

## **E-Governance Plans in Punjab: An Emerging Application of IT**

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### Abstract

E- Governance stands for Electronic Governance. It is the mechanism for delivering basic government services electronically to the citizens. Government of India has approved National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects (MMPs). For Implementation of e-Governance in Punjab, Government of Punjab has entrusted DOIT (Department of Information Technology) which formulate policy, give technical advice to all the Government Departments for effective implementation of e-Governance projects in the state. PSEGS (Punjab State e-Governance Society) societies are formed by Government for effective implementation of e-Governance projects. e-Governance aims at providing better, speedy and accurate delivery of services to the citizens. It helps in tackling corruption by providing transparency in governmental operations. It also aims at empowering people through information dissemination. It improves efficiency of Government by citizens' participation in the decision making. e-Governance is beneficial for the government and the clients as well. This paper studies the services provided under e- Governance plan in Punjab and common infrastructure used for implementation of these plans.

### **Keywords**

ICT, DoIT, NeGP, SSDG, PSBTE, ITISP, PRISM, PSEGS, PAWAN, SDC.

### **1. Introduction**

e-Governance is a movement of the government to deliver services to the citizens in effective and efficient manner by using Internet, WWW and electronic means like computers, mobile phones etc. e-Governance makes the use of ICT (Information and Communications Technology) to provide government's information and services accurately and instantly. e-Governance aims at providing anywhere, anytime and low cost services to the residents of country. Other benefits of e-Governance include online information access, online application form submission and one stop shop for all transactions.

### **The primary goals of e-Governance are**

- Better, speedy and accurate delivery of services to the citizens
- Tackling corruption by providing transparency in governmental operations
- Empowerment of people through information dissemination
- Improved efficiency of Government by citizens' participation in decision making
- Improve interfaces with
  - (a) Government to Citizen (G2C)
  - (b) Government to Business (G2B)
  - (c) Intra-Governmental processes (G2G)

### **2. National e-Governance Plan**

On May 18, 2006 Indian government approved National e-Governance Plan (NeGP), which includes 27 Mission Mode Projects (MMPs). Later on four new MMPs i.e. Education, Health,

PDS & Post were added and the number of MMPs increased to 31. According to their nature & implementing strategy of the project these MMPs have been divided in three categories as mentioned below in the table

State MMPs	Central MMPs	Integrated MMPs
e-District	Passport	India Portal
Agriculture	MCA-21	CSC
Commercial Taxes	UID	e-Procurement
CCTNS-Police	Insurance	e-Biz
Land Record	Banking	e-Courts
Road Transport	Income Tax	EDI for e-Trade
Treasuries	Pensions	NSDG
Panchayat Raj,PDS	e-office	
Employment Exchange	Central Excise & Custom	
	Immigration, Visa & Foreign Registration	
	Trade Posts	

**Table1. Mission Mode Projects (MMPs)**

NeGP has also approved two common and support infrastructure projects i.e. State Wide Area Network (SWAN) & State Data Center (SDC).

### 3. e-Governance in Punjab

Punjab is among the one of the richest states of India which is located in the northwest of the Country. It covers 50,362 sq. km geographical area which is 1.54% of Country's total geographical area. Department of Information Technology (DoIT) of India provided e-Readiness report according to which Punjab is one of the leading states of India making the use of ICTs (Information and Communication technologies). Government of Punjab has entrusted DOIT (Department of Information Technology) in the state of Punjab which formulate policy, give technical advice to all the Government Departments for effective implementation of e-Governance projects in the state. Various services provided under e-Governance in Punjab are:-

- i. SUWIDHA
- ii. State Portal and State Service Delivery Gateway (SSDG)
- iii. e-Districts
- iv. VAHAN and SARATHI
- v. Web-based Counseling for PSBTE (Punjab State Board of Technical Education)
- vi. Punjab Government Personnel Management System
- vii. ITISP ( Integrated Treasuries Information System of Punjab)
- viii. PRISM (Property Registration Information System Module)

### 3.1 SUWIDHA

The term SUWIDHA refers to Single User-friendly Window Disposal Helpline for Applicants. The project SUWIDHA was started in August 2002 at District Fatehgarh sahib and was financially supported by GoP (Government of Punjab) and DoIT (Department of Information Technology). Now it has been implemented in all Deputy Commissioner's offices. With the help of this project services are provided to the citizen through a single window counter or common interface. SUWIDHA software is also available in Punjabi language.

#### How SUWIDHA Works?

- i. When a citizen visits SUWIDHA center he gets Queue Token number from Queue Counter.
- ii. When his Token number is displayed on screen it's his turn to file the application.
- iii. After filing the application he gets a receipt cum token number on which date of delivery of service/ processed application is mentioned.
- iv. He pays the fees at same counter.
- v. Afterwards the Citizen can get to know about the progress of his case by using token number through CITI(which is IVR based system) or website.
- vi. The documents requested or processed case is delivered to the citizen on the specified date from SUWIDHA delivery counter.

#### Services provided under SUWIDHA project are

- i. Services related to issue of birth certificates, death certificates and marriage certificates.
- ii. Issuance and renewal of passes to freedomfighters and handicapped person.
- iii. Services related to widows, old age pensions.
- iv. Pensions to destitute children and disabled persons.
- v. Services related to arms license.
- vi. Character Verification.
- vii. Freedom fighters ID-Cards issuance and renewal.
- viii. Indemnity bond attestation.
- ix. Dependent Certificate issuance to wards of freedom fighters and riots/ terrorist victims.
- x. Passport Applications submission and other passport services.
- xi. Registration of vehicle.
- xii. Services related to issue of bus passes.
- xiii. Endorsement of SPA/GPA.
- xiv. Issuance copy of a Document/Inspection of Record.
- xv. Driving license issuance and renewal.
- xvi. Affidavit attestation
- xvii. Surety bond attestation and acceptance.
- xviii. Issuance of No Objection Certificates for marriage palace, hotel & restaurant, petrol pump, cinema etc.
- xix. Issuance of nationality certificate, unmarried certificate.
- xx. Counter signing of documents.(Kaur and Rathore, 2012)

### 3.2 State Portal and State Service Delivery Gateway (SSDG)

The SSDG aims at providing Government services accessible to a citizen at affordable cost with efficiency and transparency. It enables a common man to submit their applications electronically through a common gateway and collect the certificate/ service from the same location.

The State Portal (SP) is also developed along with State Service Delivery Gateway (SSDG) so that citizens can access services from a single interface in the form of a portal anywhere and anytime. Citizens do not have to visit Government offices again and again for availing services. The objective behind SSDG is to reduce the administrative burden, service fulfillment time and costs for the Government, citizens and business. SSDG makes use of Gram SUWIDHA Kendras in integration with the common infrastructure (SWAN, SDC) and develops the applications required for deployment of State Portal and State Service Delivery Gateway (SSDG) for the State.

SSDG Project has been awarded to the Implementing agency M/s HP India Pvt. Ltd. To design, develop, test, implement, operate and maintain for 3 years for “e-forms application, State Portals and SSDG” along with installation, commissioning and maintenance of IT infrastructure. Different departments will provide 32 services under the project. Software Requirement Specifications (SRS) for 32 services have been approved by respective departments. The data center hardware has already been installed. The State Portal has been made live by Deputy Chief Minister Sh. Sukhbir Singh Badal on 22.02.2014.

S. No	Department Name	Service Name
1	Food & Civil Supplies	Addition/ Change/ deletion of names in Ration Card Issue of New Ration Card
2	Governance Reforms	RTI (Right to information)
3	Health & Family Welfare	Addition of Name in Birth certificate Correction of Name in Birth / Death certificate Issue of Birth Certificate in Rural Areas Issue of Death Certificate in Rural Areas Issue of Disability Certificate Late entry of Name in Birth / Death certificate
4	Home Department	Issue of Marriage ability Certificate Registration of Marriage under HINDU marriage act Registration of Marriage under special Marriage act Solemnized marriage
5	Local Government	Issue of Birth Certificate in Urban Areas Issue of Death Certificate in Urban Areas
6	Personnel Department	Issue of Residential Certificate

7	Rural Development & Panchayat	Issue of Job Card under NREGS (National Rural Employment Guarantee Act) Scheme
8	SC/BC Welfare	Ashirwad/Shagun to Scheduled Caste, Christian girls and daughters of widows of any caste at the time of their marriages Post Matric Scholarship to OBC students Post Matric Scholarship to Minorities Term loan scheme for SC Term Loan Scheme for BC Caste Certificate (SC/OBC)
9	Social Security	Old Age Pension Scheme (Urban areas) Widow Pension Scheme (Urban areas) Dependent Children Scheme (Urban areas) Handicap pension Scheme (Urban areas) Old Age Pension Scheme (Rural areas) Widow Pension Scheme (Rural areas) Dependent Children Scheme (Rural areas) Handicap Pension Scheme (Rural areas) National family benefit Scheme

**Table 2: Services provided through SSDG Portal**

(www.punjab.gov.in)

**3.3 e-Districts**

Districts prove to be the front end of any government. The major citizen government interaction takes place at district level. e-District project is implemented by government in order to provide high volume services to citizens through automation of workflow, data digitization, backend computerization across participating departments. The project aims at providing smooth, efficient and speedy services to citizens through Common Service Centers. The project makes the use of four pillars of e-infrastructure namely State Wide Area Network (SWANs), State Data Centres (SDCs), Gram SUWIDHA Kendras (CSC Scheme) and State Service Delivery Gateways (SSDGs) to deliver public services electronically to citizens at their door steps.

**Services provided under e-district project are**

- Certificates: Issuance of certificates for birth, domicile, caste, income, death etc.
- Public Distribution System (PDS): Issuance of Ration Card etc.
- Social Welfare Schemes: Disbursement of widow pensions, old-age pensions, family pensions etc.
- Licenses: Arms Licenses, etc.
- Complaints: Related to absentee teachers, unfair prices and non-availability of doctor etc.
- RTI: Online filing and receipt of information relating to the Right to Information Act.
- Utility Payment: Payments relating to electricity bills, water bills and property taxes etc.
- Linking with other e-government projects: Driving Licenses and Land Records etc.

- Information Dissemination: Dissemination of information about government policies etc.
- Assessment of taxes: Property tax, and other government taxes.
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S. No	Department Name	Service Name
1	Agriculture Department	Addition in license of Godowns Addition in license of Items Issuance of Duplicate Agriculture license New/Renewal of Agriculture Licenses
2	Department of Governance Reforms	Right to Information Services
3	Department of Grievances and Pension	Grievance Redressal system
4	Department of Health	Addition of Name in Birth certificate Correction of Name in Birth / Death certificate Issuance of Birth / Death / Not Found certificate Late entry of Name in Birth / Death certificate
5	Department of Rural Development	Rural Area Certificate
6	Food & Civil Supplies Department	Duplicate Ration Card Issuance of New Ration Card for APL/ BPL. Modification in Ration Card Surrender of Ration Card
7	Home Department	Addition/Deletion of Retainer Addition/Deletion of Weapon Cancellation of License Change of Address Change of Bore Duplicate Arms License Entry of Weapon Extension of Cartridges Extension of Jurisdiction Issuance of Marriage ability certificate New Arms License NOC for Sale of Weapon Permission for Deposit of weapon in death Case Permission for sale / transfer Weapon in Death Case Permission to Carry the Weapon

		Registration of Marriage under HINDU marriage act Registration of Marriage under special Marriage act Renewal of License Solemnized marriage
8	Personnel Department	Residential Certificate
9	Revenue Department	Attestation of affidavit / indemnity bond / surety bond Copying service Countersigning of documents Issue of notices Issue of notices / updating treasury receipts Listing of cases
10	Social Security Department	Financial Assistance to Dependent children Financial Assistance to Disabled Persons Financial Assistance to Widow & Destitute Women Old age pension Senior Citizen Identity Card
11	Social Welfare Department	Caste Certificate (SC/OBC)

**Table: 3. Services provided through e-District**

(www.punjab.gov.in)

**3.4 VAHAN and SARATHI**

It is the Punjab State Transport Department who took the initiative to use information Technology for providing services to its clients. Transport department computerization started 10 years ago when the department started the use of Software like VAHAN and SARATHI for providing its services. Now the department is computerized and all the information is provided to the citizens through internet and SMS. The two most important software used by the transport department are:

**3.4.1. VAHAN** NIC Headquarters Delhi developed VAHAN software for transport department. The software is used to provide the following services:

- It is used to register the vehicle
- It is used to collect tax
- It is used to issue certificates and different permissions
- It is used to record the fitness of the vehicle.

**3.4.2. SARATHI** NIC Headquarters Delhi developed SARATHI software for transport department. Registering and Licensing Authority (RLA) use this software for providing the services like:

- Issue of Learner license
- Issue of Permanent driving license
- Issue of Conductor's license
- Issue of Driving school license

### **3.5 Web-based Counseling for PSBTE (Punjab State Board of Technical Education)**

PSBTE is a self-managed (autonomous) statutory authority. It aims at maintaining academic standards for Technical Education Institutions and Industrial Training Institutes.

Different responsibilities of PSBTE are:

- It provides Web-based Online off-campus counselling for admissions in Engineering and lateral Entry (LEET) to Engineering and Pharmacy Streams in 125 institutes in the state of Punjab.
- It is also responsible for conducting exams in Polytechnic and Industrial Training Institutes.

This system is very beneficial as it provides the most transparent way to admit students to various academic courses. It also saves the time of the candidate as the candidate does not have to be physically present at the venue of the counselling. (Singla and Aggarwal, 2012)

### **3.6 Punjab Government Personnel Management System**

Punjab government's objective is to provide speedy and accurate information and services to the citizens. This is not possible without the proper involvement of employees of the government. Employees play a major role in functioning of different departments. The software has been developed for keeping the record of employees of Punjab government so that employees can easily access their data and can work efficiently. The software has been developed after consultation with different departments of Punjab government keeping in view that the same software can be used by every office for the automation of employee's record. The software used keeps the record of following attributes of a Punjab Government's employee:

- Personnel Information System: For keeping the personal record like name, address etc.
- Pay Accounting System: For keeping information related to salary.
- Leave Accounting System: For keeping the record of leaves of an employee.
- Loan Accounting System: For keeping the records related to loans etc.
- General Provident Fund Accounting System: For keeping information related to Provident Funds.
- Pension Accounting System: For keeping the record of Pension of an employee.

### **Implementation status of Project**

The system has been implemented in offices at Chandigarh and Mohali. Record of almost 15,000 employees has been automated. Computerized payroll of almost 54 offices is being generated. Implementation of System is under progress in 33 chosen departments in all the districts for almost 40,000 employees. (Kaur and Rathore, 2012)

### **Objectives of the project**

- Provide easy access of information to employees about their salary details, leaves etc.
- Provide easy and accurate access of information to concerned authorities about their employees which can help them in decision making.

### **3.7 ITISP (Integrated Treasuries Information System of Punjab)**



ITISP was started in 2001 by Government of Punjab. ITISP was developed to computerize the Treasuries system for improvement in management of funds. Under this project, computerization of 18 district treasuries and 53 sub treasuries has been done. ITISP is used for online automation of treasuries. Verification of DDO is done using photograph, signature, receipt module, pension module and cheque printing using this system. With the help of this project time involved in calculation is reduced and reliability and accuracy of financial reports has been enhanced. (Mittal and Kaur, 2013)

### **3.8 PRISM (Property Registration Information System Module)**

Revenue department has computerized land records in order to facilitate the land owners of Punjab. Under this project all major activities of Sub-Registrar office has been automated through a single window system. User interface of the system is available in both Punjabi and English. Various services provided under this project are:

- On the spot registration, registration fees calculation.
- On the spot valuation of property
- On the spot stamp
- Online capturing of photograph of parties, witness and sub-registrar. These photos are printed at the back of stamp paper

## **4. Bodies Deputed by Government for monitoring e-Governance services**

### **4.1 PSEGS (Punjab State e-Governance Society)**

PSEGS societies are formed by Government for monitoring implementation of e-Governance projects. The objective behind the formation of society is to take all the necessary steps to promote transparency, efficiency in implementation of e-Governance projects. Sukhmani societies are established under this society for providing desired services to the citizens. Sukhmani Society is a district level body. Sukhmani Centres provide services such as water/sewerage bills, electricity bills, house tax, payment of telephone bills of BSNL and issuance of birth and death certificates by Municipal Corporation etc.

## **5. Infrastructure projects approved by Government for implementation of e-Governance**

Punjab Government provides dedicated infrastructure projects for implementation of services provided under e-Governance plan. These Infrastructure projects are:

### **5.1. PAWAN**

Punjab State Wide Area Network (PAWAN) is a converged fiber network for data, voice and video communications throughout the State of Punjab. It acts as a backbone for implementation of E-Governance services in Punjab. Features of PAWAN are:

- Dedicated state owned fiber Network infrastructure to connect Government offices at State, District & block levels.
- Designed to cater to the Governance information and communication requirements of whole State of Punjab.

- Aims to create a dedicated Closed User Group(CUG) network among State's Civil Secretariat, Departments, Corporations, Boards, District offices and Block offices.
- Dedicated e-mail service for official use by employees of State Government.
- HCL Infosystem is the PAWAN operator and Bharat Sanchar Nigam Limited (BSNL) is the bandwidth provider for PAWAN.(www.punjab.gov.in)

#### **Advantages of using PAWAN are**

- PAWAN Vertical bandwidth along with internet is provided free of cost to state government departments as, it is funded by Government of India.
- The horizontal (last mile) connectivity from the existing PAWAN POP has to be funded by State government. (www.punjab.gov.in)

#### **5.2. State Data Centre (SDC)**

State Data Centre is being set up across 35 States/UTs under the National e-Governance Plan of Department of Information Technology, Government of India. It is one of the core infrastructure components of National e-Governance Plan (NeGP) .This project was approved by Government of India (GoI) for Punjab with total outlay of Rs. 5014 lacs for five years. Functionalities provided by State Data Centre are:

- Central Data Repository of the State
- Citizen Information/Services Portal
- Disaster Recovery of Services
- Remote Management
- Secure Data Storage & Online Delivery
- Service Integration
- State Intranet Portal (www.punjab.gov.in)

#### **6. Conclusion**

e- Governance is mechanism for improving the working of government. Number of e-Governance services has been implemented in state of Punjab. These services are really beneficial for the citizens. Citizens do not need to visit different offices for payments of bills and availing other government services. But most of the rural citizens of Punjab are not aware of these e-Governance services. So, for proper utilization of e-Governance services it is necessary to create awareness among the masses. Rural citizens should be motivated to make use of these services.

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