistrictdd.gov.in/en_US/web/guest/list-of-seva-kendras	14	19	3	28	Salaried	no	Yes
10	Goa	Apnacsc	no information available	No info	no info	no info	no info	no info	no	no info
11	Gujarat	e -Gram - Vishvagram	https://egram.gujarat.gov.in/	13685	25	5	no updated info available	VLE	no	Yes
12	Haryana	*Atal Seva Kendra*	http://edisha.gov.in/	yet to finalise	298	40	no info available	VLE	no	Yes

S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
		Haryana e Seva	http://www.haryana.gov.in/EFormsOnlineModule/index.action?submissionType=1&request_locale=en	2294	180	9	no info available	VLE	no	
13	Himachal Pradesh	http://hp.gov.in/sugam/	not available	3226	12 at GP	10	no info available	Salaried	yes (1)	Yes
		LokMitra Kendra LMK)	lmk.gov.in	118	12 at BP, DP	10	no info available	VLE	no	
14	Jammu & Kashmir	not there	no information available					no info	no	No
15	Jharkhand	*Pragya Kendra*	http://jhr2.nic.in/rtgs/frmRTSGDesignatedLogin.aspx	4168	19	31	2216691	VLE	yes (7)	Yes
16	Karnataka	*BapujiSeva Kendra*	http://rdpr.kar.nic.in/english/BSK.asp	4023	3	1	3016	Salaried	no	Yes

S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
		Sakala	http://sakala.kar.nic.in/gsc_home.aspx	No info	73	24	no info available	VLE	no	Yes
17	Kerala	*Akshaya*	http://www.akshaya.kerala.gov.in/	No info	23		no info available	VLE	yes (22)	Yes
		Sevana CR	http://www.infokerala.org/sevana-civil-registration	No info	3	1	no info available	VLE	No	-
		Sevana Pensions	http://www.infokerala.org/sevana-pension	No info	1	1	no info available	VLE	No	-
18	Lakshadweep	*Akshaya*	http://www.akshaya.kerala.gov.in/index.php/achievements	No info	9	9	no info available	VLE	no	Yes
20	Madhya Pradesh	no info available						no info	no	Yes

S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
21	Maharashtra	*Aaple Sarkar Seva Kendra* (ASSK)	https://mh.gov2egov.com (yet to be launched)	17200	372	39	yet to be launched	VLE	yes (21)	Yes
22	Manipur	Currently no service available								No
23	Meghalaya	e Services Meghalaya	http://serviceonline.gov.in/login.do?state_code=17&OWASP_CSRFTOKEN=V94J-Y9W7-J50L-HOJP-00QV-IICU-UD5R-4TD4		6	5	info not available	info not available	yes (6)	Yes
24	Mizoram	e District	https://edistrict.mizoram.gov.in/eDistrict/	8	26	8	info not available	VLE	no	Yes
25	Nagaland	apnacsc	no information available	No info	no info	no info	no info	no info	no	No
26	Odisha	*Jana Seva Kendra*	https://www.odishaonline.gov.in/Site/Core/CitLogin.aspx	6647	6	6		VLE	yes (2)	Yes

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S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
27	Puducherry	Yet to be started	http://dit.puducherry.gov.in/pages/DIT_CSCs.html	5	yet to be started	yet to be started	yet to be started	VLE	no	No
28	Punjab	e-district	http://edistrict.punjabgovt.gov.in/EDA/Landing.aspx	19	43	10	no info available	VLE	no	Yes
29	Rajasthan	*e - Mitra*	http://emitra.rajasthan.gov.in/content/emitra/en/home.html	61493	406	57	37158321	VLE	no	Yes
30	Sikkim	not there							yes (7)	Yes
31	Tamil nadu	*e-Sevai*	https://tnega.tn.gov.in/	10532	61	14	info not available	VLE	yes (1)	Yes
32	Telangana	*MeeSeva*	http://www.meeseva.gov.in/	4527	322	34	84570236	VLE	no	Yes

S.No.	State Name	Name of the CSC	url	No. of Kiosks	No. of services offered	No. of Depts./ Sectors mapped	No. of transactions (last one year)	Type of Model	Is Service Plus being used? How many services?**	e-Services
		PalleSamagraSeva Kendra/ One Stop Shop	https://oss.telangana.gov.in/OSSPORTAL/userinterface/DeliveryChannel/SDPUserLoginForm.aspx	581	58	6	71279	Salaried	No	-
33	Tripura	e District	http://edistrict.tripura.gov.in/	No info	18	3	184747	no info	yes (18)	Yes
34	Uttar Pradesh	e District	http://edistrict.up.nic.in/	No info	56	16	no info available	no info	no	Yes
35	Uttarakhand	e District	http://edistrict.uk.gov.in	No info	27	3	3356993	VLE	no	Yes
36	West Bengal	Gram Panchayat Management System (Panchayat Service Delivery Model)	http://www.wbprdgpms.in	3285	no info	no info	no info	no info	no	Yes
37			https://new.sahaj.co.in/	6339	Basic services, number not available	no info	no info	VLE	no	

ANNEXURE 5

STATE/UT WISE LIST OF NODAL OFFICERS IDENTIFIED FOR THE SURVEY AND DATES OF SURVEY

S. No	STATE / UT	NODAL OFFICERS	DATES OF VISIT
1	Andhra Pradesh	Dr.M. Sudhakar Rao, Additional Commissioner, PR & RD Department, Govt. Of A.P.	21 to 27 March 2017
2	Andaman & Nicobar Islands	Shri S. M. Nair	16 to 21 January 2017
3	Arunachal Pradesh	Shri Rodo Bui, Asst. Director (e-Governance) SIRD	13 to 19 February 2017
4	Assam	Shri Abhijit Mishra, SPM- Assam	14 -23 March 2017
5	Bihar	Shri. Krishna Nand Rai, BPRO (On Deputation)	16 - 22 January 2017
6	Chandigarh	Shri Sundarlal, BDPO, Chandigarh	18-22 January 2017
7	Daman & Diu	Dr Damania, BDO- Moti Daman	22 -26 February 2017
8	Dadra & Nagar Haveli	Shri PP Parmar, Project Director-Silvassa	29 Feb -2 Mar 2017
9	Goa	Shri Anil Dumaskar, CEO-Goa	13 - 19 February 2017
10	Gujarat	Ms SheetalGoswami, Assistant Development Commissioner, Officer of the Development Commissioner, Gandhinagar	14 - 21 March 2017
11	Haryana	Shri Venus Nathalia, SE, ICT, PR and RD Dept, Chandigarh	22-28 January 2017
12	Himachal Pradesh	Shri Satish Sharma	23 March to 3 April 2017
13	Jharkhand	Smt. Rajni Singh	31 Jan to 6 Feb 2017
14	Karnataka	Shri Mohd. Imtiyaz, SPM	13 to 18 March 2017
15	Kerala	Shri SabuKuttan Nair	12 to 19 March 2017
16	Lakshadweep	Shri. Basheer	20 to 22 March 2017

S. No	STATE / UT	NODAL OFFICERS	DATES OF VISIT
17	Madhya Pradesh	Shri. Vinod Yadav, Dy. Director PR Dept.	20 - 26 March 2017
18	Maharashtra	Ms. SarojDespande, Section Officer, Rural Dev. Dept.	18 to 28 January 2017
19	Manipur	Shri. Robindro, State Program Manager	5 - 10 February 2017
20	Meghalaya	Shri. J Massar, JD C&RD- Meghalaya	26 March- 2 Apr 2017
21	Mizoram	Shri. Rochinga, LAD Officer,	10 - 15 February 2017
22	Nagaland	Shri. Khovi, BDO	28 Feb - 5 March 2017
23	Odisha	Shri. Srimanta Kumar Samal	27 Jan-17 to Feb 2017
24	Punjab	Shri. S. Jatinder Singh Brar, Deputy Director (IT)	12 to 18 February 2017
25	Puducherry	Mr Mansoor, Director	31 Jan to 2 Feb 2017
26	Rajasthan	Shri. Sanjay Sharma, Executive Engineer, Panchayati Raj (IT) Department, Jaipur	8-16 February 2017
27	Sikkim	Ms. Cheden P. Ladingpa, Joint Secretary, Directorate of Panchayati Raj	6 to 12 February, 2017
28	Telangana	Shri. Narsimha Reddy	20-24 January 2017
29	Tamil Nadu	Ms. Meghala	21 to 30 January 2017 3 to 9 February 2017 (2 spells)
30	Tripura	Shri. Sanjeeb Pal, Asst Director of Panchayats-Tripura	15 - 21 January 2017
31	Uttar Pradesh	Shri. Ritesh Sharma	23 January to 5 February 2017
32	Uttarakhand	Shri. Manoj Tiwari	20 to 26 January 2017
33	West Bengal	Shri. SanjuGujaMajumdhar	19 to 26 February 2017

TEAM OF MEMBERS INVOLVED IN MoPR PROJECT

S.No.	Name of the Expert	Designation	Role & States/UT Visited
1.	Devi Prasad J	Director	Advisor
2.	G. Lakshmi Till 30 June 2017	Associate Director	Team Leader/ Gujarat, Rajasthan, Haryana, Chandigarh
3.	Raja Krishna Murthy M From 1st July 2017	Sr. Knowledge Manager	Team Leader
4.	Sapna Kuraganti	Knowledge Manager /Project Coordinator	Project Coordinator/ Tamil Nadu, Puducherry, Andaman & Nicobar, Himachal Pradesh
5.	Dr. B.M. Naidu	Associate Director	Statistician
6.	V. Jyothi	Project Manager	IT Expert
7.	Indira Priya Darshini	Programme Manager	Karnataka, Andhra Pradesh
8.	Lakshmi Prasanna	Legal Consultant	Legal Consultant
9.	Dr. A.D.N. Sharma	Sr. Technical Consultant	Consultant
10.	Karthik Subrahmanyam	Programme Manager	Jharkhand
11.	Tejbir Singh Sony	Sr. Knowledge Manager	Panjab, Uttar Pradesh
12.	K. Radha Krishnam Raju	Sr. Knowledge Manager	Kerala, West Bengal, Uttarakhand, Lakshadweep
13.	D. Rajeshwar Rao	Research Associate	Statistician/ Odisha, Telangana
14.	Md. Iliyas	Knowledge Manager	Tripura, Goa, Daman & Diu, Dadra & Nagar Haveli, Assam, Meghalaya
15.	Md. Aslam Ali	Knowledge Manager	Bihar, Mizoram, Manipur, Madhya Pradesh, Nagaland
16.	Sameera Mushini	Knowledge Manager	Maharashtra, Arunachal Pradesh, Sikkim
17.	K. Rajeshwar	Asst. Professor	Centre for ICT, NIRDPR
18.	VenkataRamana	Project Associate	Document Designer
19.	ArunRupala	Software Developer	Database Management
20.	Ramya T	Software Developer	Database Management
21.	BiradarVikas Kumar	Data Entry Operator	Data Entry
22.	S V S A Raju	Data Entry Operator	Data Entry
23.	A Shiva Vani	Data Entry Operator	Data Entry

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