

**Best Practices -
Education, Agriculture & Rural
development and Water and
Sanitation**

A large yellow triangle is positioned in the bottom right corner of the slide, pointing towards the top right. It is partially cut off by the right edge of the slide.

Education

Problem 1: The local schools for special children and regular students were at risk of shutdown due to lack of funds to maintain the schools

Problem 2: Last mile access to schools and educational facilities was a hindrance for the local communities and government departments in the backward districts of Maharashtra.

Solution: 1. Enhancing the quality of education through smart classes and providing educational infrastructure such as libraries.

2. The Collaborators for Transforming Education initiative is an endeavour to mobilise a consortium of key donors and implementing NGOs in PPP mode who work with Government education machinery and local community, to transform last mile delivery of education in backward districts

Education

- Problem:3. Engineering students were finding it difficult to get jobs due to lack of relevant skillsets.
- Problem 4:Lack of schools and schooling material such as shoes and books impact the enrolment rate of girl students and their ability to complete their schooling.

Solution:3. Tata Technologies has created a scalable and replicable model for reducing the industry-education gap and increasing the employability of engineers in Tier 2 and Tier 3 cities of India. They use a a short-term upskilling certification process.

Solution 4. Regular contact between the girls and tutors ensures that any challenges faced by the girls in regularly attending school can be proactively addressed. The project engages with school teachers, community leaders, parents, panchayats and village elders to sensitise them on the importance of girl's education

Education

- Problem 5: larger issue of cultural indifference towards educating the girl child at the community level, most among rural communities and urban slums
- Problem 6: India has one of the highest fatalities from road accidents in the world, with victims primarily in the age group of 18-35 years

Solution 5: Regular contact between the girls and tutors ensures that any challenges faced by the girls in regularly attending school can be proactively addressed. The project engages with school teachers, community leaders, parents, panchayats and village elders to sensitise them on the importance of girl's education.

Solution 6: The road safety programme was initiated to save lives through Highway Assistance Booths and effective policing, building a future of safe and responsible riders through traffic parks, mass awareness on road safety and outreach campaigns

Education

Problem 7: Girls in the Muslim community had very limited access to education

Problem 8: The local girl schools of Angul district in Odisha did not have sufficient access to scholarships for its students to pursue education, nor did it have sanitation infrastructure for their students.

Solution 7: The project strives to adopt the Government school and improve the infrastructure of school, the sanitation, the kitchen and drinking water facilities. The company is also running a school for drop outs in order to mainstream them.

Solution 8: The company initiated sponsoring of education beyond the high school level. It provides financial support to girl students from BPL families from periphery villages of S&P Complex Angul and quality education to the students of peripheral areas in Nalco Saraswati Vidya Mandir School at Angul

Education

Problem 9: There was a lack of educational facilities for youth and elderly alike in a few districts of Assam

Problem 10: The early childhood education project is strengthening the Anganwadi centres and showing positive learning outcomes which were perceived as significant by the parents of the children and other stakeholders.

Solution 9: The Dikhya buses, specially designed like a classroom and loaded with laptops, whiteboards, fans, and a library, travel from school to school, and has impacted a total of 26,500 students. 300 K-Yan and K Class (all in one educational devices) with a high-end computer, advanced projection system loaded with subject-specific modules in 3 languages, in-built interactivity with image processing technology, DVD player and inbuilt audio system, were provided to schools

Solution 10: focusses on creating opportunities for quality education, and reaches out to local communities in Shirwal and Satara, around its factory locations. Its Early Childhood Education (ECE) and needs of children with learning disabilities was developed holistically with a contextualised curriculum, recurrent training, monitoring, and use of audio visuals in the training.

Agriculture & Rural Development

- Problem 1: The fishermen community near the Mundra port lacked facilities such as education, alternative livelihoods, and clean drinking water.
- Problem 2: Water harvesting structures were found to be inadequate in the areas of Gondia district in Maharashtra, which was hampering the growth of paddy and other water intensive crops.
- Solution 1: The activities under the initiative among others include plantation of mangroves in 500 acres, provision of drinking water for more than 4230 fishermen residents, and training for improved livelihoods.
- Solution 2: By dovetailing Government schemes of Jalyukt Shivar Abhiyan, the villagers' traditional wisdom was utilized for selection of sites of ponds with continuous engagement with communities. The activities under this initiative include:
 - Creating water literacy and motivating villagers to conserve water
 - Activating and training village development committees to effectively manage water resources.
 - Creating awareness amongst farmers for judicious use of water in irrigation

Agriculture & Rural Development

- Problem 3: Veterinary care in remote rural areas is saddled with challenges such as unavailability of qualified vet professionals, access to quality medicines, timely care and advisory support, lack of awareness, erratic infrastructure and transportation, and lack of farmer awareness.
- Problem 4: Widespread ignorance on proper techniques to diagnose diseases and taking care of livestock and cattle prompted Fullerton to undertake CSR efforts to address this issue.
- Solution 3: The need-based program has been implemented in collaboration with the state government. 'Sanjeevani' makes use of IT and Telecommunication – call centres, linking the Government Veterinary Services to the farmers.
- Solution 4: 'Pashu Vikas Day' for educating and creating awareness about cattle development, which is part of the daily life of an average villager. It has twin objectives: to make people aware about health of cattle, as well as to provide healthcare services.

Agriculture & Rural Development

- Problem 5: Villagers in the remote area of Korba district in Chhattisgarh were struggling to make ends meet due to low agricultural income
- Problem 6: The rural areas of Bhopal and Damoh districts in Madhya Pradesh were struggling either with scanty rainfall or waterlogging which was adversely affecting the farmers as the area is mostly dependent on rain-fed irrigation.
- Solution 5: The Holistic Rural Development Programme '*Parivartan*' increased irrigated area and thus, production of agriculture crops. This became possible due to water availability and multi-cropping as well as multiple income generating activities.
- Solution 6: The rural areas of Bhopal and Damoh districts in Madhya Pradesh were struggling either with scanty rainfall or waterlogging which was adversely affecting the farmers as the area is mostly dependent on rain-fed irrigation.

Agriculture & Rural Development

- Problem 7: The farmers in Vikarabad district lacked resources and capacities to employ better agricultural practices.
- Problem 8: Poor agricultural practices and persistent pest attacks crippled the local farmers of Jhanor (Bharuch) in Gujarat.
- Solution 7: The major aspects of the project are fodder cultivation, integrated livestock development with a focus on artificial insemination of hybrid livestock, shade net development which produces high yielding seeds for rural cultivation, and the organisation of a Farmers Collective
- Solution 8: NTPC has focussed on enhancing the productivity of farmers by systematically training them in crop diversification and pest control through its 'Enhancing agricultural incomes by improving productivity' initiative

Agriculture & Rural Development

- Problem 9: Tribal farmers of Dhule district were suffering from lack of income despite relative abundance of agricultural resources
- Problem 10: The problem of insufficient agricultural returns in the tribal district of Rayagada (Odisha) was affecting farmer incomes and forcing them to take other livelihood options
- Solution 9: To alleviate this, a capacity building program in bee-keeping was conducted by RBL Bank under its 'Improving Tribal Livelihoods through Bee-keeping' project. The project provides support to the bee-keepers for the management of bee-keeping and promote agricultural cultivation including honey and honey wax
- Solution 10: Farmers have benefitted from the inputs, support, and enhanced irrigation facilities. Vegetable farming, mostly organic in nature, is done. A farmers club has been formed to encourage collective decision making. The project has forged both backward and forward linkages and is taking institutionalized shape.

Water & Sanitation

- Problem 1: The lack of sufficient clean drinking water in the rural and tribal-dominated areas of Palghar in Maharashtra, deeply impacts the quality of lives of the local residents
- Problem 2: Lack of toilets and related sanitation infrastructure in the slum communities under Kolhapur Municipal Corporation led to poor health outcomes and rampant open defecation.
- Solution 1: The innovative Scitech Jaldoot auto rickshaw has a membrane-based water filtration plant installed in it. The water is stored in stainless steel tanks with a capacity of 500 litres, and delivered at the doorstep after purification
- Solution 2: HDFC financed the implementation of the Individual Household Latrines (IHHL) scheme to construct toilets in urban slum communities. The project focussed on two activities – increasing access to improved sanitation facilities by constructing household toilets, and using effective IEC tools to drive behavioural change among the beneficiary communities.

Water & Sanitation

- Problem 3: The villagers of East Singhbhum district did not have access to a regular water supply and had to travel many kilometres through dense forests to get water for their needs.
- Problem 4: Lack of sanitation infrastructure led to poor health outcomes in the local communities
- Solution 3: The project focuses on Jal Minar – a water structure – to improve access to drinking water and improve the design of toilets. While the work of the company in setting up the project is commendable and very close to national priorities, the maintenance of existing water structures is the responsibility of local people. Water users collect some minimal funds to maintain the structures
- Solution 4: ITC's Sanitation programme promotes low cost toilets on a cost-sharing basis, coupled with awareness activities to drive behaviour change. The company has implemented Mission Sunehra Kal to promote areas such as waste reduction and sustainable waste management, and encourage maintenance of a healthy and hygienic living environment. There is a strong focus on IEC and putting in place systems for community managed operations and maintenance for infrastructure provided.

Water & Sanitation

- Problem 5: A large part of Talcher city and hundreds of villages around it were struggling with scarcity of drinking water.
- Problem 6: Lack of toilets in government schools have hindered the participation of girl students.
- Solution 5 : Their efforts to provide safe drinking water include submersible water supply through tankers in 270 peripheral villages and municipal wards, piped water supply in 56 villages and 35 peripheral villages of Talcher, water supply scheme for Brajrajnagar and a water supply and treatment plant at Burla.
- Solution 6: M&M successfully built 4597 toilets spreadver these locations which are used by over 2.94 lakh students and teachers every day. They also organised 70 toilet maintenance and training programmes per year comprising of 81 hygiene awareness programmes, 23 special programmes in the areas of personal health and sanitation, 23 selective programmes for teachers, students, and parents towards the clean school initiative, 23 special programmes for adolescent girls towards MHM, and 20 special trainings for differently able children.

Water & Sanitation

- Problem 7: The areas surrounding busy shopping districts in New Delhi-NCR, suffered from a lack of public toilets for the local community members and visitors
- Problem 8: The lack of toilets in the predominantly rural areas of Kotapadu and Vishakapatnam districts in Andhra Pradesh was hampering the dignity and daily lives of the local school going girls
- Solution 7: construction of 4 public toilets -The locations are also chosen carefully – near autorickshaw/taxi stands and close to the market. Mitsubishi has dedicated an annual budget for maintenance of these toilets for next three years
- Solution 8: TCS built dedicated toilets for girl students in the schools allocated across the selected states. They adopted innovative measures such as use of FRP and steel to ensure regular cleaning and sustainability, extensive use of informative material in the form of badges, posters, and competitions to inculcate behaviour change.

**Best Practices -
Healthcare, Differently-abled
and Environment sustainability**

A large yellow triangle is positioned in the bottom right corner of the slide, pointing towards the top right. It is partially cut off by the right edge of the slide.

Healthcare

- **Problem:** In India, most deaths caused by diseases such as Malaria, Dengue, and Japanese Encephalitis, occur in remote areas due to delays in detection and the lack of access to good treatment.

Solution: Mobile Medical Units (MMU), are able to tackle these challenges and provide quality healthcare in remote regions. The key objective of the MMU is to reach populations in remote tribal and inaccessible areas with a set of preventive, promotive, and curative services, which are free at the point of care. The Foundations can sign MOUs with other organisations for resource pooling, to scale the MMU operations to other districts where medical facilities are scarce.

Healthcare

- Problem: The backward areas have a very high number of infant and maternal mortalities.

Solution: With the aim to reduce maternal and infant death rates in backward districts of India, company can take up the project that employs ASHAs and Sahiyas (government health extension workers) and build their capacity. When the project phases out, these workers will continue to work with their improved capacities and newly developed work culture. No additional financial burden will be realized by the government, and it has potential for scaling up. The project addresses a very important aspect of human development which is also a national policy priority. It provides a relevant model to be adopted by the Government and other stakeholders.

Differently-abled

- Problem: Differently abled persons seldom find productive jobs, as not many companies are willing to hire them. Therefore, it is imperative that they be suitably trained and groomed to take advantage of employment opportunities.

Solution: With the aim to sensitise employers to hire persons with disability (PwDs), by highlighting not only the ethical and moral grounds, but also how it is a sound business practice. The project was conceptualised with an objective to impart vocational training to 8,000 PwDs across 18 training centers. The objective was to enable persons with speech, hearing and loco-motor disabilities to find better livelihood opportunities, along with providing job placement to at least 60% of trained PwDs. The trainees, upon completion of the training, were certified by Retailers Association's Skill Council of India (RASCI).

Differently-abled

- Problem: The visually impaired girl students of Brajkishore Netraheen Balika Vidyalaya were in dire need of funds for their skills training and for the infrastructure requirements of their institution.

Solution: The project activities included construction of infrastructure such as study halls within the school and fully sponsored education of 40 girl students. The skills training includes imparting computer training to girls and enabling them to find employment opportunities in the IT sector. These girls are now earning some money by working in call centres.

Differently-abled

- Problem: Differently abled persons are unable to find employment because of a lack of employable skills.

Solution: Skill development training in skills like welding, carpentry, plumbing and painting for PWDs identified by National Handicapped Finance and Development Corporation are useful.

Differently-abled

- **Problem:** There is strong need to train persons with disabilities (PwDs) to enhance their employability and workforce integration, and to enable inclusion. For differently abled people, access to prosthetic limbs can be very expensive too, leading to lack of participation in the labour work force. Lack of appropriate skills for the workplace also hampers their participation.

Solution: Creation of the 'Empowered Centre for Divyangs' dedicated to provide prosthetic and orthotic devices to Divyangs annually. The company can hold artificial-limb fitment camps for which the beneficiaries/stakeholders are identified through the government. Artificial Limb Fitment (AIF) free of cost and life-long registration with partner organisations for consultation and equipment at no charge. There is strong need to train persons with disabilities (PwDs) to enhance their employability and workforce integration, and to enable inclusion.

Various interventions are undertaken such as providing accessible and assistive technologies, imparting skills through on-job training, creating inclusive workplace and ergonomics, and imparting life skills to the persons with disability. The dedicated facilities such as Braille books, audio visual clips, and trained professionals, are very helpful to train different types of PwDs. Developing simple training tools and manuals can be used to design the training programmes.

Environmental 1 Sustainability

- Problem: Declining tree cover

Solution: The push towards a greener world is through large-scale tree plantation and environmental awareness, drives with a focus on young school children, public orchards providing free access to fruits to communities, installation of solar-powered streetlights and LED lights for rural households. Aim to create an army of green corps in neighbouring schools.

- Problem: Long distance travel to get Drinking water

Solution: The 'Solar Photovoltaic-Based Drinking Water System' helps to reduce the consumption of conventional energy, and hence ensures environmental sustainability.

Environmental Sustainability

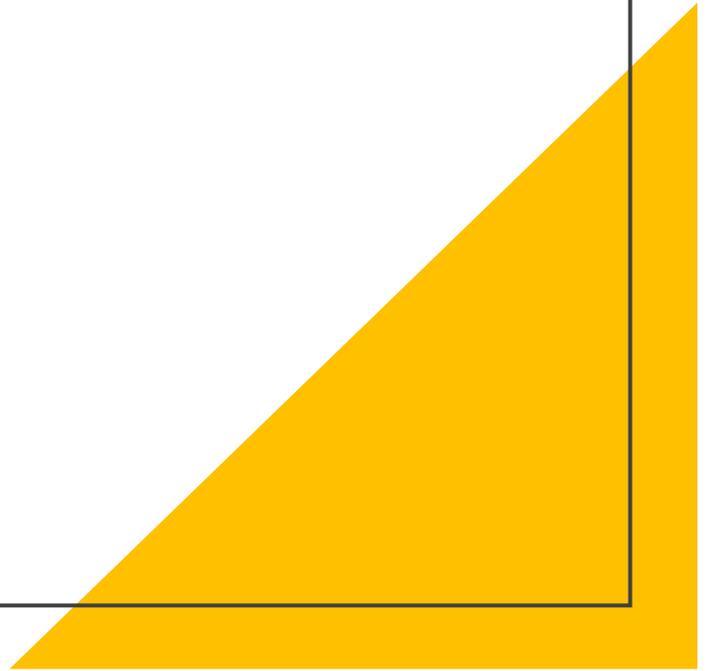
- Problem: Lack of access to reliable illumination at night or access to electricity.

Solution: Integrated Domestic Energy Systems (IDES) to 25000, households of Bihar, which gave people access to home lighting, cooking and basic charging infrastructure at the household level

- Problem: Difficulty to access electricity in difficult areas

Solution: A Village Level Committee collects minimal contributions from beneficiaries through Village Level Entrepreneurs (VLE) and deposits it in a joint bank account. This money is used to pay for the services of the VLEs and procurement of small items required for replacement. Now night-time markets are being organized weekly giving rise to business and services.

**Best Practices vis-à-vis Public
Distribution System, Financial
Education, and Infrastructure
Development.**



Arun ePDS initiative
to improve delivery
through process re-
engineering and use
of Information and
Communication
Technologies (ICTs)

Problem:

- Pilferage at every node of supply
- Wastage of food
- Issue of Inaccessibility

Arun ePDS initiative
to improve delivery
through process re-
engineering and use
of Information and
Communication
Technologies (ICTs)

Objectives of ePDS:

- Arrest issuance of bogus ration cards
- To create a mechanism to achieve accuracy in projecting requirements
- centralised reporting and monitoring

Key Stakeholders

**Beneficiaries availing PDS ration from
Fair Price Shops**

Department of Food and Civil Supplies (DFCS)

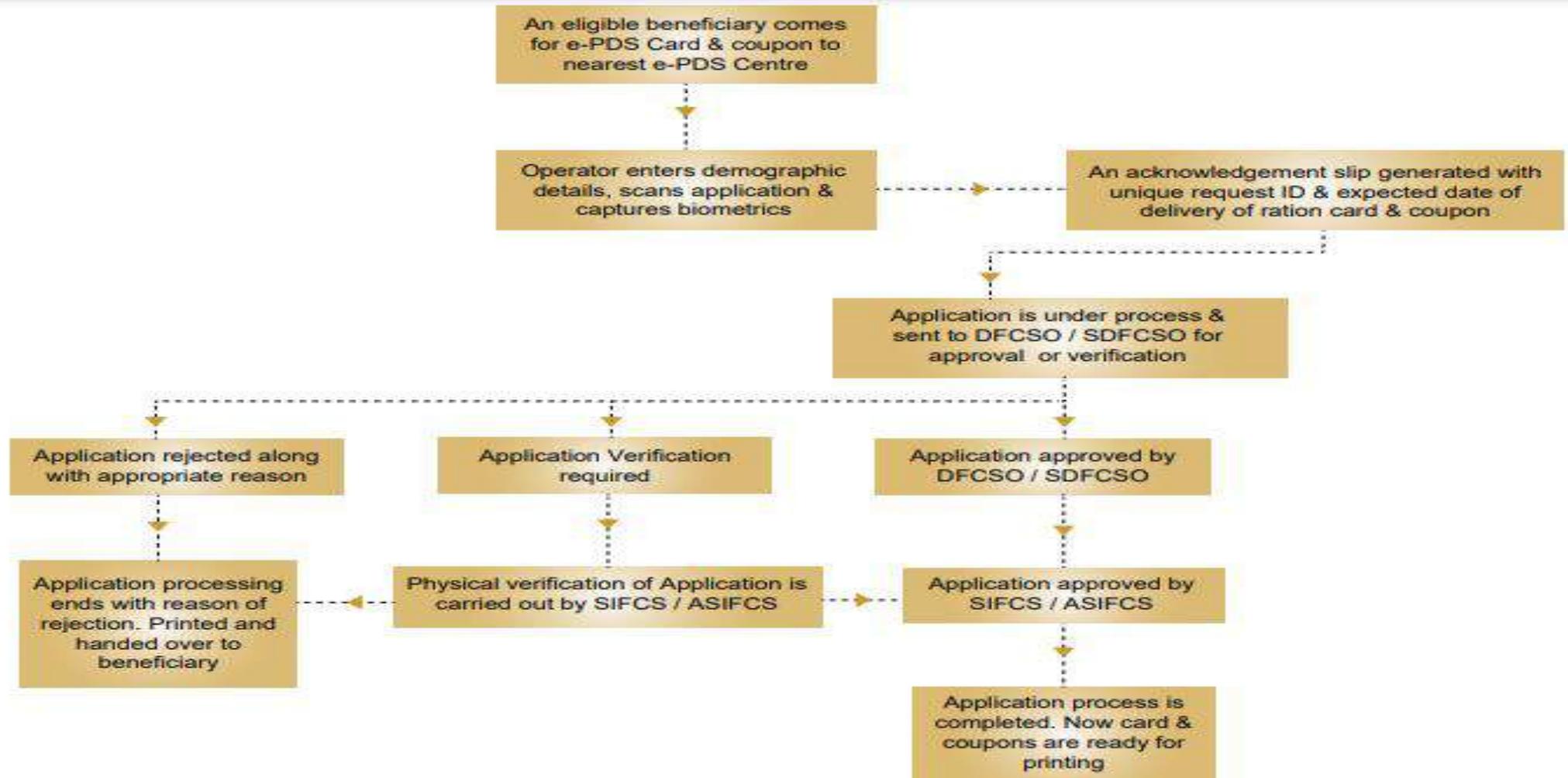
Indian Institute of Management, Ahmedabad

Beacon Analytics

National Informatics Centre

Department of Information and Technology

Process flow of Arun ePDS



Resources Utilized

The existing resources of the department were used and no additional personnel were hired specifically for this project. The hardware was bought from the existing budget of the department. The training for the staff utilised the funds made available for Arun ePDS. Community participation was leveraged to aid identification of eligible families under different ration schemes. A total of Rs. 200 crore was sanctioned to the Department by the state for rolling out ePDS in 2010-11.

Stakeholder Engagement

The Tirap pilot involved intensive engagement with the community. The process started by the department officials contacting the Gram Panchayats, Gaon Muras or village elders as well as the beneficiaries at the village level. They explained to the village elders and the beneficiaries about discrepancies wherein the beneficiaries were not getting the allotted quota of 35 kg because of bogus ration cards and non-eligible candidates. As a result of the public meetings, the Panchayat members and village elders were convinced about the merits of the new digitised ration cards and took upon themselves to convince the community. These interactions showed results as beneficiaries agreed to surrender their old ration cards in favour of the new digitised ones. The Gaon Muras, representatives of women self-help groups and representatives from the department, formed a vigilance committee which was empowered to classify families under different schemes through which ration was to be given to them. The creation of this committee also helped in generating awareness and worked as in-built mechanism to weed out ineligible ration card seekers.

Grievance Redressal

Grievance redressal is an integral part of the system and the toll free number 1967 has been provided to people to list out their grievances and register complaints. As the entire process is digitized, actions taken to address grievances could be tracked. This has deterred malpractices and enforced efficiency by enabling swift action to be taken on complaints and discrepancies.

Impact

- Efficiency and elimination of errors
- Facilitation of tracking through stages
- Rapid grievance redressal, transparency and accountability

Replicability and Sustainability

- This system ranks high on sustainability as it does not require heavy additional resources. With small additional inputs, the system can be put in place in any state that wants to streamline its PDS. The entire financial cost for the Tirap Pilot was only Rs 7 lakh. Further, this cost is primarily a one-time cost at the time of digitization and the maintenance cost is not high. Many states in the NorthEast have shown an interest in studying this initiative after the Supreme Court issued a directive to digitise the PDS.

Arun ePDS initiative to improve delivery through process re- engineering and use of Information and Communication Technologies (ICTs)

Problem:

The pilferage of PDS commodities, including pilferage at every node of supply chain; wastage of food grain and the issue of inaccessibility of foodgrains for many people in the country and the problems of bogus ration cards.

Solution:

1. One solution recommended by the Supreme Court was the computerization of the Public Distribution System and four States and Union Territories, namely Chhattisgarh, Gujarat, Assam and Chandigarh were chosen for piloting e-PDS initiatives, all with varied degrees of success.
2. The prime objective of the initiative is to improve the PDS in Arunachal Pradesh; arrest issuance of bogus ration cards; and to create a mechanism to achieve accuracy in projecting requirements. Arun ePDS aims to facilitate citizen-centric functioning and rapid grievance redressal, have centralised reporting and monitoring, create efficient allocation of commodities, and track supply chain from FCI godowns to FPS.

Arun ePDS initiative
to improve delivery
through process re-
engineering and use
of Information and
Communication
Technologies (ICTs)

Key Stakeholders:

- Beneficiaries availing PDS ration from Fair Price Shops
- Department of Food and Civil Supplies (DFCS)
- Indian Institute of Management, Ahmedabad
- Beacon Analytics
- National Informatics Centre
- Department of Information and Technology

Arun ePDS initiative to improve delivery through process re-engineering and use of Information and Communication Technologies (ICTs)

Implementation Strategy

In 2008, the effort to formulate a plan for streamlining PDS was undertaken by the District Commissioner, Tirap, and DFCS. Institutions like the Indian Institute of Management-Ahmedabad, Indian Institute of Technology-Delhi, and Beacon Analytics were involved in the process.

IIM Ahmedabad in 2008. Based on the findings and suggestions of this study, Beacon Analytics created new processes and software under the guidance of DFCS. The initiative was formally launched in Tirap District by the Arunachal Assembly Speaker on 31st May 2010. The cost of the Tirap ePDS pilot was Rs 7 lakh under the financial head of border area development funding. Key aspects like ration card management, supply chain management, and FPS automation were implemented during this pilot.

Arun ePDS initiative to improve delivery through process re-engineering and use of Information and Communication Technologies (ICTs)

Implementation Strategy

In 2008, the effort to formulate a plan for streamlining PDS was undertaken by the District Commissioner, Tirap, and DFCS. Institutions like the Indian Institute of Management-Ahmedabad, Indian Institute of Technology-Delhi, and Beacon Analytics were involved in the process.

IIM Ahmedabad in 2008. Based on the findings and suggestions of this study, Beacon Analytics created new processes and software under the guidance of DFCS. The initiative was formally launched in Tirap District by the Arunachal Assembly Speaker on 31st May 2010. The cost of the Tirap ePDS pilot was Rs 7 lakh under the financial head of border area development funding. Key aspects like ration card management, supply chain management, and FPS automation were implemented during this pilot.

Financial Education

Problems-

1. network of financial institutions in Jharkhand is weak with only 1,500 bank branches across the state, which are mostly concentrated in urban areas
2. Residents of rural and far flung areas face several difficulties in carrying out financial transactions.
3. The problem becomes particularly acute when it comes to the disbursement of government benefits such as pensions, scholarships and MGNREGA wage payments
4. The difficulties include the need to travel long distances, entailing monetary expenditures and loss of time. Sometimes multiple visits are required for the same transaction

Objectives

The primary objective of this initiative was to provide banking and financial services at the Panchayat level. The idea was also to provide access to government schemes such as pensions and MGNREGA payments, which bring numerous benefits to people.

Financial Education

Solution-

1. To further improve access and bring banking facilities closer to the village level, in 2010 the Government of Jharkhand decided to introduce financial services as part of the existing system of Common Service Centres , known as Pragya Kendras in Jharkhand

Pragya Kendras

The Pragya Kendra is a Gram Panchayat level centre, which is housed in the Panchayat office. These centres are spread extensively across Jharkhand, covering more than half of the total 4,562 Panchayats in the state.

Citizens can visit the kendras to avail of e-Governance services such as applying for a birth certificate, death certificate, caste certificate etc. Locally residing Village Level Entrepreneurs (VLEs) build and operate these centres in return for a commission on each service provided. The objective was to make the Pragya Kendras into Panchayat Banks as well and bring financial services to the Panchayat level. The Kendras were selected for reasons of financial sustainability.

Financial Education

Implementation Strategy

The first step in implementation was to bring banks on board. This was done through regular engagements between the government and banks through the State Level Bankers Committee. Banks supported the initiative as the Aadhaar-based payments were already receiving a strong thrust from the Government of India, and this presented an additional opportunity for expansion. The first partner banks were the State Bank of India (SBI) and Bank of India (BoI).

Figure 1: Key stakeholders

Jharkhand Agency for Promotion of IT

- ◆ Nodal authority - Provides financial assistance, coordinates with all stakeholder and ensures proper implementation through district and local level support and monitoring and evaluation

Banks

- ◆ Main funding agency - Works with SCAs for expanding financial network.

Service Centre Agencies

- ◆ Business Correspondents - Select and train VLEs.
- ◆ Coordinate with banks and provide funds to VLEs.

Village Level Entrepreneurs

- ◆ Main field level implementing agency - Establishes and operates the Panchayat Bank and creates awareness.

a. Process Flow

Figure 3: Setting up a Panchayat Bank



Impact

- Improved access to financial services: The initiative has significantly improved access to financial services in the rural areas. Prior to the introduction of Panchayat Banks, rural citizens had to travel long distances for conducting financial transactions, often spending up to Rs 100 per day. The expenditure is significantly higher if factors like loss of daily wages, the travel cost of an accompanying aide and the cost of multiple trips are also included.
- Reduction in corruption and leakages
- Increase in savings
- Increased efficiency of banks
- Livelihood generation

Infrastructure Development

Problems- Mysore city faced severe problems of road congestion and associated issues of commuters, which include delays in the arrival of buses at bus stops, lack of information about different bus routes and stops, time, frequency etc. Considering the wide range of problems related to mismanagement of traffic, high pollution levels and the high growth rate in traffic density

Objectives

- The Mysore ITS was conceptualised with the objective of managing the entire public transport system in the city to make it safe, more efficient and environment friendly
- Introducing real time data and facilitating commuters with accurate information on bus schedules, estimated timings of arrival and departure, announcing bus stops (by their names) and fare details at bus stops, bus terminals and inside the buses using SMS, internet and an interactive voice response system (IVRS)

Figure 1: Key stakeholders

Sustainable Urban Transport Project (SUTP)

- ❖ Initiated under the scope of National Urban Transport Policy to foster a long-term partnership between Government of India and State/local governments in the implementation of a greener environment.

Karnataka State Road Transport Corporation (KSRTC)

- ❖ Implemented the Intelligent Transport System in Mysore to address the need for efficient urban transport management.

Ministry of Urban Development (MoUD)

- ❖ Involved in formulating policies, monitoring and coordinating activities and programmes of various State government, central ministries and other concerned authorities related to urban development issues.

Global Environment Facility (GEF)

- ❖ Provides grants to developing countries and countries with economies in transition for projects related to global environmental issues.

The World Bank

- ❖ Helps institutions to find suitable solutions to the development challenges and supports the SUTP

Global Environment Facility (GEF)

- ❖ Provides grants to developing countries and countries with economies in transition for projects related to global environmental issues.

The World Bank

- ❖ Helps institutions to find suitable solutions to the development challenges and supports the SUTP programme.

United Nations Development Programme

- ❖ Provides grant support to developing countries for such projects to carry out project activities effectively.

Ministry of Environment and Forests

- ❖ Nodal agency in the administrative structure of the Central government for the planning, promotion, co-ordination and overseeing the implementation of India's environmental and forestry policies and programmes.

Figure 2: Implementation strategy

Online tracking of KSRTC buses using GIS maps by officials

Online tracking of KSRTC buses by the commuters

Provision of commuter portal for the commuters

Bus announcements and text display in both English and regional language

Expected time of arrival of buses

SMS and IVRS facility for tracking the bus by commuter

Two way communication between driver and central control station

Infrastructure Development

Impact

Greater safety, convenience and commuter satisfaction: The introduction of ITS in Mysore has resulted in several benefits to people, such as safer travel, lesser traffic congestion and delays leading to greater commuter satisfaction.

Positive environmental impact: As the initiative does not demand any widening of roads, construction work, or cutting of trees, it has not inconvenienced residents of the city, and not had an adverse impact on the environment in terms of air/water/noise pollution or vegetation or land degradation. |

Replicability and Sustainability

By mobilising community support and demonstrating the sustainability of its approach, KSRTC has been able to expand the ITS initiative and its services all over Mysore. KSRTC is also planning to introduce a similar system for another 2,000 buses within Karnataka state in a sustainable manner. Other road transport corporations that have shown an interest in replicating this initiative include the Andhra Pradesh State Road Transport Corporation and the Bangalore Metropolitan Transport Corporation

**Best Practices -
Child Protection, Education and
Environment**



Child Protection

Sampark: Reaching out through school student helpline in Odisha

Problem:

- Avenues of Redressal of complaints were limited with respect to increased cases of dropouts, cases of negligence and violation of rules or the non-availability of entitlements as per the mandate of the RTE Act
- Issues related to the needs of special and disadvantaged children, complaints of corporal punishment and incidents of sexual abuse of students needed redressal.

Solution: Against this background, a 12-hour student helpline, Sampark, was started by the Department of School and Mass Education in Odisha. The helpline service was initiated to provide relief to the students in distress through timely action. It allows any individual or students (between the classes of I and IX) to call up the toll free number 1800 345 6722 to seek information or voice concerns, views and ideas on school education. The project is innovative as it covers almost all issues ranging from sexual abuse to education and the management system. Importantly, the identity of the caller is kept confidential. This case study aims to highlight the working design and impact of the Sampark helpline in Odisha.

Child Protection

Sampark: Reaching out through school student helpline in Odisha

Key Stakeholders:

- Implementing: Agency: Grievance Redressal Cell of School and Mass Education Department, at Odisha Primary Education Programme Authority, Bhubaneswar
- Funding Agency: e School and Mass Education Department, Government of Odisha under the Sarva Shiksha Abhiyan (SSA)
- Beneficiaries: students going to school of age 6-16 years; (classes I – X) and who are in or out of school, parents, guardians, community members and teachers.

Impact: The Sampark student helpline is the only helpline in Odisha to help children in distress by counseling and by providing accurate information over telephone about their rights and entitlements. From 2010-2011, the helpline received a total of 5,054 calls whereas the number of calls in 2013 reached 13,037. This shows the popularity of the helpline as a redressal mechanism among students and parents

Education

Migration Card and Migration Monitoring Software: Tracking and educating migrant children in Gujarat

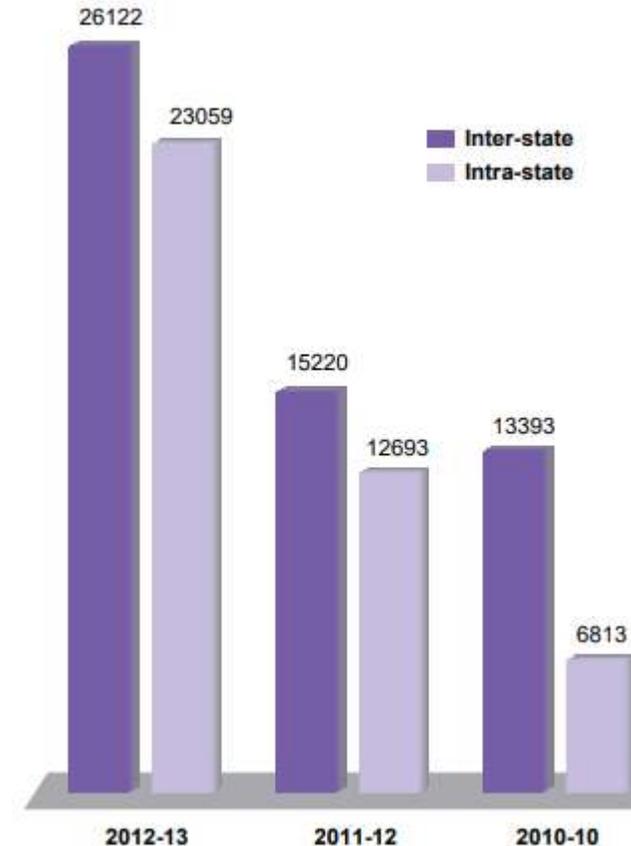
Problem: Migration for seasonal employment is one of the factors known to contribute to the dropout rate of children from schools. Migration due to seasonal employment is caused by many industries including brick kiln factories, construction industry, sugar factories, shipyards, agricultural labour and salt pan units. While the academic year is from June-April, migration for seasonal employment usually occurs in the months of September-November up to May-June. Therefore, children of parents who seek employment opportunities away from their domicile – within the same state or in others – are often uprooted in the middle of the academic year. They also face trouble rejoining schools and drop out of schools altogether

Solution: The Gujarat Government's Migration Card initiative helps track inter-state and intra-state migration of school-going children, and the Migration Monitoring Software, introduced in 2009, has enabled tracking and streamlining of implementation in real time. The Sarva Shiksha Abhiyan (SSA) in Gujarat has used this programme successfully to accommodate and educate migrant children in seasonal hostels and in Tent Special Training Programmes. The programme has helped increase retention under elementary education of children who migrate with parents looking for seasonal employment and reduce the drop-out rates of girls in primary education

Migration Card and Migration Monitoring Software: Tracking and educating migrant children in Gujarat

Impact: Educational rehabilitation and reduced dropout rates of migrant children: The Migration Card and Monitoring Software have helped improve time efficiency by reducing the duration of time in tracking migrant children since the progress can be tracked in real time and on a daily basis as opposed to monthly checks.

Figure 3: Coverage of (migrant children) under the migration card initiative in Gujarat
(no. of children)



Source: Sarva Shiksha Abhiyan, Gujarat, 2013

Education

Porta Cabins: Residential schools for children in LWE- affected areas of Chhattisgarh

Problem: The status of education in Dantewada district of Chhattisgarh was abysmal. In January 2011, the number of out-of-school children in the age group of 6-14 years in Dantewada district was 50.3%, and 20-30% schools were reported defunct.

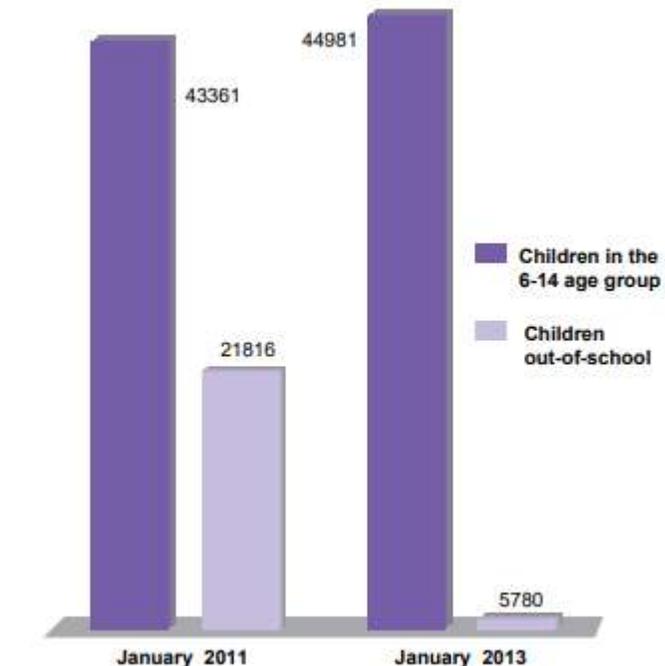
Solution: For the benefit of out of-school children, especially in Left Wing Extremism affected areas, Porta Cabins, or residential 500-seater campuses were installed in 2011.

To address the destruction of concrete structures, the administration decided to build schools made of prefabricated materials such as bamboo and ply so that schools cannot be used as hideouts or armed camps.

Porta Cabins: Residential schools for children in LWE-affected areas of Chhattisgarh

Impact: The initiative has helped reduce the number of out-of-school children and improve enrolment and retention of children since its introduction in 2011. The number of out-of-school children in the 6-14 years age group reduced from 21,816 to 5,780 as the number of Porta Cabins rose from 17 to 43 within a year of the initiative. These residential schools help ensure continuity of education from primary to middle-class levels in Left Wing Extremism affected villages of Dantewada district, by providing children and their families a safe zone where they can continue their education in an environment free of fear and instability.

Figure 3: Comparative estimate of out-of-school children of elementary school age in Dantewada district



Source: Dantewada District Administration, 2014 (Working paper)

Education

Pratibha Parv: Strengthening quality of education in government schools of Madhya Pradesh

Problem: The Pratibha Parv initiative in Madhya Pradesh evolved as a response to address key education issues and shortcomings in facilities provided in government schools.

The school education system suffers not only from a lack of infrastructural facilities but also from the shortage of well-trained and motivated teachers. Factors such as a high rate of teacher absenteeism, increased drop-out rates and under-staffed government schools adversely affect the quality of education.

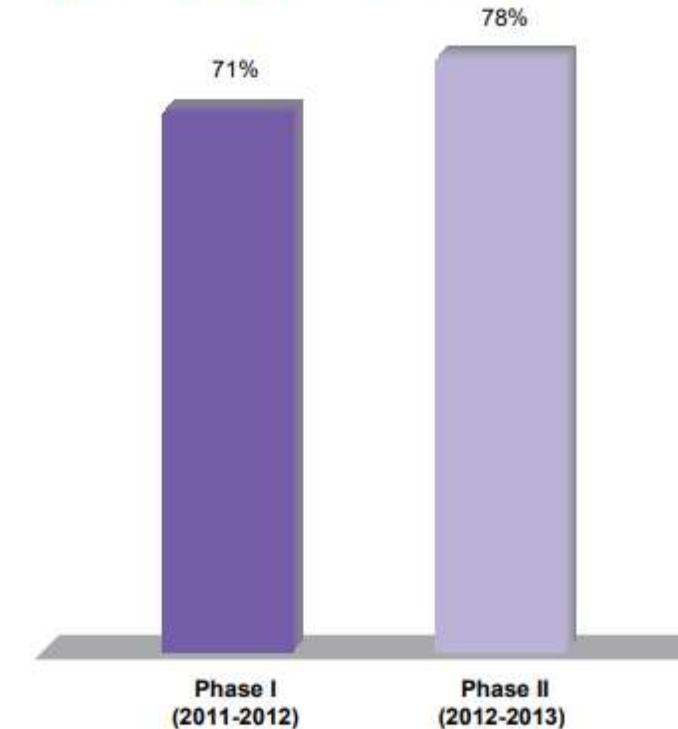
Solution: It was against this background in 2011 that the Government of Madhya Pradesh designed this initiative explicitly to address the needs of government-run schools and to ensure improvement in education quality in primary and upper primary schools. Pratibha Parv draws upon the 'Gunotsav model' of Gujarat, which also assesses the performance of students in a similar manner. It seeks to introduce a comprehensive assessment approach to improve the overall education system across all state-run schools in Madhya Pradesh.

Pratibha Parv: Strengthening quality of education in government schools of Madhya Pradesh

Impact:

- **Better quality of education and improved attendance:** Between Phase I in 2011-2012 and Phase II in 2012-2013, the initiative has improved the attendance of students at the primary level from 71% to 78% while at the middle level it has gone up from 79.1% to 84%
- **Identification of areas for improvement:** identification of weak students, finding out gaps in the teaching learning processes, improving the health of the students and reducing student and teacher absenteeism.
- **Wide coverage and recognition:** As of March 2014, the initiative has been able to cover approximately one crore students and 47,650 assessors, and monitored 1,12,788 schools

Figure 3: Students attendance in government primary schools in Madhya Pradesh



Source: Rajya Shiksha Kendra, Madhya Pradesh

Environment

Avadi Sewage Treatment Plant: Sustainable off-grid sewage treatment in Chennai

Problem: The lack of sewage treatment facilities was a major concern for residents of the police quarters in Avadi, a suburb of Chennai under the municipality of Thiruvallur district.

The problem with this arrangement was that the percolation of water from the septic tank to the subsoil was little, as the soil was largely clayey. This resulted in heavy stagnation of wastewater around the police quarter area, which became a source of foul odour and waterborne diseases, causing severe inconvenience to residents

Solution: The Tamil Nadu Police Housing Corporation (TNPHC) has successfully constructed an off-grid sewage treatment plant (STP) to improve living conditions in the police housing colony in Avadi, a suburb of Chennai. This sewage treatment plant has not only solved the problem of sewage disposal but also provided a pond of treated water for fishing, vegetable cultivation and recharging of groundwater. It treats 12 lakh litres of sewage every day with no negative discharge, produces manure, recharges groundwater, removes the source of foul odour and waterborne diseases, and beautifies the area

Avadi Sewage Treatment Plant: Sustainable off-grid sewage treatment in Chennai

Impact: Treatment of sewage, removal of odour and diseases: The immediate outcome of the STP in Avadi has been to treat 12 lakh litres of sewage every day with no negative discharge, produce manure, recharge groundwater, remove the source of foul odour and waterborne diseases, and beautify the area. Production of economically valuable items: The water produced by the STP is being used for cultivation of bananas, coconuts and vegetables; fish like katla, kapis and logu; and beema bamboo, which is used in the production of furnace oil, paper, cloth, ornamental items and mats. This fast growing, thorn-free plant generates high levels of oxygen and also acts as a green boundary wall. The 1,000 beema saplings brought from Hosur, Bengaluru, will be ready for harvesting in five years. The products cultivated at the site are used in police canteens and are made available to the colony's residents at subsidised rates.



Environment

Dhara Vikas: Creating water security through spring-shed development in Sikkim

Problem: The adverse impact of climate change on rainfall threatens the delicate, holistic balance that once stimulated the Himalayan ecosystem. The problem of water scarcity was more pronounced in South Sikkim and West Sikkim districts, which fall in rain-shadow areas and receive much less rainfall than other districts.

Solution: Recognising the urgent need for ensuring water security, the Rural Management and Development Department (RMDD), Government of Sikkim (GoS), conceptualised the Dhara Vikas initiative to revive the state's dying lakes, springs and streams. Estimates suggest that in mountainous terrain less than 15% rainwater percolates down to recharge springs, while the rest is lost as surface water. The core thrust of Dhara Vikas is to catch this runoff water and use it to recharge groundwater sources.

Dhara Vikas: Creating water security through spring-shed development in Sikkim

Impact:

- **Recharging lakes, reviving springs, reforestation:** Dhara Vikas has created a significant impact by recharging lakes and reviving several springs in Sikkim. As many as 50 springs have been revived, most of them in Kaluk, Rhenock, Ravangla, Sumbuk, Jorethang and Namthang. Further, five lakes, namely Dolling, Deythang, Nagi, Karthok and Datum, were revived by the initiative. It has also led to reforestation of seven hill-top forests at Simkharka, Sadam, Tendong, Maenam, Gerethang, Chakung and Sudunglakha. Overall, at an investment of Rs. 2.5 crore over the last four years, Dhara Vikas has brought about 900 million litres of annual groundwater recharge
- **Benefits to agriculture and farming:** According to Bengaluru-based Indian Institute of Science's, an average of 15% increase in crop yield and 25% increase in the cultivation of irrigated crops such as paddy, tomato and vegetables.



Image 4: Recharging lakes by piping surface rainwater flow in Dolling lake, South Sikkim

Source: Rural Management and Development Department, Government of Sikkim

Environment

Forest Produce Tracking System: Facilitating resource management from source to sink in Karnataka

Problem: the Karnataka Forest Department (KFD) used a manual system to manage and regulate the extraction of natural resources such as timber, minerals and firewood. However, this manual system suffered from several shortcomings. It was very time consuming as multiple authorities, approvals and logistics were involved in the issuance of TPs.

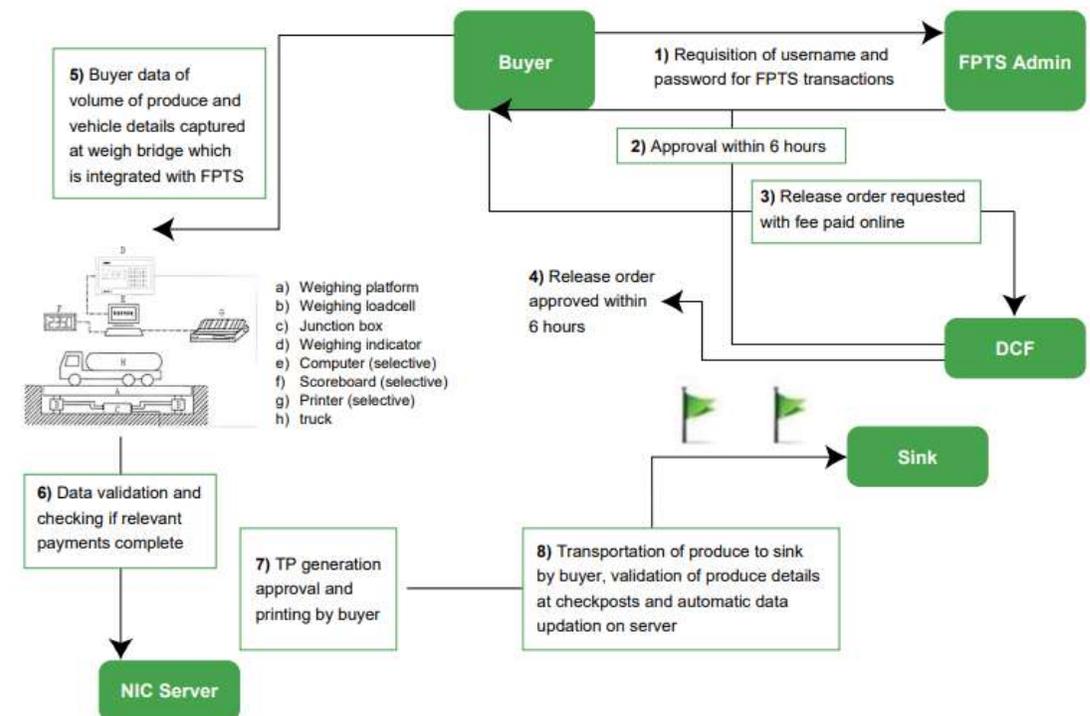
Solution: Forest Produce Tracking System (FPTS) was introduced. It is a cutting edge web-based application, which was developed and implemented by the Karnataka Forest Department (KFD) in 2011. India's first end-to-end online system for tracking forest produce, FPTS represents a radical shift in the approach toward transit management as user departments have access to all the data on a single, simplified dashboard which generates reports on transit passes (TPs), rejected applications, check post registers and tracks delayed arrivals too. The FPTS automatically tracks a voluminous number of transactions, handling approximately 4,000–5,000 TPs issued daily

Forest Produce Tracking System: Facilitating resource management from source to sink in Karnataka

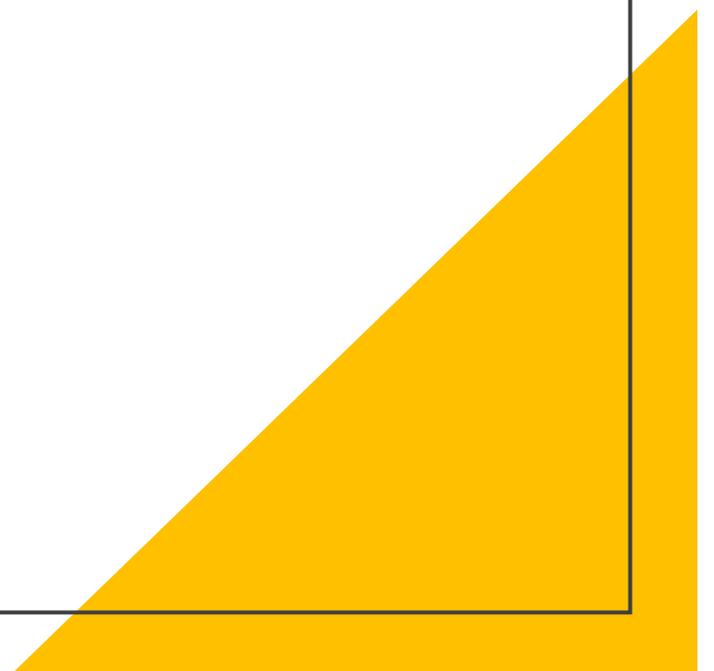
Impact

- **Ease of tracking:** User departments have access to all the data on a single, simplified dashboard. They can view reports on TPs (by release order or date).
- **Improved transparency, better monitoring:** FPTS automatically makes the details available at a central location and enables instant report generation, thereby greatly strengthening KFD's monitoring and evaluation capacity as well as bringing complete transparency to the system. It handles approximately 4,000–5,000 TP issues every day.
- **Decline in corrupt practices and increased accountability:** FPTS eliminated this systemic compulsion, making it easy to do fair business. The system has also enhanced accountability, as the discretion of TP issuing officers at the loading point has been completely removed. The new system undertakes authentication through digital signatures, making officers completely accountable. The number of TPs that can be printed is dynamically linked to payments (TP fee and taxes) made by buyers, minimising chances of illegal payments

Figure 4: Process flow after FPTS implementation



**Best Practices -
Local Governance, Water &
Sanitation and Women
Empowerment**



Local Governance

Problem: Rate of groundwater depletion has limited the water supply especially in summer months, unhygienic and non potable quality of water also leads to sanitation related diseases.

Solution: 24x7 Metered Water Supply initiative has successfully involved the community in planning and implementation and metering water consumption for judicious use in Punjab. A beneficiary share of Rs. 1,500 per household was taken as a compulsory contribution from the community in order to kickstart the initiative. The community is mobilised and a GPWSC is formed. It is headed by the Sarpanch and includes compulsory and adequate representation from the following categories: women (33%), Scheduled Castes/Backward Communities (20%), below poverty line/landless residents (33%) and others (14%). Once this is done, the GPWSC opens a bank account for financial transactions and proceeds with the collection of the beneficiary share from all of the village households.

Local Governance

Problem: Issues in conducting decentralised planning due to sheer size of national and state level schemes.

Solution: Entitlement-Based District Planning (EBDP) is a unique initiative that institutionalises decentralised planning at the district level across Bihar through an entitlement-based approach to ensure inter-regional and social equity. EBDP has educated district officials and Panchayati Raj Institution (PRI) representatives on various schemes and statutory provisions they are entitled to and has helped improve the process of monitoring and decision-making while reducing the scope of corruption and leakages besides enhancing public participation. The initiative is an effective model to standardise and disseminate public information and leverage existing resources and infrastructure in a unique way.

Water & Sanitation

Problem: Lack of adequate clean drinking water supply in rural areas of Gujarat due to geological, climatic, hydrological and soil conditions. Excessive fluoride and nitrate contents is also an issue.

Solution: WASMO (Water and Sanitation Management Organization) adopted a unique cost-sharing model to connect rural areas of Gujarat to the water supply network. It facilitated the village communities in planning, designing, selecting the site and implementing the scheme under a community managed, demand-driven decentralised system. The community was encouraged to share the partial cost (10%) and look after the maintenance and operation of the scheme with the help of the money collected as water tariff from users.

Water & Sanitation

Problem: Usage of Toilets (High percentage of dysfunctional toilets)

Solution: Three flagship programs Nirmal Bharat Abhiyan (NBA), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), National Rural Livelihood Mission (NRLM) were converged. The strategy for implementation of the State Water and Sanitation Mission (SWSM) is six-fold:

- 1) devolving power to the Gram Panchayat;
- 2) adopting a saturation approach in implementation, considering the entire village as one unit;
- 3) using the 'revolving funds' available in NBA guidelines to give loan to the village community to initiate the process of ODF village;
- 4) seeking community contributions as matching share of funds made available as loan;
- 5) subsidy accruing to eligible families calculated only after the village achieves ODF status and transferred to the VWSC after adjusting with loan amount;
- 6) identifying a distinct post-construction phase to ensure sustainability of the ODF village.

Women Empowerment

Problem: Complex property rights of women due to personal laws.

Solution: Mahila Arthik Vikas Mahamandal (MAVIM), the women's economic empowerment organisation of the Government of Maharashtra, has undertaken an awareness generation campaign that seeks to make women aware of their rights to their husbands' house and property. The initiative stands out for addressing a challenging issue that has often been cited as a reason for the vulnerabilities of many married women. 1,065 women from 29 villages in Parbhani district have become co-owners of property since June 2013. Besides a sense of security, they have been able to resist domestic abuse with the knowledge that they cannot legally be thrown out of their houses. Women members of Self Help Groups (SHGs) are even more empowered owing to their increased awareness and economic independence.

Women Empowerment

Problem: Women perform activities such as seeding and weeding, which require them to bend and work for long hours in the field. This causes considerable amount of drudgery for women who, aside from farming, also perform household activities on a daily basis.

Solution: The Tejaswini Rural Women's Empowerment Programme, implemented by the Mahila Arthik Vikas Mahamandal (MAVIM), Government of Maharashtra, has empowered marginal women farmers by helping them improvise upon existing agricultural practices through organic farming and System of Rice Intensification (SRI) methods and, in turn, increasing their yield. The emphasis on the role of women in agriculture has helped in elevating their status as stakeholders in agricultural activities. SRI, is a low water, labour-intensive method for organic rice production. Evidence from the six blocks in which the project is under implementation has shown that the costs of production have reduced by 30 percent, increased women's participation in decision-making matters of the household and reinforced faith in the capacity and potential of women-related government schemes in agriculture, besides popularising crop insurance.

**Best Practices -
Skill Development, Sports and
Women and Child Development**



Skill Development

Problem: In India, the construction sector has huge number of workers but most of them are unskilled. Since the country is undergoing mass industrialization and infrastructure development, this has created incremental demand for skilled workforce.

Solution: The skill training for the construction workers can improve their earning capacities. Initiative can be taken to skill them in new techniques and transition from conventional to modern skill practices and increase their income by 45 to 50percent is contributing through customised training modules as per the demand of the market, providing on-job training exposure, assisting each trainee with placement, and aligning with core business interests of construction sector industries.

.

Skill Development

Problem: Lack of digital literacy among rural youth especially girls

Solution: Digital literacy training can be provided to rural youth who are either studying in class 10th/12th or are a drop-out. Basic programmes can be introduced in the module. The training centre can be a bus fitted with computers. It can also be at a certain place as the agency finds cost effective and the needs of the people.

Skill Development

Problem: Women from low-income backgrounds have been left behind in relevant and employable skills training

Solution: Beauty and wellness training to girls hairdressing, Mehandi etc can help them earn good income. The trainees can be initially given internships in famous centres and later employed. This project can be expanded through their 'Beautypreneur' programme, that builds the capacity of alumni (trainees) to become trainers. The programme further incubates women entrepreneurship and enables women to start training other local girls in beauty and wellness services.

Women and Child Development

Problem: Anganwadi are not properly managed and are in disarray. Malnutrition among women and children is higher.

Solution: Those areas need to be mapped where the malnutrition among women and child is high. The anganwadis of the area can be provided technology in the form of an app, to track attendance and health of children, and e-consultation and integrated patient tracking system, to bring about a marked difference in the lives of the beneficiaries. The tracking of the distribution of the nutritious meal can be done. Monthly meeting with the women of the area can be done to improve the quality of the service.

Women and Child Development

Problem: Low households income and lack of resources

Solution: There are many types of cottage industries which women can do in their homes. They need guidance and support. For this purpose SHGs can formed and ideas can be taken from them. Locally relevant items can be produced and marketed. The idea can be taken up credits are provided to the SHGs and their products are marketed.

Sports

Problem: very few opportunities to hone their athletic skills

Solution: Athletic grounds can be provided. Auditoriums with all the facilities can be provided. Sports kits are distributed to students. Assistance is provided to children who wish to participate in sports competitions. Sports tournaments are organized and training is provided.