



गृह मंत्रालय
MINISTRY OF
HOME AFFAIRS



Project Report

On

Spandan and Parivartan (Project No.09/MM:03)

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Bureau of Police Research and Development
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'Promoting Good Practices and Standards'



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1. Introduction

India is a vast country in terms of area, with some districts as large as some small countries. Considering India's vastness, direct communication becomes very difficult as it is both time-consuming and expensive. For an ordinary person, it is challenging to travel long distances to approach the district or sub-divisional headquarters to redress his grievances. It is even more problematic for the people of socio-economically-weaker sections, women, children, and the elderly, to easily access the police services.

Sometimes, the ground level police can not respond appropriately to the petitioners and resolve their grievances due to professional engagements. Therefore, easy and prompt access to senior officers enables the general public to redress their grievances swiftly.

An ordinary man is generally hesitant to approach the Superintendent of Police (SP) to lodge his complaint against someone. Hitherto, some citizens also have to travel from faraway places of the district, losing their hard-earned money over food and travel. Despite spending an entire day at the office of an SP, they are not sure that they would be able to meet the concerned officer. There is also a general perception that meeting a high-ranking officer is possible only with some influence, someone's recommendation, or known sources.

Even when the petitioner can meet the high-ranking officer, he may not solve their grievances due to varied reasons. Senior Officers may not be physically present to receive petitions from the public in a transparent and accountable manner due to their preoccupied schedules. In general, there is no proper system of registration of public grievance in many offices. Thus public grievances are not reviewed and resolved in time. The saying is that justice delayed is justice denied. Therefore, grievances not disposed of in time create a sense of denial of justice.

The video conference-based grievance redressal system, *Spandana*, promises to bring accessibility, accountability and transparency in public administration as it improves the public's access to senior officers to resolve their grievances. Such a grievance redressal system meets the general public's expectations from the police in the long term.

Like any other department, even the police department has review meetings and training programmes, for which officers need to be present physically at their headquarters. It leads to the absence of executive officers or station house

officers from their respective police stations, delaying the resolution of the people's grievances.

Police of Prakasam district has adopted an intensive weekly review system over the traditional monthly one through *Spandana*. Such a review redresses peoples' grievances online, automatically records the meetings, and creates foolproof and accountable documentation.

2. Overview

The video-conference based grievance redressal system, *Spandana*, is a transformed version of the general Public Grievance Redressal (PGR) system. It also includes *Parivartan*, which has two elements: Performance Appraisal and Review (PAR) and Training and Capacity Building (TCB). *Spandan* uses a package of technological solutions to leverage information technology to transform the systems and increase the scale and scope of organisational processes. This project uses an ultra-low-cost solution with a combination of new and old equipment. It also uses open-source software and other freely available online tools to create a whole ultra-low-cost live multimedia link network (video conferencing). The SPANDAN also uses more versatile systems for video-conferencing and sharing documents, data, tables, and weblinks as the regular systems are costly.

2.1 Project Title: *Spandana* and *Parivartan*

The *Spandana* and *Parivartan* are digital *avatars* of the usual government processes as they leverage information technology and technological solutions to change the scale and scope of organisational processes.

2.1.1 VC-Based Grievance Redressal System, *Spandana*

The project *Spandana* is a novel grievance redressal system, which enables citizens to avail police services conveniently. The project has revamped the front-end delivery system of public services. Through technological solutions, it allows citizens to approach the police headquarters remotely. Citizens can simply access the senior officers from their computer or the video conference facility available at their local police station. Thus, citizens can have their grievances redressed swiftly.

The *Spandana* is a delivery system of public services available everywhere in a district, accessible from anywhere in the world and deliverable on-demand and

onsite. It redresses the public's grievances through a video conferencing system, connecting all police stations, offices, technical and trained personnel for the smooth execution of the processes.

Citizens can access *Spandana* to lodge their grievances with the SP in three ways:

2.1.1 .1*Spandana Live*

In *Spandan Live*, citizens come to police headquarters to submit their grievances directly. Then, the SP directs the field officer to take necessary actions, using the live-video link, as all officers are virtually connected. Such a system assures the general public and promotes an environment of respect and trust.

Figure-1



2.1.1.2 *Spandana Online*

However, the citizens who cannot travel to police headquarters use *Spandana Online* to submit their grievances for various reasons. In this system, citizens submit their grievances at the nearest police station. After the Station House Officer accepts the grievance, the SPANDAN Online connects citizens, SHO of that police station and the SP virtually through a web link. Thus, the citizens get an opportunity to express their grievances before the SP.

Figure 2



2.2.1.3 *Spandana Beyond Borders*

Under Spandana Beyond Borders, the citizens can communicate their grievances to the SP from any location.

Figure 3: Petitioner Interacts Live with officers



2.1.2 VC-Based Performance-Review and Capacity-Building System, *Parivartan*

Project *Parivartan* also aims to reengineer the critical processes, such as Performance Appraisal and Review (PAR) and Training and Capacity Building (TCB). The Parivartan ran a pilot project to test the design and processes using information communication technology (ICT) tools and applications.

This project is much more versatile than a standard VC system as it establishes live multimedia data links among all police stations and officers. It helps to share files, documents, videos, data and important web links. Consequently, it enables online surveys, update existing files and documents.

Conducting PAR and TCB in physical mode is inconvenient, disruptive, expensive, and limited in scale and scope. Additionally, it also disturbs routine functioning and weakens the emergency response. Hence, Parivartan has redesigned PAR and TCB in digital format and increased their scale, scope, and impact.

The two processes carried out through *Parivartan* are:

2.1.2.1 PAR

The performance appraisal and review system has progressed from a monthly to a more intensive weekly review system.

Figure –4



2.1.2.2 TCB

Under *Parivartan*, it is now possible to train many officers simultaneously across various locations using minimum time and money and without disrupting the regular and routine work.

Figure 5 & 6



Figure 7



2.2 Vision

Need for the Initiatives

Spandana

The project *Spandana* addresses three problems citizens face in availing police services: availability, accessibility, accountability and transparency.

2.2.1 *Availability*

a. In the present system, the officers cannot focus and devote time to solving public grievances for various reasons. The officers cannot hear the public and solve their grievances as they spend a lot of time travelling to the District Headquarters and remain preoccupied in other official engagements. There was no system to register public grievances, resolve them in a time-bound manner, and properly dispose of them.

2.2.2 *Accessibility*

- a. India is a vast country. Therefore, it is very inconvenient, time-consuming and expensive to have direct personal communication.
- b. Traditional grievance redressal services are limited to the district headquarters, inconvenient for the public from remote areas where public transport is also limited.
- c. When petitioners approach an SP with their grievance, the SP would issue instructions on the petition and forward it to the concerned officer(s) through a post that takes a lot of time to reach the destination.
- d. So far, petitions could be submitted only in person. And, citizens residing in other districts, states or countries could not report their problems and lodge grievances at the police station of their native district.

2.2.3 *Accountability and Transparency*

- a. In the traditional system, sometimes at ground level, bribes influence officers, resulting in dishonest and improper disposal of grievances. Before *Spandana*, there was no easy recourse for the general public in such situations.
- b. The traditional grievance redressal procedure was not transparent at the field level. And due to poor supervision and lack of systematic monitoring, petitions used to be pending for lack of progress.

- c. There was no system to share information about the progress/status of petitions filed by the citizens.
- d. There was no time-bound process for the disposal of petitions. There was no system for taking feedback from petitioners on the action taken on their petitions.

Parivartan

Both PAR and TCB are critical processes to enhance efficiency, effectiveness and expand the scale. So far, both these processes have employed archaic ways. Understandably, these old methods were inadequate about the requirements of 21st century policing to facilitate good governance and better citizen services. Therefore, Parivartan has created an improvised design to suit contemporary times and needs.

2.2.4. PAR

The Performance Appraisal and Review (PAR) functioned through the system of monthly crime review meetings. The officers of the district had to travel to their headquarters to attend meetings. The physical journey was long and tiring for the officers serving in remote areas of the district, as they would spend around 7 to 8 hours in travel. Therefore, the SP met a limited number of officers in the earlier PAR and reviewed a restricted set of performance indicators.

These meetings disrupted the regular work and consumed the productive time of officers concerned. Moreover, the officers weren't physically available to attend to any emergency matter in their jurisdiction. Therefore, it was not practical to conduct such meetings frequently.

- a. The SP could not conduct a fair review of officers' performance as he would have limited time and opportunity to meet them.
- b. The documentation of PAR in monthly crime meetings was in the form of handwritten minutes. The system did not record all instructions issued with high fidelity, leading to poor accountability of the officers under review.

2.2.5 TCB

Training and Capacity Building (TCB) of police was built around the system of classroom-based training by instructors/experts who were required to be physically present in the classroom and the trainees.

- a. Earlier, TCB classes for the police personnel were conducted only at the district headquarters.
- b. Only a limited number of participants could attend the sessions. The one-trainer-one-classroom module could train only 30 to 35 officers at a time, which was not sufficient for the needs of contemporary police establishments. Moreover, the entire police force needed to be trained regularly and in time.
- c. One of the crucial issues in TCB was the unavailability of instructors. Instructors are rare and valuable resources. They are usually available in big cities and not in the districts.
- d. Therefore, the TCB system was reformed and re-engineered to maximise the instructors' availability and enhance the value of training and capacity building.

2.3 Objectives

2.3.1 Objectives of *Spandana*

1. Generally, the citizens do not get a prompt response from the police and the police services. The poor, women and people from weaker societies face even more significant difficulties in getting police services.
2. The objective of *Spandana* is to increase access to justice, protect the weaker, and remove socio-economic, administrative, and other physical barriers.
3. Hitherto citizens suffered a lot in approaching the SP to lodge their grievances. They had to travel from faraway places of the district, losing their hard-earned daily wages while spending extra money from their pockets over travelling and food, apart from wasting their productive hours in the process.
4. *Spandana* ushers a new era of transparency and accountability in police public administration as this project may be easily upscaled and replicated in the country.

2.3.2 Objectives of *Parivartan*

1. The main objective of this project is to address the inefficiency, ineffectiveness and severely throttled scale and scope of organisational operations.
2. Most importantly, the project aims at saving time, energy and money incurred on physical communication. It also minimises work disruption due to officers' absence from the field for training or review purposes.

3. The Project

3.1 Purpose

3.1.1 Purpose of *Spandana*

The project *Spandana* emphasises the use of technology in policing to bring about changes in the implementation of overall enforcement of law in society. Its purpose is to create an appropriate public perception about police and enhance the trust between the police and the public. The project also aims to become a platform for the young officers to improve their knowledge, skills and competencies using technology.

In today's scenario, where corruption has become a menace at lower levels of administration, resulting in dishonest and fraudulent disposal of grievances, there is a need to adopt an efficient system like *Spandana*. The project *Spandana* makes it convenient for the general public to approach the police personnel to resolve their grievances. The project also cuts down various travel costs by the petitioners to meet the police officers at headquarters. It ensures the presence of station house officers in their respective jurisdictions at the time of emergency.

This project enables sharing of documents, data, and other files among the police establishments. It helps in creating new records, updating existing ones, and review of the pending cases. The project enables the general public to submit complaints and know the status of their complaint without approaching the police station physically.

3.1.2 Purpose of *Parivartan*

Systemic inefficiencies and ineffectiveness adversely affect the scale and scope of significant departmental or organisational operations. Therefore, the project *Parivartan* helps in addressing and revamping the following purposes in the government:

1. Review Meetings
2. Training

3.1.2.1 Review Meetings

The review meetings in police are conducted every month during crime-review meetings. Due to the lack of time in these meetings, the SP meets a limited number of officers and reviews a limited number of cases and performance indicators.

While such meetings disrupt day to day work, they also make it difficult for the officers to attend the meetings due to exigencies at their respective offices. It results in the loss of valuable time and energy. Moreover, it is also not practical to conduct such meetings frequently across the regions because of such hassles.

Since the documentation in monthly crime-review meetings is handwritten, it is challenging to record the instructions entirely and in a timely manner. The handwritten documents do not have the required information affecting accountability and transparency.

The project *Parivartan* addresses and overcomes the challenges in the existing system as the officers do not need to travel to the headquarters for review meetings or training. Consequently, they devote their time and energy to monitor day-to-day work and redress the public's grievances in a time-bound manner. The project also records the meetings conducted virtually and prevents data loss or left out issues discussed in the discussions.

3.1.2.2 Training

1. Training and capacity-building of police are organised through classroom-based training by instructors/experts who need to be physically present in the classroom with the trainees.
2. In the earlier system, as the training classes for the police personnel were conducted only at district headquarters, only a limited number of participants could attend the sessions. The one-trainer-one-classroom module could train only 30 to 35 officers at a time, which was not sufficient for the needs of contemporary police establishments. Moreover, the entire police force needed to be trained regularly and in time.
3. As instructors are rare and valuable resources, therefore, the unavailability of instructors was a crucial issue in training. Instructors are generally available in big cities and not in the districts. Thus, the Training

system was reformed and re-engineered to maximise the instructors' availability and enhance the scope, scale and value of training and capacity building.

4. *Parivartan* project engages experts from various domains online. It imparts specialised training and skills to police personnel at their offices in large numbers, helping police to transform into a professional workforce.

3.2 Financial Benefits

Projects *Spandana* and *Parivartan* bring a variety of benefits to the general public and the government. Earlier, the general public had to face many hardships to redress their grievances, and the government had to spend a lot of time and money to redress the public's grievances. These projects reduce the money, time and effort costs of the people and the government.

3.2.1 Sample Project and Benefits of the Project (Sample District: Prakasam)

1. Ultra-Low-Cost Solution for Setting-up VC

So far, there was only one standard VC set up at the headquarters, costing ₹3.2 lakh. However, Spandan installed ultra-low-cost VC systems at the rate of ₹2,400.00 per terminal, spending just 2% of the market price.

Purchased

- Standard webcam (*Logitech*): ₹1600.00
- Standard microphone with 3.5mm jack: ₹500.00
- USB speakers: ₹400.00
- The license of Zoom application for 100 users for a year: ₹12000.00

Existing

- Display system and signal processor: Nil (Used existing computer systems)
- Repair/up-gradation of other hardware/internet connection: Cost will vary.
- Minor software/driver updates: Free

Table 1: Indicative Cost Savings to Government in VC Establishment

	No. of Terminal s	Estimated Market Cost for Standard VC	Devised Ultra-Low- Cost Solution	Cost Saving (Col. 3 – Col.4)
Police Station	1	₹3.2 Lakh	₹2535 Rs	₹3.17 Lakh (approx)
In Prakasam District (after implementation)	84	₹2.68 Cr (84 x ₹3.2 Lakh per one terminal)	₹2.13 Lakh (84 x ₹2535 for one terminal)	₹2.68Cr
Entire Country	25000 (appx)	₹800 Cr	₹6.3 Cr	₹794 Cr

Figure 8: Standard VC Market Cost Estimation Bill for 84 Terminals

15 COMMUNICATIONS

No.421,2nd Floor, Dev Complex, Cross Out Road, Coimbatore-541001

e-Mail:i5communications.vc@gmail.com



Ref:HYD/VCS/02002

Date:06.02.2020

To
Superintendent of Police
Prakasam District,
Andhra Pradesh
Dear Sir,

Subject: proposal for Panasonic HDVC series VC Equipment with TV

We have pleasure in enclosing the commercials for the Panasonic VC1000 make of video conferencing device with complete kit.

S No	Model	HSN Code	Description	Qty	Unit Price (INR)	Total Price (INR)
1	KX. VC1000SX	85171890	Panasonic HD visual Comm (only Codes)	84	210104	17648736
2	GpP VD131	85176290	3x Optical/4X Digital Zoom PTZ Camara			
3	KX VCA002	85177090	Panasonic Anaogue Bounciary Microphone			
4	32 Inch		32 Inch Television	84	10000	840000
5	Installation		Installation	84	1680000	1680000
6	CPU		I5 CPU with Keboard, Mouse	84	34000	2856000
					Total	23024736
			GST		18%	4144452
			Grand Total			27169188

Terms & Conditions:

1. Warranty -3 Year Warranty from the date of Installation /Delivery
2. GST 18% Applicabe
3. Delivery -2 to 3 weeks from the date of PO
4. Payment-100% in advance
5. PO to be sent from the communication mail to execute the order.

For I5 Communications,

Jaganathan C
Managing Partner
Cell:9000112275

Regd office:1085/D4,1st Floor, venkateswara Aparments, Prem Vijayanagar Colony, Malkajgiri, Hyderabad-560047 Head office:
#811,1st Floor,10th Main road, Indra Nagar 1st State, Banglore-540038
Cochin Office: AS, 2nd Floor, Hearverly Plaza, above Reliance Mart, vazhkala Colony Stop, civil Line road, kakkanad, Cochin-582021

3.2.2 Financial Benefits for Public through Spandana

The project *Spandana* serves all community members directly and provides ease of living to the general public.

Before *Spandana*, the general public travelled to the headquarters to submit their grievance to the SP. On an average, a Citizen would travel about 100 km and spend:

Bus tickets: ₹150.00 x 2 = ₹300.00

Food expenses: ₹200.00

Daily wage: ₹500.00

Total expenditure: ₹1000.00

In Prakasam district, therefore, on an average, expenditure for 150 people travelling to the headquarters in a week amounts to ₹1,50,000.00 (one lakh fifty thousand rupees); and ₹78,00,000.00 (seventy-eight lakh rupees) in a year.

Project cost for connecting all 84 police stations/ offices (per year) of Prakasam district: ₹2,13,600.00 (two lakh thirteen thousand six hundred rupees)

On average, 150 persons are approaching the headquarters every week for their grievance redressal. At this rate, approximately 7,800 (150 x 52) petitioners come to the headquarters in a year.

The cost to deliver services on one petition comes to ₹27.40.00 (twenty-seven rupees forty paise).

3.2.3 Financial Benefits for Public through Parivartan

By implementing the *Parivartan* project, a saving of ₹1.57 Cr could be made in a year, considering the case of Prakasam District. This saving would be ₹984.2 Cr, considering the cost of the entire nation.

Method of Calculating the Savings in Project Parivartan

Parivartana holds PARs and TCB programmes once in four weeks for all officers in the Prakasam district and saves the following:

Time:

In Prakasam, the 10th largest district in the country, 120 officers across the district spend 3 hours to reach police headquarters for a crime-review meeting.

Total man-hours used in a week = 120×6 (3+3 hours up and down) = 720

Total man-hours used in a month = $120 \times 6 \times 4.3$ 52 weeks in 12 months = 3096

Three thousand ninety-six man-hours of officers are spent in the district to assemble at the headquarters, which is approximately equivalent to having 17 extra officers on the payroll. The costs of 3096 man-hours are:

$17 \times ₹50,000.00$ (average salary) = ₹8,50,000.00

ii) Vehicle Mileage:

On average, a vehicle runs for about 100 kilometres for a crime-review meeting in a week. So, for 120 officers, the vehicle mileage would be:

$120 \times 100 \text{ kms} = 12000 \text{ km}$

Vehicle mileage in a month would be = 12000×4.3 (considering 52 weeks in 12 months) = 51600 kms

A vehicle travels 51600 km in a month and spends about 1.6 lakhs which is equivalent to purchasing a new vehicle within five months, considering an average cost of a vehicle is ₹8,00,000.00. Thus, savings per one month will be-

$= ₹8,00,000.00/5 = ₹1,60,000.00$

iii) Vehicle Fuel:

Fuel spent in a month in attending crime meetings = $51600/9$ (average mileage) = 5733 litres of fuel

A vehicle would consume about five thousand seven hundred thirty-three litres of fuel, equivalent to providing fuel to additional 48 officers, assuming each officer gets 120 litres of fuel.

Savings per one month 5733×75 (Cost of fuel) = ₹4.3 Lakh

Total savings per month for Prakasam district = Manhours Cost + Fuel Cost + Monthly Cost of a New Vehicle = ₹8,50,000.00 + ₹4,30,000.00 + ₹1,60,000.00 = ₹14.4 Lakh

Saving per year for the Prakasam district will be ₹14.4 Lakh x 12 = ₹1.72 Cr.

Saving per month for the entire country amounts to (630 Districts across the country x ₹14.4 Lakh) = ₹90.7Cr.

Saving per one year for entire country = ₹90.7Cr x 12 = ₹1088.4 Cr

4. Situational Assessment and Problem Statement

4.1 Spandana

After studying the problems faced by the public in availing of police services and assessing the situation in the field with multiple stakeholders, including journalists, NGOs, welfare associations, public representatives, women's organisations, and police officers, the Police explored all possible ways and means to improve the system.

1. The new Andhra Pradesh government had started a public grievance programme across their various departments urging all field officers to think and suggest innovative initiatives to improve the system and take the government closer to the public.
2. Police's main challenges are its availability, accessibility and accountability to the general public. A core team of senior officers from the field, staff from the IT team and others deliberated to meet these challenges by harnessing information technology.
3. An understanding of how to act and tackle the challenges also emerged in the course:

Availability

The Police felt that police services should be provided effectively for all ordinary citizens and police personnel at every police station.

Accessibility

The Police decided that instead of people coming to the headquarters to meet the SP, it should empower the public to access the police services from their

local police stations. The Police also decided to make their services online, to enhance its accessibility, availability and accountability for everyone from all corners of the world.

Accountability & Transparency

Prakasam Police felt the need to have a live system to hear the public's grievances and record them automatically.

4.2 Parivartan

Parivartan enables professionals and experts to remotely impart skill-building education and training to many police personnel without disturbing their routine. Prakasam District's in-house Team implemented Parivartan at a meagre cost without the assistance of an outside vendor. The project improved the scale and scope of departmental processes, such as PAR and TCB.

PAR

1. A weekly online PAR was designed instead of the regular monthly review. In this process, all officers, along with junior investigation officers (JIOs), were engaged.
2. Officers of the district could attend the PAR by sitting in their respective offices instead of travelling to the headquarters.
3. The new system minimised the disruption in routine work, which made the officers available in their respective jurisdictions to handle emergencies.
4. Since more than 500 officers connect every week, senior officers could now instruct them on various topics/subjects and collect their responses immediately. Investigation Officers could also respond instantly after verifying the records.
5. All video conference proceedings could be saved in this system to create a permanent record.

TCB

Police felt to develop skills and train many police personnel without wasting time, money and energy. Therefore, a comprehensive e-learning system was required.

Securing the physical availability of instructors was a challenge; therefore, the online lectures were conducted and saved for revisions in future for those who could not attend the sessions.

1. The Prakasam Police conducted online classroom training sessions. As per the planned schedule, all trainees joined the same online platform using video links from their respective locations, i.e., police stations.
2. The system creates a permanent record in the form of video documentation of the proceedings. It covers a comprehensive e-learning solution, which enables the conduct of TCB programmes through live lectures, demonstrations of software applications, online testing assessment and sharing of files. All participants interact with their instructor and express their views about the training.
3. After reengineering the government processes, various reports like DSR (daily situation reports), MCR (monthly crime reports), visiting and inspection notes of senior officers are forwarded online from all police stations and officers.

5. Critical Constraints and Challenges

5.1 *Spandana* and Various Constraints

Financial constraints

Getting dedicated video displays, signal processors, omnidirectional microphones, and wide lens PTZ cameras.

Bandwidth Constraints

Getting dedicated hi-speed broadband fibre for all police stations, like the SWAN network of the AP government, was not feasible.

Capacity Constraints

To test and implement the new system, all stakeholders needed training for seamless usage.

5.2 *Parivartan* and Challenges

Financial Challenges

Connecting all police establishments with a video conferencing system and getting dedicated video display monitors, signal processing unit (SPU), omnidirectional microphones, and UHD PTZ camera is costly.

Challenges

Getting a dedicated hi-speed broadband connection for all police stations might not be feasible.

Capacity Challenges

Successful implementation of the system across the jurisdictions requires all officers to be adequately trained for smooth functioning. Due to insufficient resources of technical staff, it wouldn't be easy to monitor the project.

Maintenance Challenges

Maintaining the quality of the deliverables and services in the long run and sustaining superior officers' interest in the system is challenging.

6. Implementation Strategy

6.1 Equipment, Plan and Resources

Necessary Equipment required at Police Stations to establish and Run the Project: -.

1. CPU, monitor, keyboard and mouse
2. Internet facility (minimum speed of 2 Mb per second)
3. Web Camera (minimum 2 megapixels)
4. External Mike
5. External Speakers

Computer and internet facilities are essential to implement the project. Under the CCTNS project, the central government has provided 3-5 computer systems to every police station in the country so that one could be used for this purpose.

Similarly, the government has also provided fibre net, BSNL internet facilities to all police stations in the country. However, an internet connection with moderate speed would do the required job.

Detailed Descriptions of Equipment

1. Web Camera

(Figure 9)

1. A moderate-quality camera is enough for the VC. Prakasam Police opted for the



Logitech C170 HD camera out of several tested web cameras, which cost ₹1200.00.

2. However, the type and brand of the camera would vary depending on the quality desired.

3. External Small Microphone and Speakers

(Figure 10)

1. External mike and speakers are required to ensure better audio. For this purpose, Prakasam police purchased mike and speakers for ₹400.00.

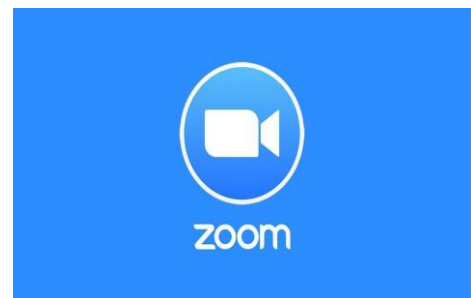
2. Prakasam police have been using the same for more than a year. They are quite satisfied with the performance of the mikes and speakers.



3. Zoom Video Conferencing Application

(Figure 11)

1. Prakasam police zeroed in on the ZOOM, as it has a user-friendly interface. However, the cost of the ZOOM application would vary according to the number of participants. There are 84 police stations in Prakasam District. The IT team assessed that the subscription of 100 participants as a pilot project would cost ₹12,000.00 p.a.



Implementation of Spandana

Prakasam Police formed a unique plan to implement *Spandana*.

I. At Headquarters

1. A core team consisting of a few officers and staff from the IT team and Coordination Cell was formed.

2. The Coordination Cell was trained to monitor the programme, make correct entries in CCTNS and collect feedback.

3. An SOP (Standard Operating Procedure) was created to coordinate synchronised meetings with the IT core team, Coordination Cell, officers from police stations and other offices.

4. Based on their education, two persons from every police station were trained to handle the interface of video-conference applications at their respective police stations.

Role of Coordination Cell

1. It will monitor the process.
2. It will receive the details of all petitioners who lodge their grievances to the SP.
3. One day in a week will be earmarked to resolve the grievances. Every petitioner will be given a time slot to interact with the SP.
4. It will make proper entries of petitions/grievances in the CCTNS.
5. It will monitor the action taken/ response received from the field officers.
6. It will collect/receive all enquiry reports from enquiry officers and put them before the SP for perusal.
7. It will collect feedback from the petitioners on the action taken in the context of their grievance.
8. After the grievance has been duly redressed, the petition will be closed by making its proper entry in the CCTNS and records.

Role of IT Core Team

1. It will connect all police stations through the VC system by sharing the meeting ID and password among all officers, circle offices and sub-division offices.
2. After connecting all the offices, it will test their connection with the headquarters and the SP.
3. The SP's terminal will function as host and control of all VC meetings.
4. It will share a live video link with the petitioner who wants to connect to the SP and eventually facilitate the video meeting using that link.
5. Once all police stations are connected, the entire process will be live-streamed/broadcast on Facebook and YouTube using OBS software (open source).
6. Using the VC system, the SP will interact with the petitioners and direct the field officers located at various police stations to resolve the grievances.
7. It will ensure that the web link terminates automatically soon after the meeting concludes.

II. At Police Station/ Circle Office/ Sub-Division Office

1. Reception centres will be set up.
2. Separate staff will be engaged to receive the petitioners.
3. A separate room will be arranged to accommodate the VC system.
4. Brief particulars of the petitioners and their grievances will be noted.

5. Field Officers and the petitioners will be present in the room specified for the video conference.

Role of Field Officers

1. After hearing the petitioners online, their grievance will be endorsed to the field officers concerned for taking necessary actions.
2. The field officers concerned will enquire into the grievance and take appropriate action.
3. After taking necessary actions, the field officers will submit their enquiry reports to the Coordination Cell at the headquarters.

Implementation of *Parivartan*

1. As far as the Appraisal and Review (PAR) system is concerned, monthly crime review meetings at the headquarters evolved into weekly performance review meetings conducted through videoconference.
2. Over 400 personnel, including the head constables and ASIs, participate in video conferences.
3. The IT Team ensures that all police stations and offices are connected to the host (SP) at the headquarters.
4. Since all police stations are connected, the host can interact with all the police stations.
5. All proceedings are automatically saved to make a permanent record.

6.2 .Deliverables

Key deliverables of the project are:

Availability

1. The project ensures immediate and proper response to the petitioners' grievances.
2. Petitioners will not waste their time by visiting the headquarters to redress their grievances.
3. The parties concerned or the petitioners will be able to participate without fear, intimidation or retribution.
4. Clear and transparent procedures, processes and time frames will be adopted.
5. Grievances will be reported in a streamlined and systematic manner.

Accessibility

1. After all police stations are connected, the public can walk into any police station and connect directly with the SP regardless of their residence.
2. The service delivery points increased from 1 to 84, where the public can access the department's superior officer.
3. Citizens beyond the borders will participate in *Spandana* and avail its services using a mobile app.

Accountability and Transparency

1. It will help in transparent enquiry and analysis of grievances.
2. It will provide fast and fair handling of grievances.
3. It will automatically drive the entire grievance procedures, right from its registration to its closure.
4. It will alert the users, i.e., officers, immediately on grievances and their redressal.
5. It will prevent unfair practices and provide an effective mechanism for grievance redressal.
6. It will make the administration accountable and foster equality in the system.

Access to Protection of the Law

1. After implementing *Spandana*, the percentage of women seeking police's services rose from 20% to almost 50%.
2. Now 60% of total complainants connect directly to the SP without going to the police station first.
3. Citizens, especially the poor and people belonging to weaker and backward sections of society, have direct access to the SP. It has broken many socio-economic, socio-psychological and political barriers.

6.3. Stakeholders

Government

Andhra Pradesh is the prime stakeholder for the projects *Spandana* and *Parivartan*.

Public

In terms of numbers, the general public is the largest stakeholder of the project.

Print and Electronic Media

Print and electronic media were involved in spreading awareness about the projects.

NGOs

NGOs have also helped to implement the programme by improving communities' engagements and promoting citizens' participation.

Specific Government Departments

Revenue and a few other government departments have also contributed to the success of the programme.

Technology Platforms

Platforms like Facebook, YouTube, Zoom, and OBS have been used to facilitate operations.

6.4. Related Projects

Initially, the Prakasam district launched *Spandan Live* to interact with police officers in the district. Later, Spandan Live transformed into *Spandana Online* and *Spandana Beyond Borders* to strengthen the system of public grievance redressal system.

Project JIO

Project JIO (Junior Investigation Officers) is a unique capacity-building programme for the ground-level Junior Investigation Officers, i.e., head constables and ASIs. It focuses on their intellectual and psychological capacity-building to make them responsible decision-makers. The project enables the participants to handle the proliferation of cases.

Project TATA

The project TATA (Training And Activities for Technology Adoption) is an extensive programme under *Parivartan*, which aims to train the entire police force of the Prakasam district in technological applications. It aims to train all officers of the district in technology in six months. It would make trained officers proficient users of various police-related, non-police software and technologies.

6.5 Work Plan

Communicating Police Stations/Establishments in Prakasam District

1. The Prakasam district has 84 police establishments divided into five sub-divisions. Each subdivision has 16 to 18 police establishments.
2. Each sub-division has two technically proficient system administrators coordinating the CCTNS project and analysing CDR.
3. A two-day training workshop was held to train participants in handling Zoom video conference.
4. A WhatsApp group called PKM ALL OFFICERS was created to facilitate smooth and secure communications among the SP and all other district officers (including DSsP, SHOs, and CIs).
5. Similarly, another WhatsApp group was created to connect system administrators, computer operators and all participating officers of the district.
6. Andhra Pradesh created *Spandana* to address the public grievances, under which every Monday is scheduled to hear and address the public grievances. It gave the general public access to justice without spending much money and effort.
7. A wide range of awareness programmes was conducted every Saturday to spread awareness among the public to cut the travel to headquarters to meet the SP.

Project Integration Process

1. The IT team in the district headquarters shares the video conferences' details, including meeting IDs, links and passwords, among the IT staff of sub-divisions using the WhatsApp groups.
2. Similarly, they also share the details with all SHOs in the district. A single video meeting could link all offices of the district.
3. The district headquarters acts as a host and monitor the remaining members. Once the meeting concludes, the video meeting link is automatically terminated.



Figure 12: Final Setup of the System

6.6 Conclusion

After walking through all facts and details of the two projects, *Spandana* and *Parivartan*, technology giants, philanthropists and senior officers of some other government departments, concluded that the projects have sustainable potential to redress the public grievances.

The following three case studies are a testimony to the success of project *Spandana* in the Prakasam district for various reasons.

6.7 Three Case Studies on *Spandana*

6.7.1 Case Study-1

Tammisetty Chennaiah (59), S/o Venkateswalru, resident of Vaddepalem (Ongole), belonged to the weaker section of society. She complained to the Superintendent of Police through *Spandana Live*, that her son Tammisetty Anjaiah had been missing for 7 years. Tammisetty Chennaiah has two sons and a 15-year-old daughter. Due to the disappearance of the Anjaiah, his wife Sujatha reached her maternal home in a village named Marrichetlapalem. Later, Sujatha, married her underage granddaughter (not named) with her maternal uncle. After that, the maternal uncle had sexual intercourse with the minor victim girl. Later, Tammisetty Chennaiah, who is the grandfather of the minor victim approached *Spandana Live* and submitted his representation. In this regard, the petitioner, the SHO of Ongole I Town PS, the DSP of Ongole Subdivision and the SP interacted through VC. The SP instructed the above officers to render justice to the petitioner. The SHO of Ongole I town PS registered a case in Cr.No.222/2019 under Section 64 of BNS (earlier Section 376 IPC), Sections 4 and 17 of POCSO Act, and Sections 9,10, and 11 of Prohibition of Child Marriage Act, 2006, and arrested the accused and sent him to remand.

6.7.2 Case Study-2

On 20th January 2020, a 19-year-old woman Mannam Jagathi Bhavya, a native of Muppavaram village of Kondapi Mandal but residing in Birmingham, UK, approached *Spandana Beyond Borders*. She complained that an unknown person created her fake Instagram account on her name, uploaded her photos after morphing them and sent inappropriate messages to some of her friends. The petitioner came to know about the *Spandana Beyond Borders* programme through social media and contacted the Superintendent of Police. The petitioner, the SHO of Kondepi PS, the Inspector of Police of Singarayakonda Circle, the SDPO of Ongole Sub-division and the SP concerned got connected face-to-face and interacted through VC. The SP instructed the above officers to render justice to the petitioner. Immediately, the SHO of Kondepi PS sent a requisition on 28th January 2020 to delete her fake Instagram account of the petitioner.

6.7.3 Case Study-3

Katikaala Jeevan Kumar S/o PeddaDevayya, a 33-year-old Indian Army Naik from 102 Regiment, Tejpur, Assam State, belongs to a weaker section of the society and is a native of Kalanuthala village of Peddaraveedu Mandal. Using

Katikela Nagamma and his relative Chilaka Yohan fell on the road in a drunken state. Noticing that, the petitioner approached and lifted Yohan. The accused Chilaka Raju, S/o Yohan, reached the spot and misunderstood that the petitioner had beaten up Yohan and hit the petitioner with stones, resulting in injuries. Elders from the village held a panchayat meeting and settled the problem. Two days later, while the petitioner was away on his duty in Assam, the accused attacked the petitioner's wife. Since the petitioner's wife had infants at home, she couldn't go to the police station. But she informed her husband. Over *Spandana Beyond Borders*, the petitioner, the SHO of Peddaraveedu PS, the Inspector of Police Markapur Circle, the SDPO of Markapur, and the SP connected and interacted face-to-face through VC. The SP instructed the above officers to render justice to the petitioner. The SHO of Markapur PS registered the case against the accused and proceeded as per law.