RESHAPING DEVELOPMENT DISCOURSE OF ARUNACHAL PRADESH USING ICT

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Abstract

This paper is an attempt to address the challenges in the state with the help of Information and Communication Technology (ICT), it illustrates the application of ICT and its tools to Government functioning and Service Delivery and in the processes bringing about SMART (Simple, Moral, Accountable, Responsive, Efficient and Transparent) Government.

It is said government is all encompassing as it touches the lives of human beings from cradle (health services for women and children) to grave (payment of pensions, gratuity etc.).

Over the years, governments have discovered that information technology can make the provision of services to the citizen more efficient and transparent. It can save costs and lead to a higher level of comfort and satisfaction to the citizens in dealing with Government.

So far as the government is concerned, the coming together of computerization and internet connectivity/web-enablement in association with process re-engineering, promises, faster and better processing of information, leading to speedier and qualitatively better decision making, greater reach and accountability, better utilization of resources and overall good governance. In the case of citizens, it holds the promise of enhanced access to information and government agencies, efficient service delivery and transparency in dealings and interactions with government.

Today, government is expected to be transparent in its dealings, accountable for its activities and faster in its responses. This has made the use of ICT imperative in any

agenda drawn towards achieving good governance. It has also led to the realization that such technologies could be used to achieve a wide range of objectives and lead to faster and more equitable development with a wider reach.

Introduction:

The utilization of ICT (Information and Communications Technology) and its tools in the government functioning and achieving the objectives of governance is known as e-ICT facilitates efficient storing and retrieval of data, instantaneous transmission of information, processing information and data faster than the earlier manual systems, speeding up governmental processes, taking decisions expeditiously and judiciously, increasing transparency and enforcing accountability. It also helps in increasing the reach of government - both geographically and demographically. The primary purpose of governance is the welfare of citizens. While one aspect of governance relates to safeguarding the legal rights of all citizens, an equally important aspect is concerned with ensuring equitable access to public services and the benefits of economic growth to all. It is expected that e-Governance would enable the government to discharge its functions more effectively. However, this would require the government to change itself – its processes, its outlook, laws, rules and regulations and also its way of interacting with the citizens. It would also require capacity building within the government and creation of general awareness about e-Governance among the citizens.

To achieve the vision of good governance in the the state its crucial to adopt appropriate strategies and expedite the deployment of Information Technology and eGovernance in the state so that the government functions as a SMART (Simple, Moral, Accountable, Responsive and Transparent) Government. To combat the rampant corruption in Government offices, its important to make each government department accountable and transparent which can be realised by making the departments online. Only 21 state departments and 16 districts have online portal and most of them are not updated with the latest information and even fewer departments/districts administration are using the ICT for government functioning and citizen interactions. Only 30% of the departments in state are using the eOffice application.

Its also important to provide an online platform for Citizen-Government interactions, so as to empower citizen to engage and participate in governance; to identify priorities, problems and find solutions. Social media can be used to propagate information on programmes, policies and schemes of the Government; Social media like Facebook, twitter etc. have wider reach with 90% of the urban population using them. The advent of social media cannot be ignored, capital town Itanagar has highest per capita users on Facebook. Citizens of the state can be seen deliberating important government decisions, programmes and activities on major Facebook pages like Voice of Arunachal Arunachal News 24 x7, Arunachal Mirror etc. With easy access to information, increased level of awareness, citizens are demanding more participation in deliberations and activities of the Government and the Government has a massive task of managing these challenges and keeping up with the expectations of the citizens.

The goals of e-Governance are:

- Better service delivery to citizens
- Ushering in transparency and accountability
- Empowering people through information
- Improved efficiency within Governments
- Improve interface with business and industry

The Government interactions may be described as follows:

- **G2G** (**Government to Government**) –Information and Communications Technology is used not only to restructure the governmental processes involved in the functioning of government entities but also to increase the flow of information and services within and between different entities. The primary objective is to increase efficiency, performance and output.
- **G2C** (**Government to Citizens**) –an interface is created between the government and citizens which enables the citizens to benefit from efficient delivery of a large range of public services. This expands the availability and accessibility of public services on the one hand and improves the quality of services on the other. It gives citizens the choice of when to interact with the

- government, from where to interact with the government and how to interact with the government.
- **G2B** (**Government to Business**) e-Governance tools are used to aid the business community providers of goods and services to seamlessly interact with the government. The objective is to cut red tape, save time, reduce operational costs and to create a more transparent business environment when dealing with the government.
- **G2E** (**Government to Employees**) Government is by far the biggest employer and like any organization, it has to interact with its employees on a regular basis. This interaction is a two-way process between the organization and the employee. Use of ICT tools helps in making these interactions fast and efficient on the one hand and increase satisfaction levels of employees on the other.

The following can therefore be achieved as a result of e-Governance:

- Better access to information and quality services for citizens: ICT would make available timely and reliable information on various aspects of governance. As regards services, there would be an immediate impact in terms of savings in time, effort and money, resulting from online and one-point accessibility of public services backed up by automation of back end processes.
- Simplicity, efficiency and accountability in the government: Application of ICT to governance combined with detailed business process Re-engineering would lead to simplification of complicated processes, weeding out of redundant processes, simplification in structures and changes in statutes and regulations. The end result would be simplification of the functioning of government, enhanced decision making abilities and increased efficiency across government.
- **Expanded reach of governance**: Rapid growth of communications technology and its adoption in governance would help in bringing government machinery to the doorsteps of the citizens.
- Enabling Environment for Promoting Economic development -Technology enables governments to create positive business climates by

- simplifying relationships with businesses and reducing the administrative steps needed to comply with regulatory obligations. e.g. : eProcurement.
- Enhancing Transparency and Accountability: e-Governance helps to increase the transparency of decision-making processes by making information accessible and allowing the on-line tracking of applications on the web by the public and press.
- Improving Service Delivery: Government service delivery, in the traditional process, is time consuming, lacks transparency, and leads to citizen and business dissatisfaction. By putting government services online, e-Governance reduces bureaucracy and enhances the quality of services in terms of time, content and accessibility through integrated service delivery platforms at the door steps of citizen.
- **Improving Public Administration** e-Governance administrative components, such as a computerized treasury, integrated financial management information systems, and human resource management systems, lead to greater efficiency in public administration.

Efficiency, Accountability and Transparency

IT allows faster communication, computation, storage and retrieval which leads to greater efficiency in any transaction. Effective use of ICT can minimize transaction costs and streamline government operations thus making government processes more efficient and effective. Judicious deployment of technology can lead to more productivity and a possible reduction & redeployment of the workforce. Further, streamlined operations, timely reports on various aspects of the service can help in initiating timely action.

e-Governance enables greater participation of citizens in policy and decision making. Participation enables greater understanding between Government and people as also between people and people. It also helps in creating a sense of responsibility and the Government becomes true representative of the peoples' aspirations and will. Using ICT along with other reforms, Governments today are able to deliver a wide range of services – from ration cards, motor licenses and land records to health, education and

municipal services – in a manner that is timely, efficient, economical, equitable, transparent and corruption-free. The successful examples of e-governance, right from the Bhoomi Project in Karnataka state of India to the Bahiya Project in Brazil have shown that optimum utilization of ICT has enough potential to attain the above and hasten the pace of development.

Application of ICT in the processes of government also helps in enhancing the transparency in government functioning, interaction with the citizens & businesses. Sharing information such as government processes, procedures, regulations as well as provision for tracking status of the application/request, introduces a lot of transparency in government functioning. This in turn helps in raising the trust level of citizens towards government and leads to better relationship between the government & citizen as well as Government & businesses.

Finally, the adoption of e-government and its benefits including higher productivity, efficiency, enhanced transparency, accountability, responsiveness lead to an overall improvement in the image of the government in the minds of the citizens. The trust level imposed by citizens and businesses in the government can significantly go up due to the increased ease & efficiency of interaction while dealing with the government.

Challenges in e-governance

There are a large number of obstacles and challenges in implementation of eGovernance in the state. The list below illustrates a few of them.

➤ Connectivity Issue: The State of Arunachal Pradesh is the largest among the north-eastern states of India in terms of geographical area and mostly mountainous with the Himalayan ranges running north south. The connectivity is one of the major challenges considering the mountainous terrains. As per the data received from DCs, most of the districts have unreliable broadband connectivity, only Papumpare and Yupia have reliable broadband connectivity and some districts like Siang, Longding, Namsai, Upper Subansiri do have broadband connectivity.

The progress of the Bharat Net project as approved by Central Government to provide connectivity to 2,50,000 Gram Panchayats of the country to ensure

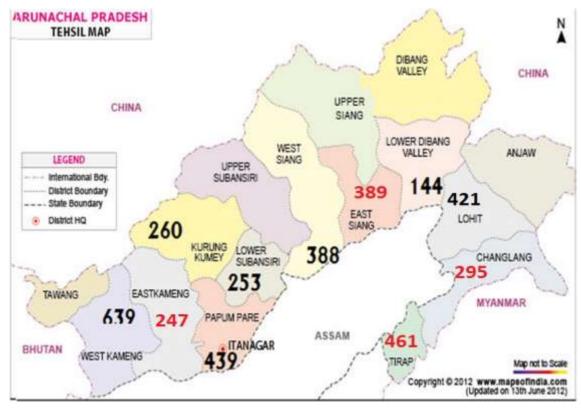
broadband connectivity with adequate bandwidth is slow and very often hampered due to innumerable reasons.

- Manpower shortage in Districts (No engineers in 6 Districts namely;
 Siang, Dibang Valley, KraDaadi, Longding, Namsai and Anjaw)
- Frequent changes in Engineers deputed in the district affecting the OFC laying work.
- Cable cut by other road widening and cable laying agencies and also landslides are hampering the progress of work.
- Lack of coordination among various stakeholders involved is one major cause despite formation of Dist. Coordination Committees.

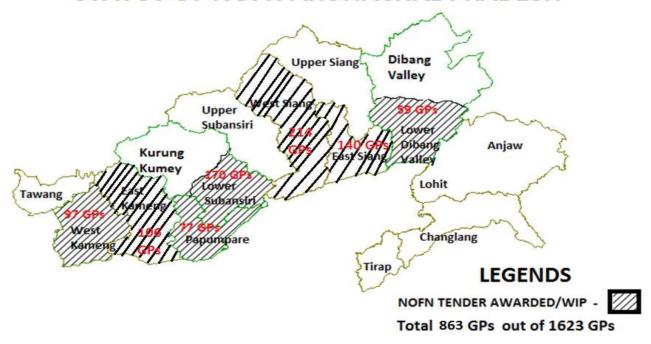
Bharat Net has 2 component

- USOF (Universal Service Obligatory Fund) which covers DHQs to Sub Divisional HQs (CO Office etc). Out of 5035 KMs only 1362.8 KMs OFC has been laid.
- National Optic Fibre Network which covers Gram Panchayats.
 Out of 5247 KMs only 201.695 KMs OFc laid.

The status of the Bharat Net project across various districts can be assessed from the maps below.



STATUS OF NOFN ARUNACHAL PRADESH



NOFN OFC to be laid = 5247 KMs USOF OFC laid = 201.695 KMs only

➤ **Power Issues:** Availability of ICT infrastructure, eGovernance application and skilled manpower have failed to gain success for the basic want of uninterrupted or on time availability of electricity as almost all of the eGovernance projects need computers, network devices etc.

> Manpower

- Lack of IT Skilled employees: IT illiteracy is a major obstacle in implementation of e-Governance in India, most of the Government employees do not posses' IT skills. Training also takes up considerable amount of time and effort and sometimes even after training, the employees are not confident of using the ICT projects.
- Resistance to Change: The struggle to change phenomenon can explain much of the hesitation of the employees, citizens, businesses in moving from a paper-based to a web-based system to interact with government. They all have their biases with respect to how transactions or service delivery should be processed in Government. Awareness about

the value of new system is an initial step towards reducing some of the resistance.

- Lack of Awareness: Most of the employee are not aware of the benefits
 of eGovernance project it would bring to the employee himself to the
 citizens or even about the project itself.
- Lack of Interest and Importance of ICT: Even though proper awareness and trainings are conducted, the Govt. employees fail to see the importance of IT in today' world and have no interest on using the ICT in their day to day functioning, instead they view ICT as an obstacle.
- ➤ Maintenance of ICT Infrastructure: As the Information Technology changes very fast, it is costly and not easy to update the existing system very fast. Hence, a system in use must be capable to handle all the emerging needs. Also physical care of the ICT equipment need extra care and maintenance is needed especially with regard to excessive rain, hot and humid climate. Theft/damage of the installed ICT equipment has also become quite a challenge. Maintenance is a key factor for long living systems in a rapidly changing technical environment.
- Lack of good software developers in the state: There are a very few technical service providers and software developers in the state, which have few IT skilled employees and hence they are incapable of taking up big eGovernance projects. Most of the good reputed companies do not favour working in difficult terrain state. The few companies that venture into the state projects are prevented by the local from taking up projects for vested interest, making the state an unfavourable and unattractive place for business investment.

The eDistrict project could not take off for these reasons, RFP was floated around 4 times, first time only single bidder tuned and next bids the bidders didn't qualify. The ones that qualified couldn't submit the Bank Guarantee (BG) and some were prevented from placing their bids by the locals.

The SDC project also floated the RFP 3 times and no bidder turned up on the 3 occasions.

- Weak support from NIC in terms of manpower and Skills: The Government's own technical institution that provides ICT infrastructure, products, solutions and support to eGovernance initiative of the Government is understaffed and under skilled in the state hence it is unable to support the eGovernance initiatives of the state properly. Many of the NIC solutions implemented in the Government of India could not be replicated in the state due to lack of manpower and technical skills for implementing these projects. Also the state NIC is not very cooperative in supporting the initiatives of the state.
- ➤ Lack of Interoperability among the IT projects: Interoperability is the ability of systems and organizations of different qualities to work together. The e-Governance applications must be interoperable so that the newly developed and existing applications can be implemented together, also applications across different departments also should be interoperable for smooth eGovernance experience. However, in the state, most of the eGovernance projects of different departments are built in silos and use different technologies and are often not interoperable.
- Lack of Co-ordination and Inter Departmental Communication gaps:

 Lack of communication between different departments of government is a major challenge in successful implementation of eGovernance project. Therefore, the information and technology that resides with one department has no or very little meaning to some other department of the government. For example, the Department of IT & Communication is building a project "Human Resources Management System" an employee management system for the whole of Government of Arunachal Pradesh and same time some departments are building their own employee management system independently. Lack of proper communication and coordination among the departments lead to duplicity of projects, hence one of the project becomes redundant, wasting Government fund, time and effort.
- ➤ Inadequate planning for project implementation and rollout: for successful implementation of eGovernance project, it should ideally go through the defined project life cycle and there should be a proper plan and strategy for each phase in life cycle. Lack of proper plan and strategy leads to failure of the

project. In many projects, ground level condition and ideal situations are just presumed without any assessment study or gap analysis study. When projects are rolled out, they fail as these conditions do not apply. Failure to review the project at the right time leads to incorrect assumptions and unwarranted delays in project implementation. For example "BPR of Industry Department", a project for end – to –end computerisation of the Department of Industry, is lying defunct now as project implementation and rollout was delayed for the above reasons. The system developed has become obsolete, since the scope of project was defined much earlier and there has been changes in the Industry Department forms and functioning which were directed by Central Government.

Citizens

- O Low literacy and IT literacy rate: Arunachal has low literacy level which is a huge obstacle in implementation of e-Governance projects. Illiterate people are not able to access the e-Governance applications. Most of the literate are unaware of IT and its benefits and do not have the enough IT knowledge to avail benefits of eServices or ICT initiatives.
- O Lack of awareness: Majority of IT and eGovernance projects of the Government have failed due of this reason. Lack of awareness of the IT initiatives of the Government and it benefits has led to non-utilisation of the eServices provided by these projects. Even the Government do not pay much attention to this issue and most of the eGovernance projects do not have any awareness and sensitization strategy. The implemented projects are rarely revived and impact assessment study to analyse the outcome of the project is almost never done. A few of the projects that have failed to draw citizens are Mobile Governance project, e-Samaj project of Women and Child Department, Software for Small Saving Department, Online Trade and Commerce Information System etc.
- Less interest: The citizens are not aware of the benefits of the eGovernance and hence do not give importance to IT initiatives of the Government. Another reason for low interest by citizens is lack of confidence on the Government of providing accurate, secure, easy, comfortable and affordable services via eGovernance or ICT application.

- Often the content on the websites of the Departments are outdated and even the technology is obsolete.
- User friendly of the Websites: as the users of the Government website
 are mostly IT non expert, the users may fail to use the system in right
 manner. Hence Government must ensure that the websites and
 applications are user friendly, easy to use and also easily locatable.

Government must carefully study the challenges to ICT /eGovernance project and take appropriate actions to address them for successful implementation of the projects, proper planning, timely rollout, correct implementation, proper awareness and dissemination strategy, feedback system are very important activities.

Some IT Initiatives of Govt. of Arunachal Pradesh

Below is a list of few IT initiatives operational in the state which can be replicated, expanded or enhanced to improve the efficiency, transparency and accountability of the state Government Departments. Leveraging the existing IT infrastructure already available with the state or being provided by Govt. of India can reduce implementation time and is also cost effective.

✓ **GeM**: is one stop Government eMarketplace (GeM) to facilitate online procurement of common use Goods & Services required by various Government Departments / Organizations / PSUs. GeM aims to enhance transparency, efficiency and speed in public procurement. It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users achieve the best value for their money. The purchases through GeM by Government users have been authorized and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules, 2017.

In the state GeM has been launched with 2 day major workshop on Sept 2017 to create awareness and on-board Govt. Departments (buyers) and sellers/vendors. 37 Departments and around 85 sellers/vendors have been successfully on-boarded onto GeM. However, the results of GeM are yet to be obtained as Departments are still learning to use the platform.

GeM on-boarding has been a challenge with the buyers and sellers showing reluctance to get on-board onto GeM, lack of awareness, incomplete data or reluctance to share details for opening GeM account etc. and issues with the GeM portal itself like complicated process involved, product listing not matching up etc. Though the departments and sellers/vendors have been on-boarded and trained to used GeM, it remains to be seen how many of them will actually use the platform.

✓ E-Office: The e-office Project has been taken up by the Government of Arunachal Pradesh through Department of Information Technology & Communication (DITC), Government of Arunachal Pradesh in order to improve efficiency in government processes and service delivery mechanisms. NIC (National Informatics Centre) is the technology partner of DITC for implementing e-Office. e-Office is aimed at increasing the usage of work flow and rule based file routing, quick search and retrieval of files and office orders, digital signatures for authentication, forms and reporting components. e-Office framework (Premium version) presently consists of e-File, e-Leave, e-Tour, Knowledge Management System, Personnel Information System, Collaboration & Messaging Systems. e-Office is not merely an initiative for office automation but also a highly citizen oriented reform.

Currently, Department of IT & Communication, Department of Administrative and Personnel, Chief Minister's Office, Chief Secretary's Office and Capital DC's office are using the eOffice application. eOffice has had significantly impact on the Government functioning; till date a total of 1322 eFiles have been created and 15,581 eFile transactions reported. Delay in file movement has been greatly reduced, bulky physical files need not be carried around, searching of files is easier, less paper work and no fear of losing/misplacing or damaging the files. With the Civil Secretariat being a Wi-Fi enabled zone, an employee can work anytime and from anywhere within the office premises. As the files can be traced, employees are made accountable to act on the file on time.

The implementation of eOffice has not been easy task, employees being reluctant to use the new system, multiple awareness programmes had to be conducted, the employees had to be trained and re-trained and given hands-on at their own desks. Existing IT infrastructure gap-assessment of 108 Departments and procurement

has been huge task. Even after implementation of eOffice application and digitization of legacy data, use of physical files continue in these offices.

Learnings from this project implementation would be that, since eOffice is top driven application, senior officers in Departments must mandate and issue clear instructions for use eFile only. It is also important to fasten the implementation of eOffice on other departments, so that the interactions within departments can also be paperless. The project should be well planned, well communicated, reviewed regularly and enforced for smooth implementation.

✓ Wi-Fi at Civil Secretariat: a state-of-art wireless network within the Civil Secretariat complex where secured, robust and seamless internet speed up to 1GBPS is available and this has enabled the employees working in the secretariat to carry out their eOffice work and other official correspondence such as email, WhatsApp and social networking site from any place and anywhere within the Secretariat complex. The project was inaugurated by the Chief Minister of Arunachal Pradesh on 17th of July 2017 making Civil Secretariat Arunachal Pradesh the only Secretariat in the Country to be Wi-Fi enabled with robust and secured network. It has the capacity to 6000 concurrent connections of government employees and 500 concurrent guest users at a time.

Implementation of this project has strengthened the initiatives of Dept. of IT & Communication and also initiatives under Digital India. Employees can now access the eGovernance applications by any device. There were some difficulties in planning, deployment, installation and commissioning of Wi-Fi devices and arrangement of power backup for switches, router and Wi-Fi access points. Also it was quite challenging to conduct survey on multi-storied secretariat building and in compiling the reports.

As per report generated, from 3rd July 2017 to 27th Nov 2017, 3497 unique users have connected to Wi-Fi over 85400 session and about 6.88 Terabytes of uploads and 83.57 Terabytes of downloads.

With the huge success of this project, it is being replicated at ADC Kanubari office and another at Ganga market to provide the benefits of Wi-Fi connectivity to common citizen and especially to attain the vision of cashless economy by promoting digital transactions among the business community and citizens.

✓ Mobile Governance for Arunachal Pradesh: Citizen centric services though mobile, Mobile apps available on Android, iOS, Windows and Nokia Asha, Channel-specific integration with MSDG for: PULL SMS, PUSH SMS, Mobile Applications. Citizen can register themselves by providing personal details including UID/Aadhaar ID. Registered citizen can avail the public services through mobile app with all possible alerts and notifications via internet or SMS. 12 citizen centric services of Health, Police, Disaster Management, Land Management, Labour & Employment, Agriculture, Social Welfare and Tourism Departments, Police, Health, Agriculture, Land Management, Disaster Management Department, Social Welfare, Labour and Employment, Tourism are integrated as of now.

The project was initiated after a detailed study of Government Departments and certain local communities, conducted by the Project Implementation team. The major issue identified was that rural population faced difficulties in availing government service; travel long distances, increased service cost, difficult terrain and inordinate delays. The study also identified that the state has a high mobile subscriber base. So to provide benefits of mobile enabled service delivery, this project was conceptualized and implemented.

In spite developing and deploying such an effective and robust mobile application for citizen service delivery, in all major mobile platforms, the project has failed to gain success. It has only had around 2112 installations despite its launch in September 2014 and recorded just 2686 transactions. Some of the reasons for the failure of the project are

- ➤ Non cooperation by the line departments: though the digital services were made available and employees of the Departments trained, the line departments failed to provide the service.
- ➤ Lack of awareness among the citizens: though the application was popularized through major news dailies and in the events like statehood day stalls, the awareness campaigns weren't enough.

- ➤ Incorrect prioritization of services: Selected list of services under m-Seva were not the high traffic citizen centric services and hence failed to draw citizens.
- ➤ Connectivity issues: Often a citizen is unable to avail services via the mSeva due to connectivity issue.
- ➤ Some services of the mSeva are SSDG (state services delivery gateway) services. Due to discontinuation of SSDG, these services became unavailable from mSeva platform too.

Learnings for the mSeva project can be summarised as inadequate planning, lack of interdepartmental collaboration, lack of stakeholder readiness, improper prioritization, lack of communication and awareness strategy.



Image: Mobile Governance portal



Image: Mobile Governance mobile app

✓ e-Cabinet: Arunachal Pradesh is believed to probably be the second State in the country where e-Cabinet system has been introduced. The information system better known as e-Cabinet is a powerful tool that the government can utilize to streamline its decision making process. This is an entirely paperless system which allows the esteemed council of Ministers prepare for cabinet meetings, conduct them and review minutes through internet. The system is a multi-user database, which helps keep relevant information organized and updated in real time, giving Ministers a clear overview of each item under discussion.

The eCabinet has improved the government process of conducting Cabinet session, Agenda items are organized and uploaded in the application which can be accessed by Ministers in the tablet or mobile device. They no longer have to carry heavy bulky files to the cabinet sessions. Manual distribution of meeting notice, minutes of meeting, extracts of minutes to various departments etc. has been eliminated. Session time has been drastically reduced as the agenda items having no objection are adopted without debate.

However, there has been some challenges in implementing the eCabinet project, the cabinet ministers and senior administrators had to be convinced, informed and trained to accept the new change. To facilitate the project, tablets were provided to legislatures and bureaucrats but many had issues using the device and still

preferred using physical copies of agenda and other documents. Network and power outage issues also hampered the smooth functioning of eCabinet sessions.

✓ **CM Helpline:** ICT is new in State and the State IT literate percentage is less approx. less than 40% of the total population. The CM helpline has been conceptualized to fill the gap of IT illiteracy found in the state and the helpline team will be filing the grievance online and operate the system on behalf of the citizens. It is also an attempt to improve the public delivery system

Through CM Helpline citizens can dial the toll free number 15520 and CM helpline team would lodge their grievance at online Centralized Public Grievance Redressal and Monitoring system (CPGRAMS) portal on their behalf, which would be submitted to concerned department or Government of Arunachal Pradesh for action taking. The system intimates the citizen via a text-SMS that their grievance has been registered and they will be notified once it is closed as well.

Even after wide promotion of the scheme, the CM Helpline is yet to gather momentum among the public. Also the grievances filled till date haven't been addressed by the respective Departments, despite nomination of of Public Grievance Officer (GPO) in each Department and District. Government should mandate a timeline for redressal of grievance through CM Helpline by all Departments and district administration.

The key learning from this project is, if the Government Department fail, delay or hesitate to use the system to respond to the request raised by citizen, citizen would lose trust in the system and would further discontinue its usage. Eventually the project would become defunct, wasting the effort and resources.

✓ Online Inner Line Permit: Automation of the end-to end process of application, and issuance of Online Inner Line Permit. Automated management of application, uploaded documents, photographs and fee payments and issuance of permit. It facilitates ILPs at one's own doorstep through web or mobile and also ILPs can be obtained from ILP kiosks available at bus / railway stations and check gates. It is integrated with a secure payment gateway. 25 gates bordering Arunachal Pradesh will be covered under the system. System also requires 20 district headquarters, 6 Deputy Resident Commissioner, 1 Resident Commissioner Office and 5 liaison officer's office to be connected to the system.

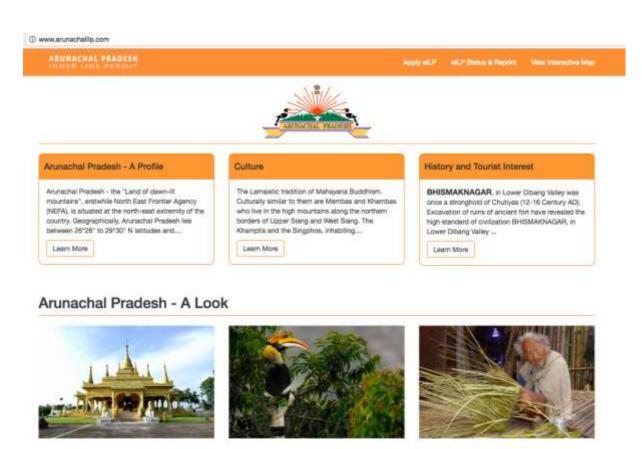


Fig : Screenshot of the website for Online ILP at http://www.arunachalilp.com/

One of the successful eGovernance projects of the state; not only citizens applying for Inner Line Permit but Government also has benefitted from the project. Complete process of issuance of Inner Line Permit has been made online, from information, application, online payment of fees and tracking of status to approving and receiving the permit online. The applicant need not visit the Office anymore, only has to track the status online from the convenience of his desk/mobile at home. Even Group ILP can be applied online in the system. With the integration of Digi locker, it has further facilitated the citizens to upload documents directly from Digi locker.

Further it has enabled the Government to verify the ILP applicant, their documents, approve or reject their application online and issue valid authenticated permits. The accounting system also has been streamlined and it has able to check revenue leakage, prevent corruption and speedy efficient delivery of service to citizens.

There have been many challenges with the implementation of the project, especially with regard to lack of connectivity and power issues in the districts and

the remote check gates. ILP issuing authority in districts still tend to issue paper ILP. Reluctance to use the Online ILP system by the Govt. employees is another major hurdle. Training all the ILP issuing Officers and the verifying officials also was a huge task.

Some learnings from the implementation of the project:

Cooperation and coordination between all stakeholder is very important for successful implementation of the project, from ILP issuing authority to ILP verifying officials at check Gates.

Since the whole process of issuing ILP, including the backend support has been computerized end-to-end, it is issuing 10,000 ILPs in a month. An ILP now is issued in minimum of 1 hour and maximum of 5 working days. The system has improved the efficiency of the government employees in delivering citizen service.

As the fee collected is paid online and linked to bank account, it has successfully prevented revenue leakage and curb corruption improving the accountability and transparency of the government officials.

✓ Service Plus: It is generic metadata based framework that can be used to configure and launch identified e Services quickly using flexible workflow and provision for dynamic design of application forms. This would be citizen centric e Delivery of Government services. Service Plus aims at providing support to the basic administrative unit i.e. "District Administration" to enable content development of G2C services and to deliver the services at doorstep. Easy and fastest mode of delivering citizen centric services and will bring more efficiency and transparency.

As the project is still in its initial phase, the outcome of the project is yet to be assessed. However, connectivity issues have hampered the progress of the Service Plus project.

Key learning from this project: to implement and roll out a state wide projects, the ground level conditions should be assessed to figure out the eReadiness of the districts in terms of infrastructure, skilled manpower and their availability.

✓ Online Entrance Exam Management System: Integrated web based of end to end management process of State's Entrance Exam for Diploma and Degree

categories. Information on the Examination, Syllabus, Scheme / Procedure of Examination, Schedules, Eligibility Criteria, Reservation Criteria, Exam centers etc. Management of all the activities of examination process i.e. registration, issuance of admit cards, payment management, declaration of results etc. Secure payment gateways have been linked to support varied payment options.

The project has been successfully running since 2014 and have benefitted thousands the students from across the state in various districts to apply for entrance exam of Degree and Diploma from the comfort of their own home. It has also made the government functioning easy and efficient.

Key Learning: Government should aspire to replicate such successful projects in other Departments like the Public Service Commission.

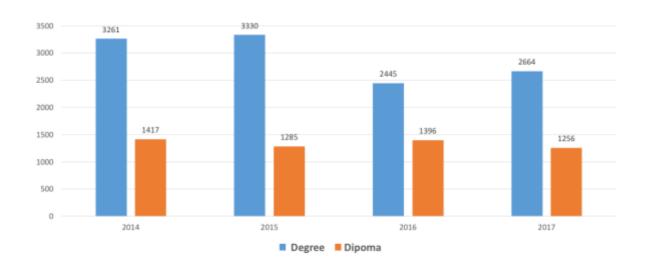


Image : Graphical representation of the registered candidate every year.

Below are few of the projects listed which are under progress and yet to be launched.

✓ **Human Resources Management System**: Arunachal Pradesh employee management portal. HRMS system would act as a tool to capture the personal, professional and educational data for all employees. Additionally, it would allow attendance, leave and pay/salary management features. The system would be designed to be flexible and scalable for any additional requirements that might arrive in the future.

- ✓ Employment Bank Portal: an interactive platform among three parties namely the "job-seekers", the "employers" and the "placement agencies". It enables online enrolment of job-seekers, employers and educational institutions. It can help the job-seekers to search for suitable employment as per their qualification. It also enables institutions to help deserving candidates apply for jobs suiting their skill sets and qualifications. It brings recruiters and job seekers on a common platform and helps the state in generating employment in an organized fashion.
- ✓ Centralized Information Management System for employees and pensioners of Audit & Pension Department: This project is envisaged to be implemented in the Directorate of Audit and Pension to meet the timely disbursements of Pension and related orders. Also, the scope is inclusive of creation of a central database of pensioners and employees to help the directorate estimate the exact budget requirement on a yearly basis. Few of the service levels efficiency estimated in this project are Pension Payment Order, Pensioners ID card, Gratuity Payment Order, File Tracking by Pensioners, Group Insurance, Reauthorization and Track Salary/ Pensions status internally.
- ✓ Web Based Biometric Teachers Attendance System: To improve the education delivery system in the state of Arunachal Pradesh by improving the attendance of teachers.

Below is a list of ICT projects which have been successful in terms of the implementation but have not gained success in terms of transactions and citizen service delivery, because of the lack of awareness created, delay in project timelines and eventually projects becoming obsolete.

✓ e-Samaj: To facilitate entry/registration of women and child beneficiary on availability of information to citizens, all stakeholders as well as policy makers. Registration of birth and death. Distribution of supplementary foods, classification of children by their personal records, status of immunization, nutrition and health education at block level ICDS Project office

- ✓ **Online Trade and Commerce Information System:** Traders can directly apply for trading licenses online. Operators can retrieve the online submitted forms by the trader's token number. The status o the trading license can be tracked and traced online. Generation of trading licenseGeneration of trading license.
- ✓ Computerization of Social Justice for Empowerment and Tribal affairs (SJETA) Department, Government of Arunachal Pradesh: To disseminate easy and speedy access of Social Justice & Empowerment services to all the stakeholders
- ✓ **Decision Support System for Economics & Statistics Department:** Census data for the State is made available in the portal with interactive map to the block level.
- ✓ **Software for small savings Department:** Online portal for the public for information and forms for all sort small savings.

Conclusion

The concept of e-governance and ICT technology is evolving in Arunachal Pradesh and it is very much required for transparency and accountability on the part of government and at the same time it is required to increase the participation of people in policy making by empowering them with the right information at right time.

The Government should focus on strengthening the network connectivity as connectivity is the backbone of all IT initiatives. Most of the IT projects are lying defunct for the want of connectivity. Government should also focus on strengthening the IT infrastructure and resolving the electricity issues of the state which support these initiatives. Replication of best practices and successful projects of different departments or of other state would save lot of time and effort. Government should also aim to deliver eServices to citizens through multiple channels like web portal, mobile app, standalone application etc. A government application can be really effective if the users can access it using different devices, emphasis on delivery of eService through mobile.

Capacity building is another important aspect for success of eGovernance and Government must draw out appropriate change management strategy with much importance to capacity building for skilling the govt. employees with required skills. Government must give clear instructions and mandate to all departments on the use of IT projects and have timely review with all departments to check on the progress of each project.

State IT policy needs to be adopted to have conducive environment for the growth of IT projects in the state. Department of IT & Communication though already mandated is yet to be recognized as nodal department for IT & Communication. Department of IT & Communication, has been instrumental in the conceptualization, design and development of many ICT based application for the state government as well as in the capacity building of the government manpower and in procurement of IT infrastructure for a successful e-governance implementation. It seeks to bring about ICT-enabled all-round Development and Inclusive growth of the State

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