

## GOAL 11 : SUSTAINABLE CITIES AND COMMUNITIES



### KERALA

#### 1. MAKING PARKS AND BEACHES READILY ACCESSIBLE FOR DIFFERENTLY-ABLED PERSONS -

This project acts as a platform to address the accessibility issues of parks and beaches in the state, by lobbying with the government departments to include specific features that make it easier for people with disabilities, senior citizens, and families to use public spaces. It also built capacities of administrations, municipalities, and regions in decision-making for future investments in accessibility.

#### Objectives -

- To build the capacity of local governments and the department of tourism to adopt and implement public space accessibility measures for persons with disabilities.
- To provide support to the District Tourism Promotion Council (DTPC) and Urban Local Body, to review and update policies to ensure consideration of people with disabilities.

The Department of Tourism has allocated funds to the Detailed Project Report (DPR) submitted by the District Tourism Promotion Council (DTPC) of respective cities to implement barrier-free projects at parks and beaches. ESAF provided technical support to DTPC, starting from DPR preparation till the implementation stage, making sure inclusive designs were used in all the projects. Government-empanelled organizations were responsible for barrier-free project implementation. Construction of all completed phases was done in consultation with ESAF. The state and local governments have sanctioned around 2135 trillion INR to develop basic infrastructure for the differently-abled; including unisex access-friendly toilets, inclusive play space and equipment's, railing barriers, ramps, wheel-chairs, inclusive walkways with tactile tiles and disabled access signs. The DTPC, Thrissur also introduced a Site Guide in Braille at 4 major public space destinations in the district, implementing the suggestion given by ESAF to help the visually impaired identify various facilities without any

difficulty. The Braille guide will be replicated at all major beach destinations in the state.

## **2. SYSTEM FOR ATTUMANAL NEUTRAL DISTRIBUTION (SAND) -**

A software and IT solution was developed to curb the problem of increasing cost of sand and its illegal procurement, and to ensure that sand officially mined is given to the actual consumer to bring fairness and transparency to the sand mining process. The SAND system was built on an open source web-based architecture. SAND uses ICT tools, radio frequency distribution (RFD), barcodes, and palm codes to provide the minimum required sand to build a house at reasonable rates. The system helps officers distribute river sand from the ghats of the River Kadavu to a household in a neutral and organized manner.

The impact of this system has been felt in the regulation, ecology, mining, transport, and supply of scarce resources. Sand for construction is available at reasonable prices with reduced interference from middlemen and the sand mafia. Price of a truckload has been drastically reduced from ₹25,000 to ₹4,750. The system restricts river sand mining and riverbank erosion. All activities are carried out online and citizens have to only visit once to collect passes. Labour charges are regulated and distributed centrally. Vehicles are registered and maintained for distribution with smart cards which has reduced the number of accidents.

## **3. E-JAALAKAM -**

e-Jaalakam was initiated to generate awareness of various e-Governance initiatives among citizens, particularly among girl students/women by developing a compiled database on e-Governance services. It also aims at motivating citizens to generate demand for e-Governance. Beneficiaries include civic groups, higher secondary students, undergraduate and research students, professionals, members of resident associations, housewives, and elected representatives of local bodies. In the first phase of implementation, awareness sessions for faculty and students at St. Teresa's College were conducted. A database of relevant governance sites was prepared to include important online services women might generally need. For the second phase, a group of student master trainers shared the database with various civic groups. Vivara Nidhi – a handbook for citizens was prepared to guide the public in accessing 23 core e-Governance services in Malayalam and English. A separate handbook for high/higher secondary school students was also prepared.

## **HIMACHAL PRADESH**

## **4. JAIL VAARTA -**

This initiative lets prisoners and their relatives or visitors interact visually through video conferencing. Jail Vaarta is a video conferencing (VC) facility in all 20 state prisons. It is a low- cost solution with a high impact that uses NIC Vidyoportal software to conduct the VC. The prisoner's relatives can use this facility using any PC with a webcam, microphone, and speaker/headphone connected to it, along with internet connectivity. The access could be directly from the home of a relative or visitor or from a Lok Mitra Kendra (Citizen Service Center) which is located in all of the 3243 Gram Panchayats in the state and is operational in about 2500 locations. An online interface is used to schedule a VC session. The initiative has reduced the cost and hassles for prisoners, their relatives as well as the prison administration.

### ANDHRA PRADESH

As per Andhra Pradesh's SDG Vision Document "*ACHIEVING SUSTAINABLE DEVELOPMENT GOALS 2030*", detailing the state's strategy to achieve benchmarks for SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES, the state has focused on the following major policies and strategies-

- Sanctioning 4.8 lakh **EWS houses** to be constructed under the **NTR - PMAY Urban Housing -Affordable Housing Program (AHP)**
- Augmenting drinking water supply of >70 lpcd to 102 out of 110 ULBs in the state. 55% of urban households have water service connections.
- **Andhra Pradesh Urban Water Supply and Septage Management and Improvement Project** to provide infrastructure facilities in 42 non-Amrut Local Bodies with the assistance of the Asian Infrastructure Investment Bank.
- **Pradhan Mantri Adarsh Gram yojana (PMAGY)**
- Strengthening the "**Urban Development Mission**"
- **Smart Cities Mission**, which focuses on water supply, smart transportation, redevelopment of parks, solar rooftops, etc. through their respective SPVs, is being implemented in Srikakulam, Eluru, Ongole, Kurnool, Ananthapur, Nellore, Visakhapatnam, Tirupati, Kakinada and Amaravati.
- Median and avenue **plantations, development of parks and water bodies**, and **expansion of greening** are being taken up to increase green cover space in all ULBs in a phased manner. Urban forests are being set up in all cities to provide a green and recreational getaway for city residents.
- **AMRUT cities initiative** by Govt. of India - focuses on urban water supply, sewerage facilities, stormwater drain, and public transport facilities in urban areas.
- The 42.5 km Visakhapatnam Metro Rail Project and the 46 km Light Metro Rail System for Vijayawada in 3 corridors are being implemented on an innovative Public-Private-Partnership model.

## GOA

### **5. MANGROVE BOARDWALK PANAJI - (CLOSELY TIES IN WITH SDGs 13 AND 15)**

Panaji Smart City Development Limited, the Smart City SPV of the Government of Goa developed a 'Boardwalk' in the midst of mangroves in Panaji. The project was executed under the auspices of the AMRUT Mission, aiming at creating ecologically sustainable green spaces thereby enhancing the amenity value of cities. The boardwalk benefits the tourists visiting the State, as well as the locals by providing a safe environment to relax and enjoy the mangroves which are an asset to the ecosystem and biodiversity

## KARNATAKA

### **6. TUMKUR SMART LOUNGE AT AMANIKERE -**

The Tumkur Smart Lounge is an independent module-based, stand-alone structure with low-cost construction with the primary objective of promoting safe public spaces for citizens of Tumkur and enhancing the quality of life by providing access to essential infrastructure, state-of-the-art technology and creating a platform that connects its citizens with the Government.

Tumkur Smart City Limited (TSCL) envisages to enhance the accessibility and convenience, and making access to digital content easy with other G2C and B2C services. The Lounge is a proven model across key locations in the city facilitating Skill Development and Employment Enabled training (via E-library).

### **7. UPGRADATION OF URBAN LOCAL BODIES (ULBs) - MUNICIPAL E-GOVERNANCE INTEGRATED SOFTWARE SYSTEM -**

Karnataka Government has created a standardized set of systems and processes to provide the benefit of knowledge-sharing across the individual bodies and create a common platform of comparative evaluation between municipalities. The objective of digitizing ULBs includes Up-gradation and streamlining of municipal services in all ULBs to ensure fast, effective, accountable, and transparent delivery of municipal services to the citizens.

The frameworks of reforms are highly sustainable and replicable. The Karnataka Municipal Data Society (KMDS) has developed and implemented various online applications for citizens and ULB Staff. It is developing the Municipal e-Governance Integrated Software System (MeGISS), a single integrated system, to work as an Enterprise Source Planning (ERP) system for all ULBs.

The reforms have ensured easier and more convenient access and delivery of services for citizens at uniformly prescribed user fees and a dedicated privacy and security policy.

### UTTARAKHAND

#### 8. **BIG DATA AND DISASTER RISK MANAGEMENT -**

Effective and innovative Big Data processing and analysis is important for risk assessment in data-scarce locations, particularly when defining the present human and economic value of assets and when characterizing their exposure to natural hazards. This is driven by dramatic increases in the volume and spatial/temporal resolution of remotely-sensed datasets and by social media-sourced derivatives. With financial support from the World Bank, the Uttarakhand State Government engaged a team of experts from DHI Water & Environment (S) Pte. Ltd, the Asian Institute of Technology (AIT) and the Evaluación de Riesgos Naturales (ERN), to complete a disaster risk assessment of the entire state and quantify, for the first time, the threat from natural hazards and the exposure of communities and critical infrastructure. To overcome a gap of accurate information on the location of buildings, all building clusters and individual buildings were digitized from high-resolution satellite images covering the state, which were divided into 60,000 grids, randomly assigned to a data entry operator for digitizing using an application. Big Data also helped in modelling the spatial distribution of tourists and tourism activity. Zones of high tourism activity were defined based on hundreds of thousands of anonymized spatial points, drawn from tourism booking and the review of websites listing hotels, restaurants and attractions, and photos posted on social media.

### MAHARASHTRA

#### 9. **E-SAHAKAR -**

The intervention provides an online platform for the governance and management of co-operative societies to carry out functions of audit management, information management, mandatory returns management and society election management. More than 1.45 lakh cooperative societies, and 7500 auditors have been enrolled. The Auditing Module provides a transparent auditor selection, tracking and monitoring process for cooperative societies. The profiles of cooperatives are accessible to all members. The Election Management Module, and Online Mandatory Returns Management Modules aim to automate the election process and the mandatory returns process.

#### 10. **PUNE CITY SURVEILLANCE PROJECT -**

The project aims to proactively prevent issues of crime, inefficient traffic laws, and traffic violations and to investigate incidents by installing closed-circuit surveillance cameras monitoring Pune. Some features include -

- Automatic Number Plate Recognition System for recording vehicle number plates in a database.
- Video analytics to trigger alerts for illegal left/right turns; wrong-side parking.
- Round-the-clock monitoring at the command and control center at the Commissioner of Police's office in Pune as well as at 30 Police Stations Control Rooms.
- Integration with Vahan RTO database for detecting hot listed vehicles

Traffic is monitored regularly during religious processions. The project involves real-time integration of crime and vehicle databases for profiling to aid in detecting, alerting and recording traffic violations through smart video analytics; and advanced urban surveillance to improve the social order, tracking of crimes and protect the lives and property of citizens.

### GUJARAT

#### 11. **SAFE CITY - SURAKSHA SETU -**

The project was launched to cover the entirety of Surat with CCTV cameras for surveillance, crime prevention and detection, post incident forensic examination, traffic management and enforcement, and to provide disaster management support and pollution control measures. The idea was floated to create a deterrent for criminals/terrorists and to infuse a sense of security in the minds of common people. It has been implemented on a public-private-people-partnership (4P) model. The project was implemented with public funding, having been duly approved by the state government. PCR vans connected with the Command & Control Center and integrated with the Intellectual Information Management System which were deployed to transfer live feeds for analysis. It supports Non-interventional Traffic Management by issuing e-Challans. Post installation crime figures have reduced considerably.

### TELANGANA

As per Telangana's SDG Implementation Document 2018, the state's strategy to achieve benchmarks for SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES, the state has focused on the following major policies and strategies-

- Construction of Double Bedroom Houses for Weaker sections
- Telangana Ku Haritha Haram
- Security measures (She Teams; CCTV cameras for cities)

### PUNJAB

As per Punjab's SDG Vision Document, detailing the state's strategy to achieve benchmarks for SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES, the state has focused on the following major policies and strategies-

- *SLUM UPGRADATION* - Punjab's slum development policy may accord priority for the prevention of slum formation by making it obligatory for industrialists, builders and others to provide reasonable accommodation connected with basic services to their workers or to pay the government for providing those basics to their workers. Suggestions for the upgrading of slums at their present locations have also been made. This will involve minimum disturbance, the least financial resources, and can be done under BSUP and AMRUT schemes and Housing for all by 2022.
- *HOUSING* - The state government intends to achieve target housing statistics through Pradhan Mantri Awas Yojna, BSUP, AMRUT and IHSDP and Housing for All mission programs by 2022.
- *SMART CITY SCHEME* - The state targets to make Ludhiana, Amritsar and Jalandhar safe through ICT/CCTV and other technological interventions for safety of pedestrians, smart traffic systems for the safety of motorists, etc., in addition to 100% coverage of the population by basic services by 2022.
- *TRAFFIC AND TRANSPORT* - Policies include reducing vehicular congestion through traffic and transport plans, improving existing public transport through AMRUT, stricter enforcement of traffic rules, provision of training and monitoring equipment to traffic police, and application of triple 'E' (Education, Engineering, and Enforcement) to reduce the number of deaths related to road accidents
- *ENVIRONMENT* - Involves tackling environmental pollution by the Punjab Pollution Control Board through strictly enforcing and implementing rules regarding pollution, providing for air pollution monitoring systems in major cities, managing treatment and collection of municipal solid waste and stricter enforcement of laws regarding the management of industrial waste, effective implementation of prohibition on burning dry leaves and other waste, and giving top priority to planned development and stringent measure to stop encroachments by influential persons on public land and open spaces.
- *NATURAL AND CULTURAL HERITAGE* - The government has constituted the Punjab Heritage and Tourism Promotion Board (PHTPB) to take a special interest in developing new historical monuments and protecting the old ones. The Government of India is also helping states through the National Heritage Development and Augmentation Yojana (HRIDAY) which seeks to preserve and rejuvenate the country's rich cultural heritage.

### HARYANA

As per Haryana's 2030 Vision Document, the following programs promoting opportunities under SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES have met with success-

- **Jawaharlal Nehru National Urban Renewal Mission and Integrated Housing and Slum Development Program** - address issues related to adequate housing and amenities of power supply, drinking water and sanitation in slums
- **Housing For All Mission/ Pradhan Mantri Awas Yojana** - The Government of India has completed the construction of over 4,000 houses with 21,600 under construction. Provision of in-situ construction for 759 dwelling units in Yamunanagar was also approved
- Mahatma Gandhi Gramin Basti Yojana - Free residential plots of 100 sq. yards each with necessary infrastructural facilities are allotted to eligible SCs, BCs and BPL families.
- **Priyadarshini Awaas Yojana** - financial assistance of Rs. 81,000 is provided to each beneficiary household for the construction of a house and Rs. 9,100 for toilet construction
- **Deen Dayal Jan Awas Yojana**
- **Door-to-door collection of solid waste** in 318 of the 1,439 municipal wards

### TRIPURA

As per the Draft Vision 2030 document, detailing Tripura's 7 year strategy to make cities and urban settlements inclusive, safe, resilient and sustainable, the state has focused on : investments in urban housing, infrastructure, transportation and pollution, safe drinking water, sewerage and sanitation, healthcare facilities; and investments for slum dwellers along with easy housing loan facility.

### MADHYA PRADESH

#### **12. E-ATTENDANCE APPLICATION (LOK SEWAK APP) -**

The Aspirational District of Khandwa established a new dimension in the direction of good governance by using the Lok Sewak App, an e-attendance and field monitoring tool that uses Geo-tagging technology. Through this app, the district has ensured the presence of Government officials at the workplace, thereby leading to significant improvement in the quantum and quality of work and facilitating their accessibility to the public. The app has also ensured availability of ASHA, Anganwadi workers, teachers and other key frontline workers involved in the implementation of various programs.

### CHHATTISGARH



### 13. **URBAN PLANNING BY DEVELOPING UAV IMAGERY -**

Urban planning is being done by developing UAV Imageries for road connectivity and identifications for traffic planning and study of urban sprawl for a probable extension. These images can identify water bodies that need interventions for siltation. Volumetric analysis of mining activities can also be conducted by such images.

14. **DIGITIZATION OF LAND RECORDS** through which computer generated certificates of land records can be created.

### ODISHA

### 15. **ENGAGEMENT OF BIKE AMBULANCE, AUTO AMBULANCE AND DELIVERY VANS TO PROMOTE INSTITUTIONAL DELIVERIES - (CLOSELY TIES IN WITH *SDG 3*)**

To encourage Institutional Deliveries, the Aspirational District of Kandhamal introduced Delivery Vans. Being a tribal area, traditional healing systems are given more importance over institutional systems, leading to several deaths. Childbirths were usually conducted by untrained 'dais' in the villages and pregnant women hardly went to the hospitals for delivery due to community norms not permitting external intervention. The district doubled its efforts for increasing the demand and supply side interventions.

All delivery points were made functional. 5 Bike Ambulances and 11 Janani Auto vehicles were deployed in outreach pockets and 7 Maternity Waiting Homes (MWHs) were established. Apart from the '108' and '102' Ambulance service, all existing vehicles including Government Ambulances, Arogya Plus vehicles, MHU & MHT vehicles were engaged to transport pregnant women to the Government health facilities. On the demand side, awareness generation activities were undertaken to improve the intake of the services provided. The Bike & Auto Ambulances along with the Delivery Vans in Kandhamal have improved the last-mile connectivity for pregnant mothers. The rate of Institutional Deliveries in Kandhamal is now the highest in the state at 97% & maternal deaths have reduced by 65%.

### 16. **BHUBANESWAR ONE E-PORTAL -**

Implemented by Bhubaneswar Smart City Limited (BSCL), Bhubaneswar One is an e-portal that integrates geo-spatial data from all government and private organisations to provide easy and hassle-free information to residents and tourists. It is an integrated GIS-based mapping system for government agencies to deliver location-based services and information. It is used to find locations,

ward information, information on public services, tourism and events related information, and updated notifications from various government organisations.

### RAJASTHAN

#### **17. LAW REFORM PROJECT - MINIMUM GOVERNMENT, MAXIMUM GOVERNANCE -**

The Project includes 4 phases - repealing, consolidating, examining the relevance and putting laws online. The Rajasthan Laws Repealing Bill 2015 was an outcome of an exercise of taking feedback from 66 departments over 100 meetings which subsequently concluded in repealing 248 Acts. The consolidation phase was complex and difficult. The Rajasthan Government identified 9 departments with the most consolidation impact and began internal department reviews. Hundred of Acts have been put online as well. The next phase intends to reduce the number of laws to 150 and to 100 only. Reduction in suspicion and the consequent increase in trust between citizens and lawmakers leads to a reduction in transmission losses between how laws are written, interpreted, practiced and enforced. Other upsides of less legislation include less corruption, nepotism and judicial intervention.

### UTTAR PRADESH

#### **18. REVENUE COURT MANAGEMENT SYSTEM (RCMS) -**

Developed by the National Informatics Center, the RCMS broke the monopoly of the Peshkar (reader) by making all the information online. RCMS is a workflow based integrated software product with major functions like case filing, entry/updation of misbranded/case diary, recording of daily proceedings, cause list generation, priority management of cases listed in the list, backlog entry, scanning/uploading of judgment, transfer of cases from upper court to lower court, restoration of cases etc. Court orders, proceedings, judgements and information about dates of the next hearing of a case are available online. Almost 24 lakh cases and their judgements are available online in a searchable database, all cases are updated every day.

#### **19. ONLINE POLICE STATION -**

This initiative was launched by the Uttar Pradesh Police Department taking into view the difficulties and harassment faced by the common people when they go to police stations to file FIRs as officers often deny registering FIRs. The program has resulted in hassle-free registration of FIRs. Police stations would be able to make the records of the cases digitally.

### JHARKHAND

As per the Jharkhand Vision & Action Plan 2021, Jharkhand's best practices, policies and strategies to achieve benchmarks for SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES, are mentioned as follows-

- Developing Smart Infrastructure
- Adoption of transit-oriented development (TOD) policy to counter unplanned urban growth set up people-friendly and compact cities by integrating land use and transit systems, increasing the percentage of people within 0.5 km of public transit running at least every 20 minutes.
- Enforcement of and adherence to the provisions of the recently implemented Jharkhand Affordable Urban Housing Policy, which provides reservations for EWS and LIG housing amongst other provisions
- Basic sanitation facilities in urban areas and making Jharkhand ODF by scaling up efforts under Swachh Bharat Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- Wi-Fi-enabled smart colony initiative
- Skill training under NULM and focus on creating industry tie-ups and placement of skilled manpower with NSDC partners
- Skilling urban poor under PMKVY and SJKVY
- Access to Safe Drinking Water for all Urban Households
- Strengthening of road and rail connectivity to Kolkata, Haldia, and Paradip ports
- Provision of necessary administrative assistance to agencies related to the development of broadband, high-speed communication, data connectivity, 4G, etc.

### NORTH-EAST

#### 20. **Centralised e-Auction Portal** —

The Center for Development of Advanced Computing (Deity, Ministry Of Communications & IT, Government of India) and North Eastern Regional Agricultural Marketing Corporation Ltd (NERAMAC) developed a user-friendly e-Auction portal for north-eastern states with the objective of using IT to develop an auction system to provide better prices to farmers. The e-auction system supports product-based online auctions of agricultural crops and produce. It aims at bridging the gap between the farmers and the market by supporting farmers/producers in getting remunerative prices for their produce. It also aims to enhance the agricultural procurement, processing and marketing infrastructure of North-East India. Farmers and traders are required to register with the e-auction system managed by NERAMAC (under the administrative control of Ministry of Development of North-East Region) to participate in the online auction.

**BENEFITS:**

- Increased market reach
- Increased sales volume
- Reduced transaction cost
- Competitive prices for farmers
- Benefits to more than 1,70,000 farmers (1700 clusters)

## **21. Mobile Based System Enabling Digitisation of Government Data**

— Sikkim

The system aimed at digitizing lakhs of records in old book ledgers and converting them into searchable content in a time bound manner. Demi Solutions developed a cost-effective system for digitizing government data to enable citizens to have easy access to all records and documents. The system has been implemented for the Sikkim Government and has successfully digitised all government data, including documents and records available only in remote government offices. The system scans documents using a custom-built application on an Android tablet with a high resolution camera and sends data synchronised with the backend server over 3G network, making it fast, reliable and efficient. It has also enabled the delivery of all public services at district/ sub-district level in electronic format and reduced the number of visits of citizens to a government office/department for availing of the services, thus eliminating harassment.

## **22. Nagaland Police SMS Based Vehicle Monitoring System (NPSVMS) — Nagaland**

The Nagaland Police developed an IT system in the form of NPSVMS to address the issue of increasing instances of vehicle theft through quick dissemination of information about stolen vehicles. It acts as a common repository of vehicle information. Registered people can simply SMS the keyword LOST to 8415900400 and the details of their vehicle would be instantly broadcast to all check-posts in the state.

On filling up and submitting a one-time free registration form with personal details, a visit to the nearest police station personally for document verification is followed by a confirmation SMS being sent to the registered mobile number within a few days. Since its launch, there has been a substantial reduction in the theft of four-wheelers and more than 100 vehicles have been recovered.

### BIHAR

## **23. SAMVIDA -**

A system for the appointment of contractual and volunteer services in districts of Bihar called SAMVIDA was developed to support the increased demand for manpower in the state government. SAMVIDA aimed to tackle the delay in recruitment

caused by traditional hiring processes, delay in receipt of approvals of recruitments, difficulties in appointing qualified retirees into the service, recruitment of large numbers of volunteers needed for various schemes, and inconsistency in recruitment among others. SAMVIDA utilises ICT technology and web-based resources for finding, attracting, training, assessing, interviewing and hiring new candidates/personnel under various schemes of the state/ central governments. Unemployed citizens can register on the website to avail the services and alerts. Registered users automatically get SMS and emails to apply for suitable vacancies. Automation of the entire process makes it more efficient, effective, transparent and economical.

24. **Local legal redressal through Gram Kachahari** (village courts within Gram Panchayats to adjudicate on local issues and provide legal redressal)

#### 25. **EFFICIENT PUBLIC SERVICE DELIVERY** -

This governance practice includes electrification in rural households, provisions for piped drinking water supply, and birth registration and issuance of birth certificates through Anganwadi Workers (AWWs).