

Government Digital Transformation

The Ministry of Panchayati Raj's

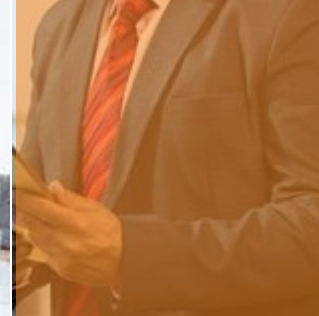
Panchayat Sammelan

on

Ease of Living: Enhancing Service Delivery at Grassroots

by:
Kamal Das, Dean,
Wadhvani Center for Government Digital Transformation (WGDT)

Hyderabad 22nd Oct 2024





Introduction

Impact

8,000+

Government officials
(Centre & State)
trained in 2 years

175+

Batches for our
workshops in 11
states

5 Lakhs+

Officials have
completed course on
iGOT

450+

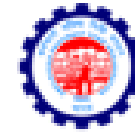
Validated ideas

15+

Projects in 2023

30 +

Partners within Gol and States



EPFO, Ministry of Labour



Haryana Institute of Public Administration



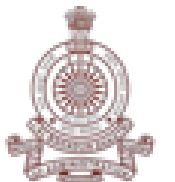
Himachal Pradesh
Institute of Public Administration



ASCI Hyderabad



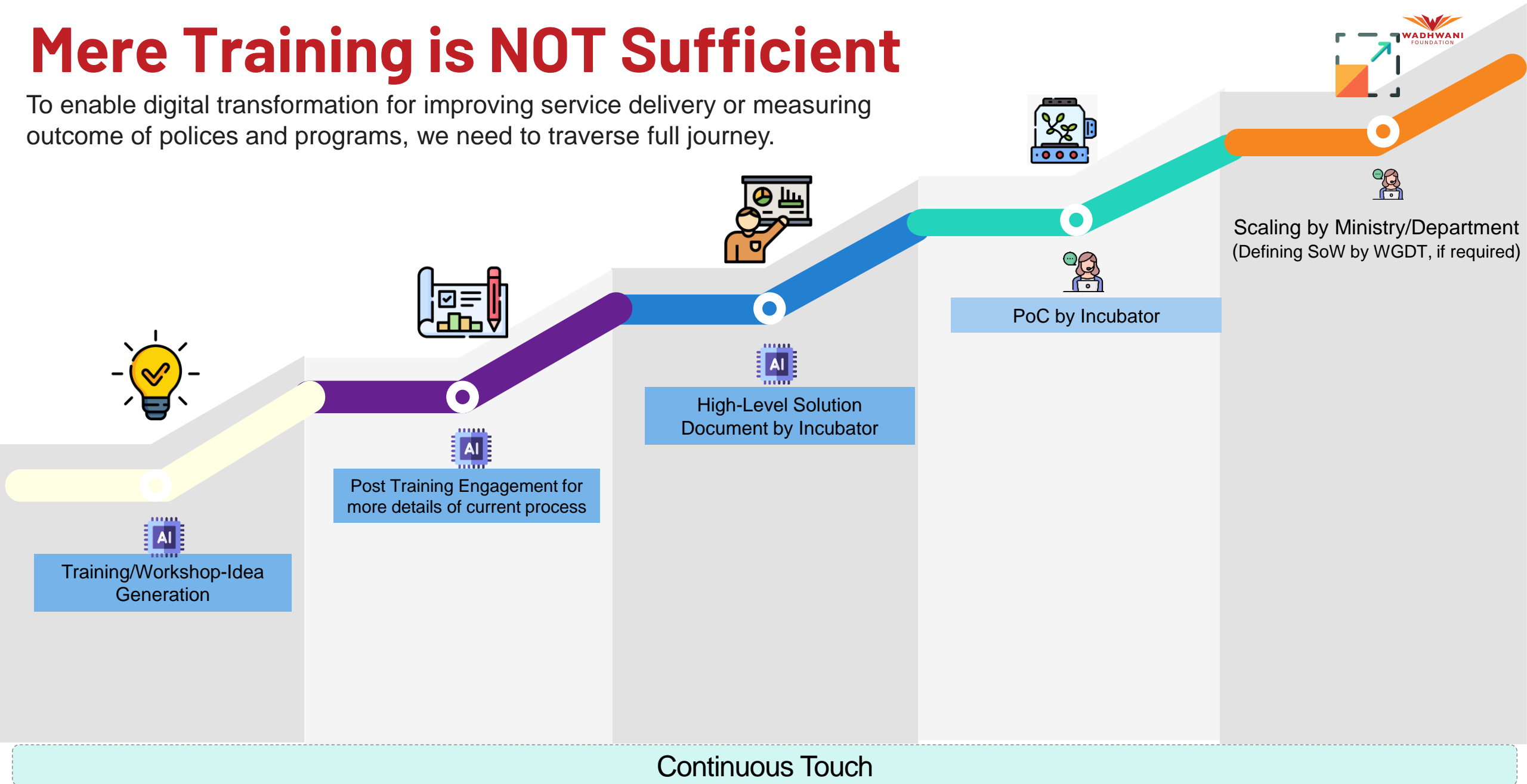
ATI, West Bengal



LBSNAA, Mussoorie

Mere Training is NOT Sufficient

To enable digital transformation for improving service delivery or measuring outcome of policies and programs, we need to traverse full journey.



COURSE

Introduction to Emerging Technolo...

The 'Introduction to Emerging Technologies' course is focused on helping learners ...

LEARNING HOURS: 2h 21m

COURSE

Data Driven Decision Makin...

In the current climate of a pandemic, governments need data more than ever

2h 30m 57 %

COURSE

Blockchain for Secure and ...

Namaskar and welcome to the course on Blockchain for Secure and Trusted

2h 40m 10 %

COURSE

ChatGPT and Generative AI tools for...

By Wadhvani Found...

0% 1h

Start

COURSE

AI for Digital Transformatio...

We are thrilled to present an exclusive course on AI for Digital

1h 30m 0 %

Course 1 – [Introduction to Emerging Technologies](#)

Course 2 – [Data Driven Decision Making](#)

Course 3 – [Blockchain for Secure and Trusted Records](#)

Course 4 – [AI led Digital Transformation in Healthcare](#)

Course 5 – [AI led Digital Transformation in Agriculture](#)

Course 6 – [ChatGPT and Generative AI tools: An Introduction](#)

Course 7 – [AI for Digital Transformation: Machine Learning and Deep Learning](#)

Course 8 – [AI for Digital Transformation: Computer Vision](#)

Course 9 – [ChatGPT and Generative AI tools for Government Officials](#)

To learn about application-based use cases on emerging technologies visit:

[WITP Digital Library](#)

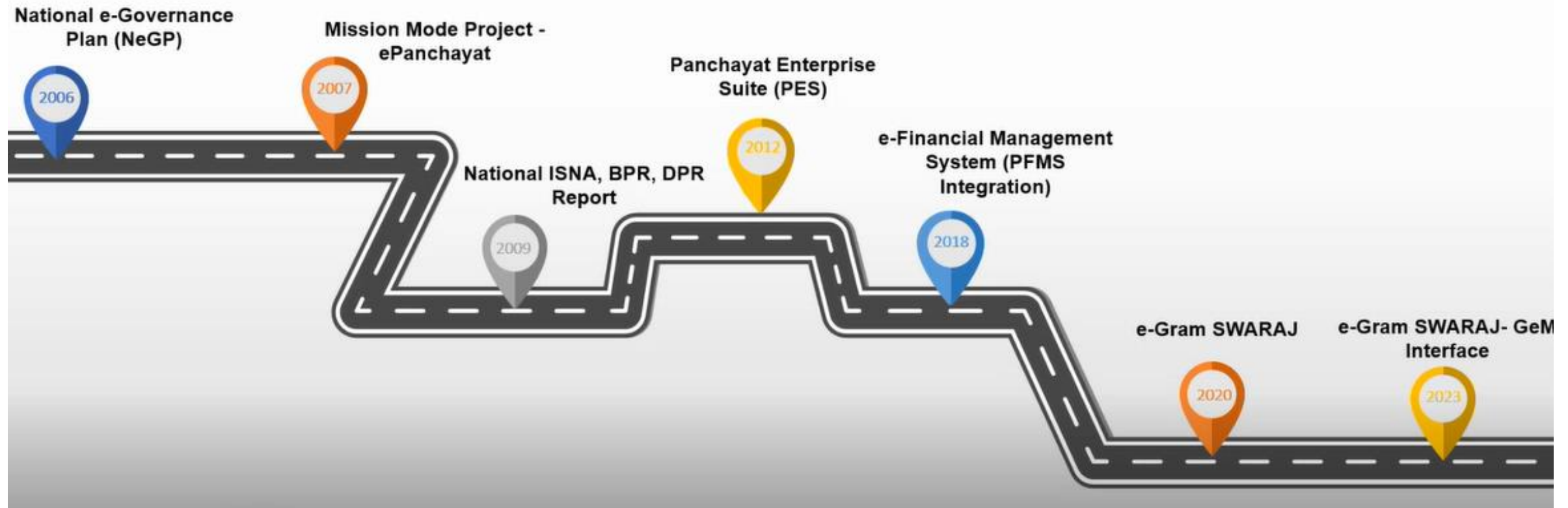
[WITP YouTube Channel](#)



The Ministry of Panchayati Raj's Digital Transformation Journey


Journey of e-Panchayat


Transforming the functioning of PRIs making them more transparent, accountable and effective as organs of decentralized self-governing institutions




e-Gram Swaraj: the Base for Digital Transformation

GOVERNMENT OF INDIA | MINISTRY OF PANCHAYATI RAJ Languages Screen Reader Access Home Login

 **eGramSwaraj**
Simplified Work Based Accounting Application for Panchayati Raj



To strengthen e-Governance in Panchayati Raj Institutions (PRIs) across the country, Ministry of Panchayati Raj (MoPR) has launched eGramSwaraj, a user friendly web-based portal. eGramSwaraj aims to bring in better transparency in the decentralised planning, progress reporting and work-based accounting.

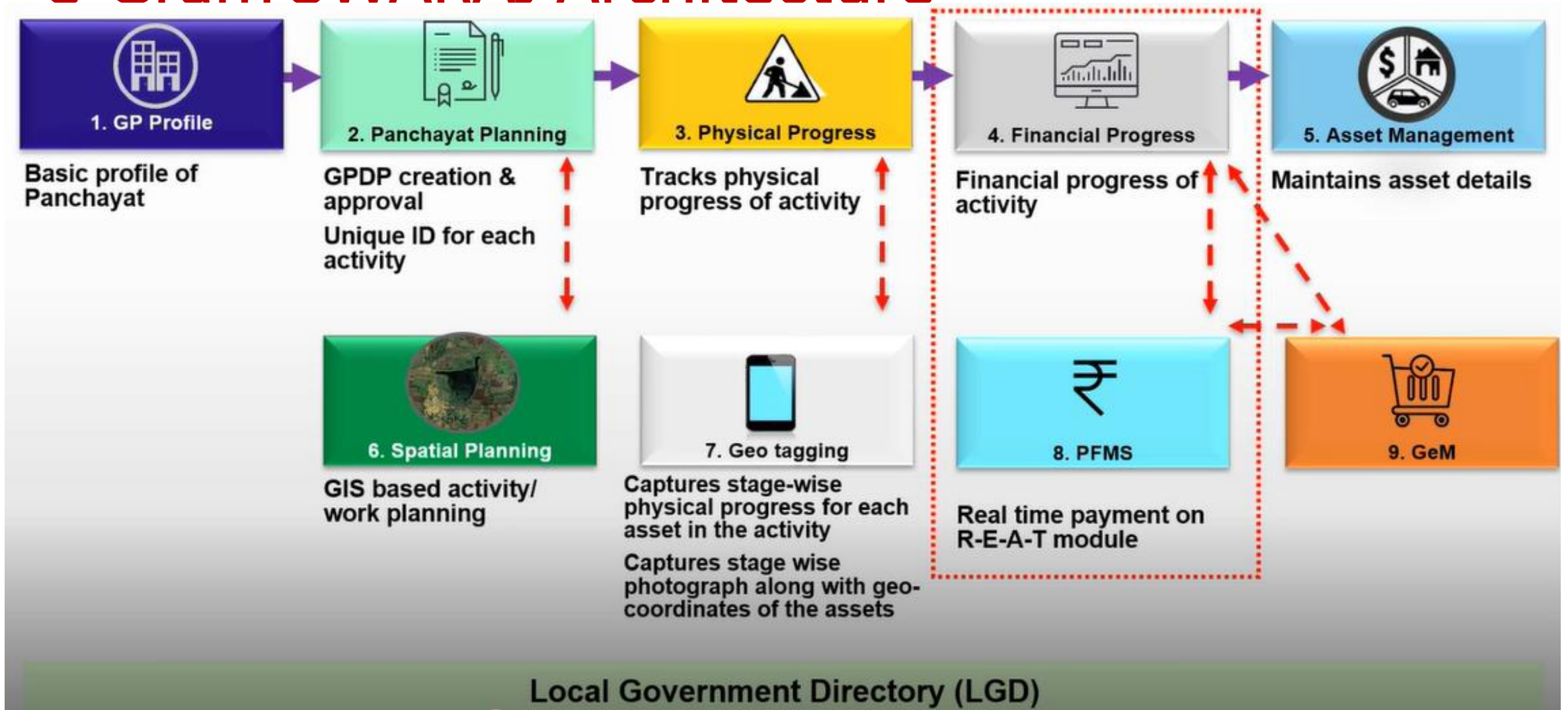


LATEST UPDATES Swachh Sujal Shakti Samman Analytical Dashboard Activity Delegation and Fund Transfer functionality Display of Beneficiary d

Swachh Survekshan Grameen 2023 Bank Performance Bank Wise Pending Details Theme Activity Master IMD Data

Plan, Activity and Payment are in sync

e-Gram SWARAJ Architecture





Large Scale Mapping
using Drones



Data Processing &
Feature Extraction



Spatial Databases- Street,
vegetation, building,
integrated data

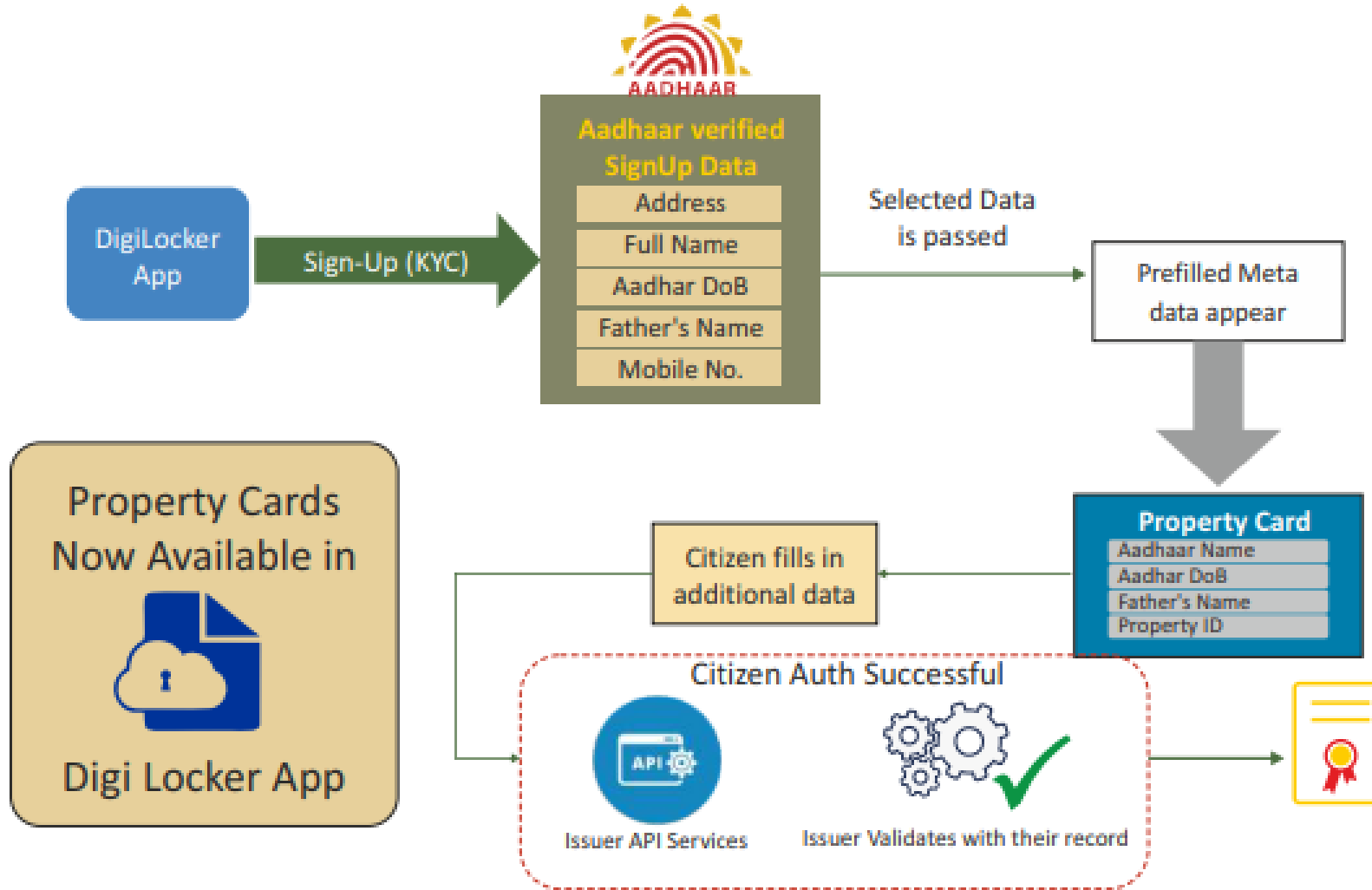
- Indian cities are experiencing an accelerated pace of growth since independence and are now emerging as hubs of domestic and international investments
- This has created opportunities for Government and administration to utilize GIS databases for better planning and management of rural and urban areas
- The GIS attributes database created through drone survey in SVAMITVA scheme will serve as a powerful tool for better planning and creating sustainable villages

Leveraging the Spatial Database

SVAMITVA

Survey of Villages and Mapping with
Improvised Technology in Village Areas

Use of DPI for Improving Citizens



SVAMITVA

- **Objective:** To provide a clear record of property rights to rural landowners, enabling them to use their land as a financial asset.
- **Key Features:** Drone-based survey, issuance of property cards, and integration with digital platforms

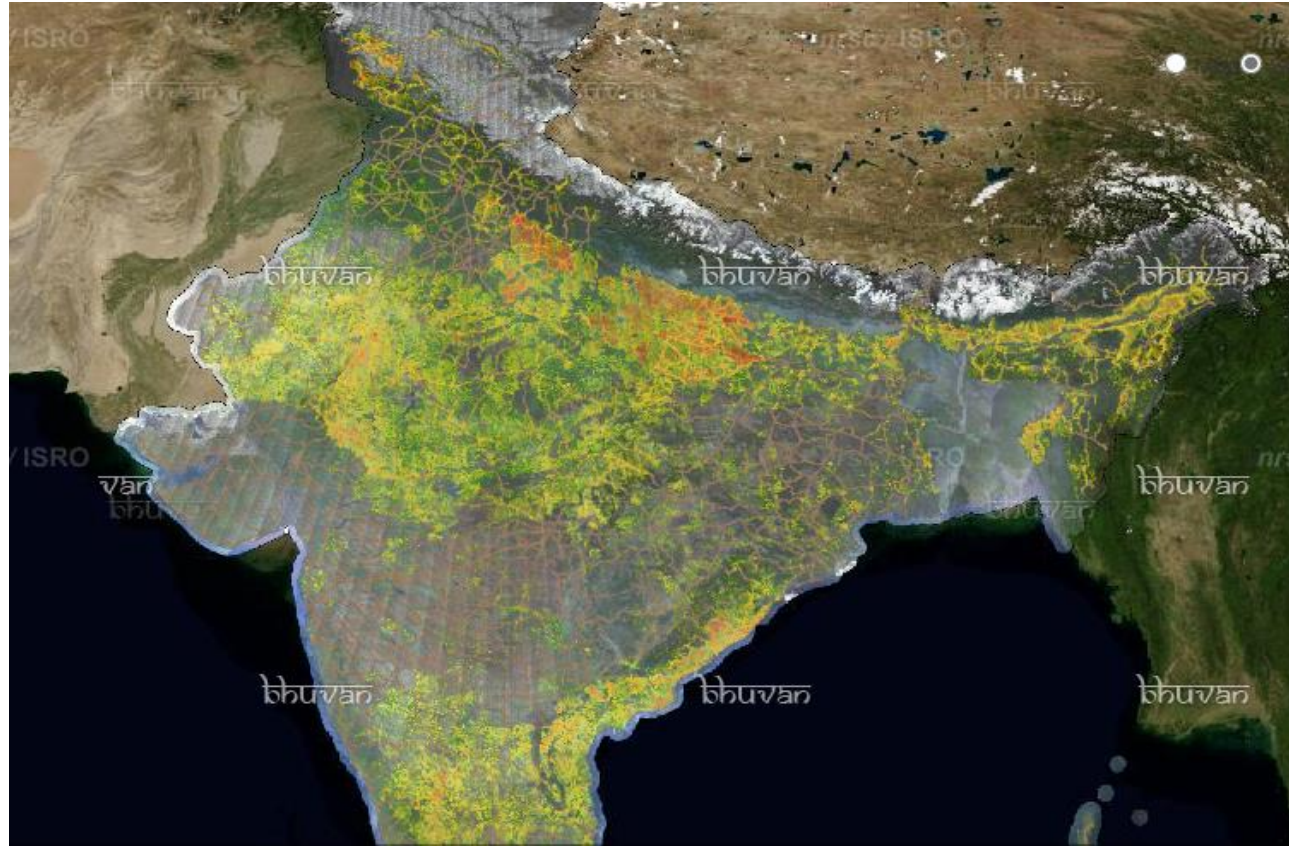


**Data Analytics:
Every Dataset has a story in it.**

Service Delivery at Gram Panchayat

#	State	Number of Gram Panchayats/ TLBs	Total Services Identified	Birth Certificate	Death Certificate	Residence Certificate	Marriage Certificate	MGNREGA Related Services	Construction Permit	TPDS Related Services	Total
1.	Andhra Pradesh	13,371	45	Y (Online)	Y (Online)	Y (Online)	Y (Online)	Y (offline)	Y (Online)	Y (Online)	7
2.	Assam	2,666	42			N		Y (offline)			1
3.	Bihar	8,135	8	Y (Online)	Y (Online)	Y (Online)	Y (Online)	Y (offline)		Y (Online)	6
4.	Goa	191	19	Information not available	Information not available	Information not available		Information not available	Information not available		0
5.	Gujarat	14621	56	Information not available	Information not available	Information not available	Information not available	Information not available	Information not available	Information not available	0
6.	Haryana	6225	34					N		N	0
7.	Himachal Pradesh	3615	42	Y (Online)	Y (Online)	Y (Online)	Y (Online)	Y (offline)		Y (Online)	6
8.	Karnataka	5971	36	Y (Online)	Y (Online)		N	Y (offline)	Y (online)		4
9.	Jharkhand	4345	40	Y (online)	Y (online)		Y (online)	Y (offline)			4
10.	Kerala	941	0	Y (online)	Y (online)	Y (online)	Y (online)	Y	Y (online)	Y (online)	7
11.	Jammu & Kashmir	4291	23	Y (Online)	Y (Online)	Y (Online)	Y (Online)	Y (offline)	Y (offline)	N	6
12.	Madhya Pradesh	22741	121	Y (Online)	Y (Online)		Y (Online)	Y (offline)	Y (offline)	Y (Online)	6
13.	Maharashtra	27898	9	Y (Online)	Y (Online)		Y (Online)	Y (offline)			4
14.	Nagaland	1299	12	N	N			Y (offline)		N	1
15.	Sikkim	185	7	N	N	N	N	Y (offline)	Y (Offline)	N	2
16.	Tamil Nadu	12525	44					Information not available	Information not available		0
17.	Tripura	1219	5	Y (online)	Y (online)	Y (online)		Y (offline)			4
18.	Uttar Pradesh	58189	33	Y (online)	Y (online)			Y (offline)			3
19.	Uttarakhand	7791	48	Y (online)	Y (online)	N	N	Y (offline)	N	Y	4
20.	West Bengal	3340	75	Y (online)	Y (online)	Y (offline)		Y (offline)	Y (online)		5
	Total	199,559	699	13	13	7	8	16	7	6	

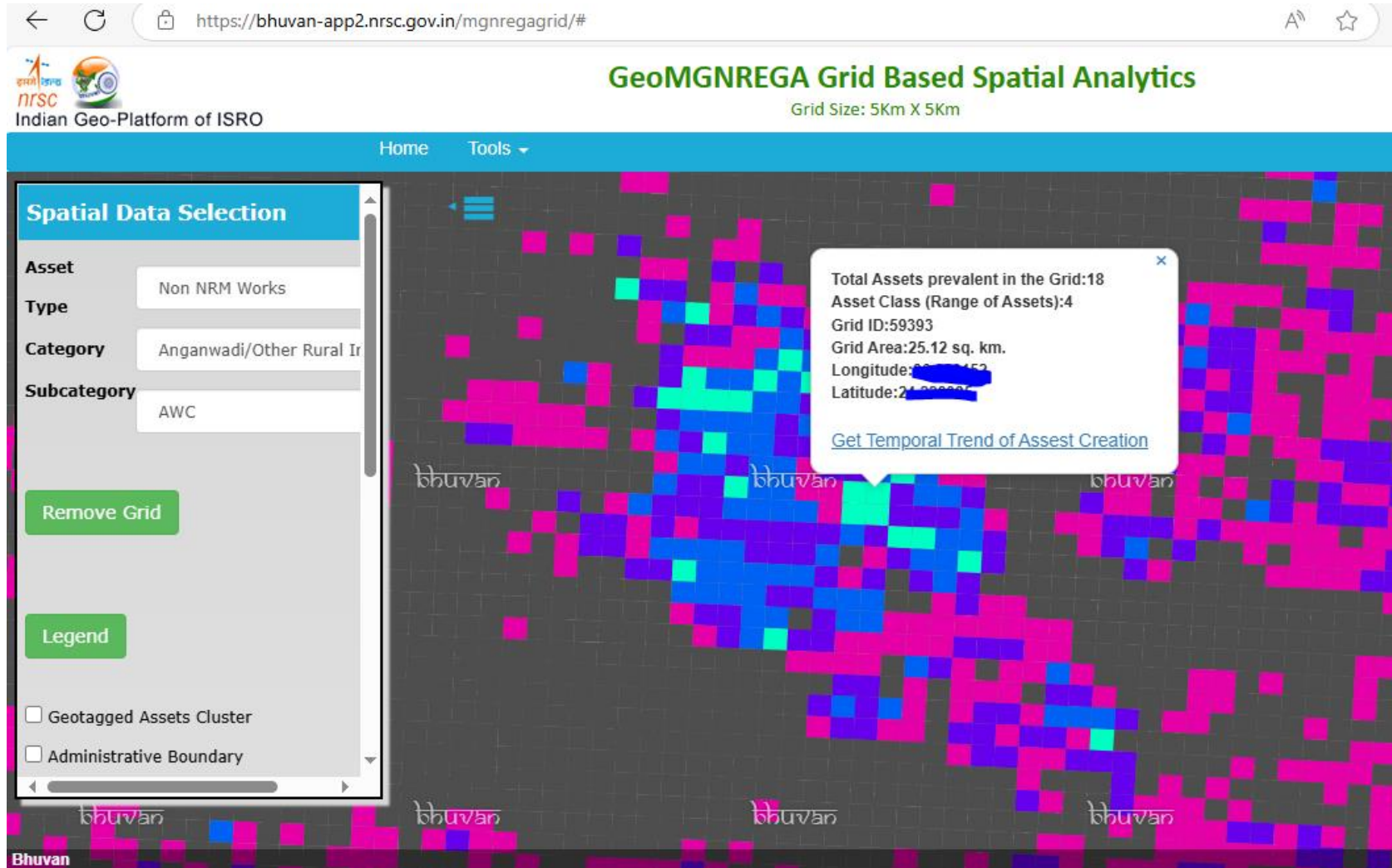
Using Data Visualization for Planning Purposes: Mapping MGNREGA Infrastructure



GeoMGNREGA Grid Based Spatial Analytics Grid Size: 5Km X 5Km

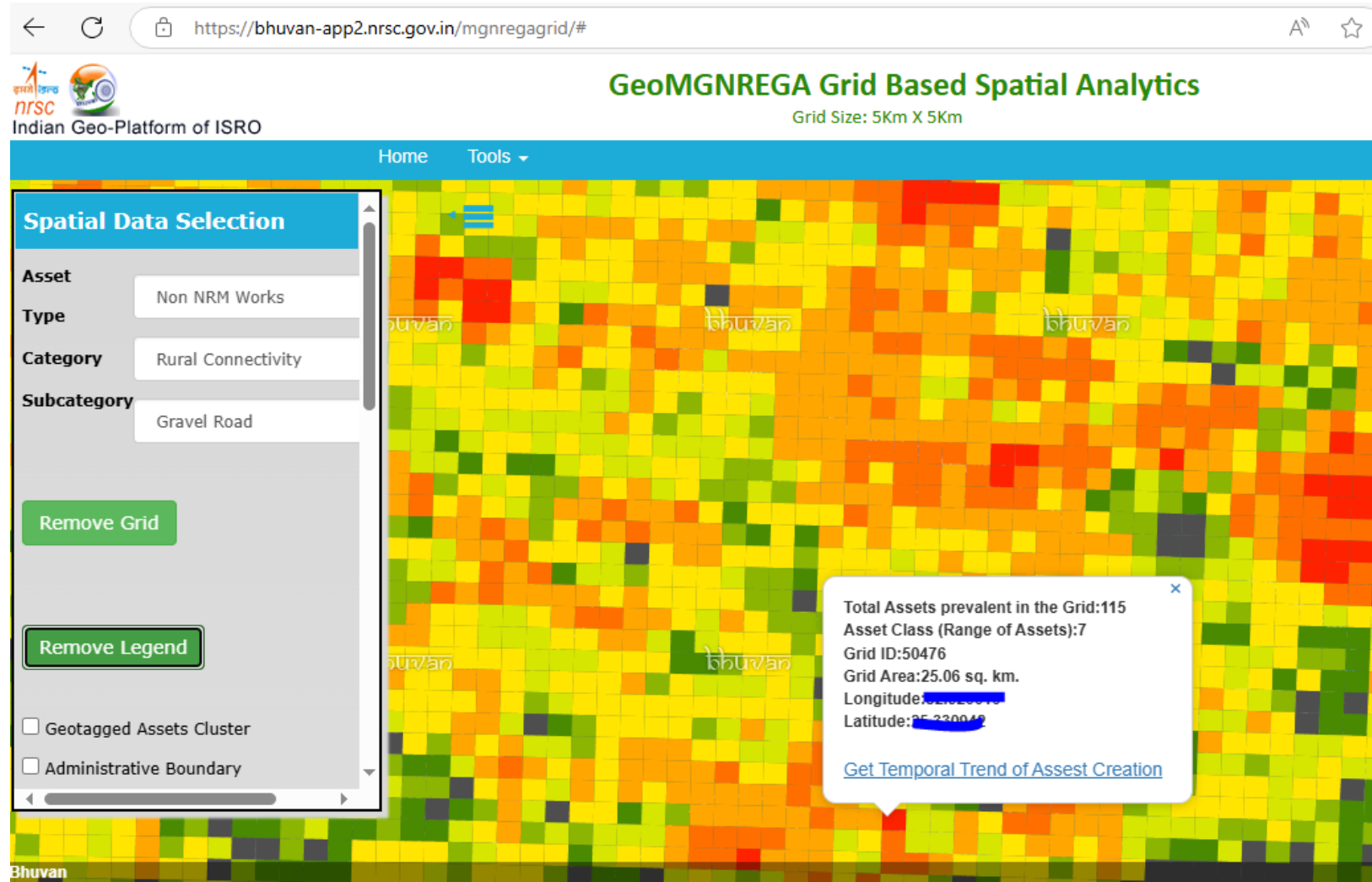
<https://bhuvan-app2.nrsc.gov.in/mgnregagrid/>

Anganwadi Centre constructed using MGNREGA funds



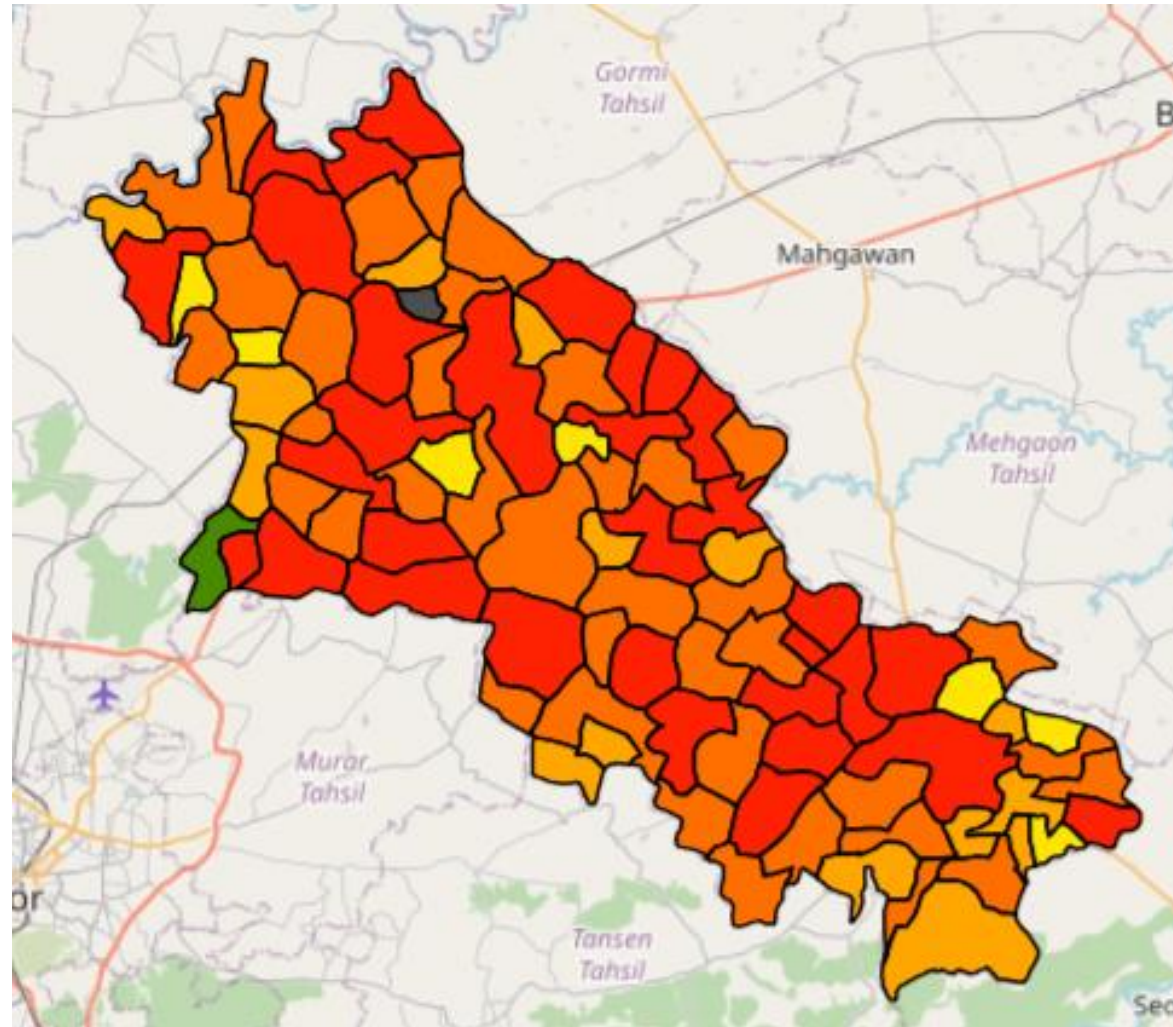
Color	Class	Range of Assets
Black	0	0
Magenta	1	1 - 2
Blue	2	3 - 5
Red	3	6 - 10
Green	4	Above 10

Rural Gravel Roads constructed using MGNREGA funds



Color	Class	Range of Assets
Dark Grey	0	0
Dark Green	1	1 - 2
Light Green	2	3 - 5
Yellow-Green	3	6 - 10
Yellow	4	11 - 25
Orange	5	26 - 50
Dark Orange	6	51 - 100
Red	7	Above 100

Panchayat Level Geospatial Maps with Assets and Saturation levels?



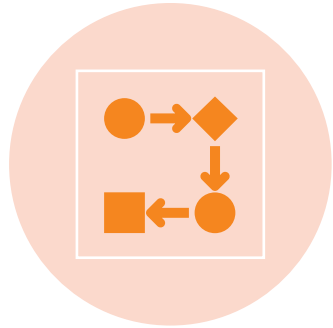
at Panchayat Level

<http://mlinfomap.co.in/wf-mng/analysis.aspx>

Leveraging AI to Leapfrog



Leap Frog for Enhancing Service Delivery at Grassroots



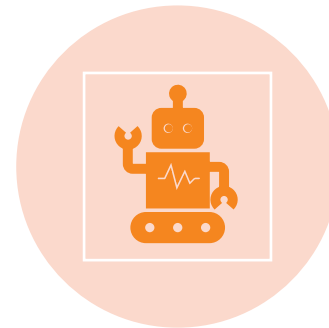
Collaborative Learning: Share and adopt best practices while learning from each other's experiences. Leverage collective knowledge to prevent repeating past errors.



Begin with Digital Transformation: Prioritize digitization and making all relevant data accessible online. Ensure the accuracy and reliability of data for effective service delivery.



Data-Driven Decision Making: Utilize high-quality data to make informed, impactful decisions.



Harness the Power of AI: Use AI and Generative AI technologies, such as ChatGPT, to deliver next-generation services.

Distribution of workdays for MGNREGA

- MGNREGA provides a legal guarantee of **100 days of employment per year** to every adult member of a rural household who is willing to do unskilled manual labour.
- We have noticed variation of the number of days worked by different adults within the village with some getting over 100 days and some not even getting 20 days of work
- AI can be used to make automated real-person like phone (voice) calls to adults registered with MGNREGA in their mother tongue (regional language) to seek interest in the next job based on the number of days worked

Financial Management for Panchayats

- AI tools can quickly analyze financial reports in high volumes, flagging irregularities in invoices, payments, property assessments, and the use of grant money.
- AI and GenAI tools can simplify budget-variance analysis, reduce costs by automating RFP and RFI creation, assist with writing budget narratives for internal and public consumption, and help governments respond to Right To Information Act requests and citizens' spending questions.
- Mt. Lebanon, Pennsylvania, a suburb of Pittsburgh, uses an AI-enabled platform to code and process invoices, reducing standard turnaround times from a week to one or two days. [AI-Enabled Automation Streamlines Local Government Finance \(govtech.com\)](https://www.govtech.com/news/ai-enabled-automation-streamlines-local-government-finance)

AI and RPA for Automating Routine Tasks & understanding grassroots concerns

- AI can automate administrative tasks such as data entry, processing applications, and managing records. This reduces the workload on local officials and speeds up service delivery.
- In the Philippines, local officials depend on an AI system to analyze news and social media in both Tagalog and English, which helps them understand the public's development priorities. This helps to identifying community-specific development issues that traditional surveys missed
- Public participation platforms such as Go Vocal (formerly CitizenLab) and Polis use AI systems when working with local governments to solicit, analyze, and respond to feedback. Large language models help decision-makers see how opinions can shift from one neighbourhood to another.
- Source: [Go Vocal: your next digital community engagement platform](#)

Voice/Chatbot for Government Schemes

- **Improving Public Services** :AI chatbots and virtual assistants provide 24/7 support to citizens, answering queries related to government services, health, and education. This ensures that even remote areas have access to essential information.
- Jugalbandi Whatsapp and Telegram bots, built in collaboration with [MyScheme](#) that help citizens understand their rights and the application process for over 50 government schemes



Feedback of Panchayati Raj Services

- AI can be used to make automated calls to collect voice-based feedback in regional languages
 - The Panchayat can use AI to automate feedback collection (voice calls in regional languages) from citizens, ensuring that policies are more aligned with community needs. This approach is being implemented globally to enhance transparency and engagement in decision-making processes
- Source:
 - [WEF_Governance_in_the_Age_of_Generative_AI_2024.pdf \(weforum.org\)](#)
 - [Role of AI technology in Government and public sector | EY India | EY - India](#)



Multilingual support

- In India, Bhashini and AI4Bharat help create better translation between Indian regional languages than even Google Translate or ChatGPT
- Phoenix, Arizona created myPHX311, a web portal and app that answers common questions in both Spanish and English and connects people to local agencies for additional help. First designed to give faster access to the city's payment portal and its water and waste disposal services, myPHX311 is now also an easy way to request various public records, start or stop water service, and report graffiti, streetlight outages, property violations, and more
- Dearborn, Michigan, is exploring the use of AI translation tools to help its Arab and Hispanic populations use the city's website.
- The town of Reading, Massachusetts, uses a GenAI system to create most of its public-facing communications, including press releases.



Appendix

Kisan eMitra, Vistaar & Kissan AI



https://chatbot.pmkisan.gov.in/Home/Index

किसान-एमित्र

हिंदी - ?

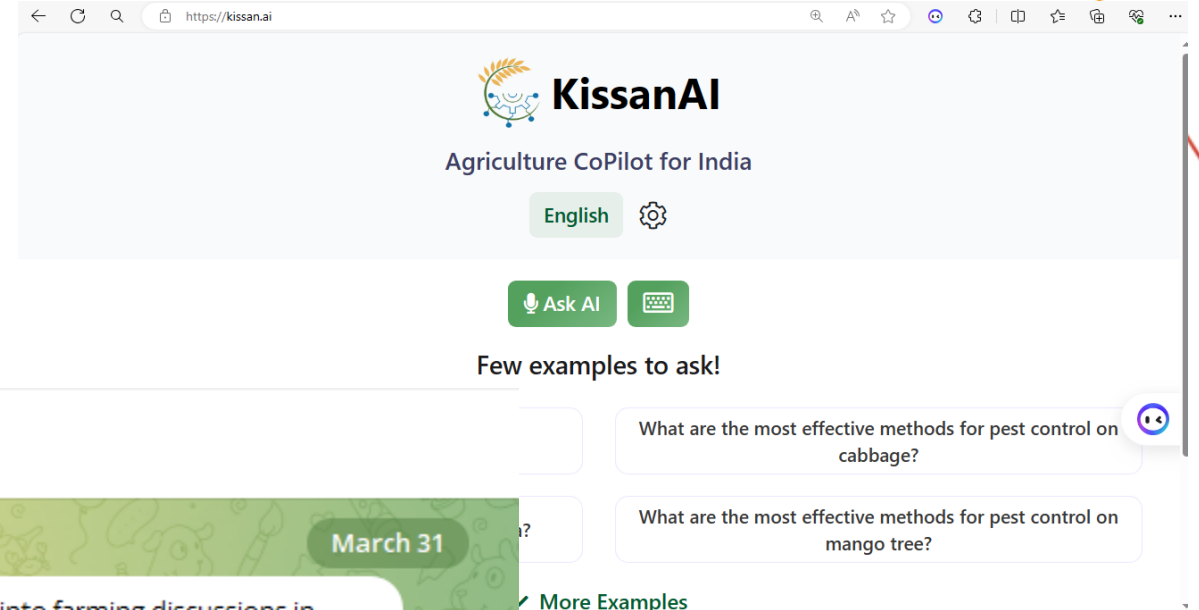
किसान-एमित्र में आपका स्वागत है! मैं आपका डिजिटल सहायक हूँ। कृपया मुझे बताएं कि मैं आपकी कैसे मदद कर सकता हूँ? आप अपनी पसंदीदा भाषा में जवाब के लिए भाषा का चयन कर सकते हैं।

हिंदी भाषा का चयन करने के लिए धन्यवाद।
प्रिय साभार्यो,
अपना प्रश्न टाइप करें या माइक बटन का उपयोग करके बोलें। बस माइक बटन को स्पर्श करें और अपना प्रश्न कहें। रिकॉर्डिंग बंद करने के लिए फिर से माइक बटन को स्पर्श करें।


पीएम किसान पर किसानों के लिए ई-KYC के विभिन्न तरीके क्या प्रदान किए गए हैं? PM Kisan में E-KYC क्या है? क्या किसान का आधार विव

अपना प्रश्न पूछें

Powered by Sunbird UCI | BHASHINI



https://kissan.ai

 **KissanAI**
Agriculture CoPilot for India

English ⚙️

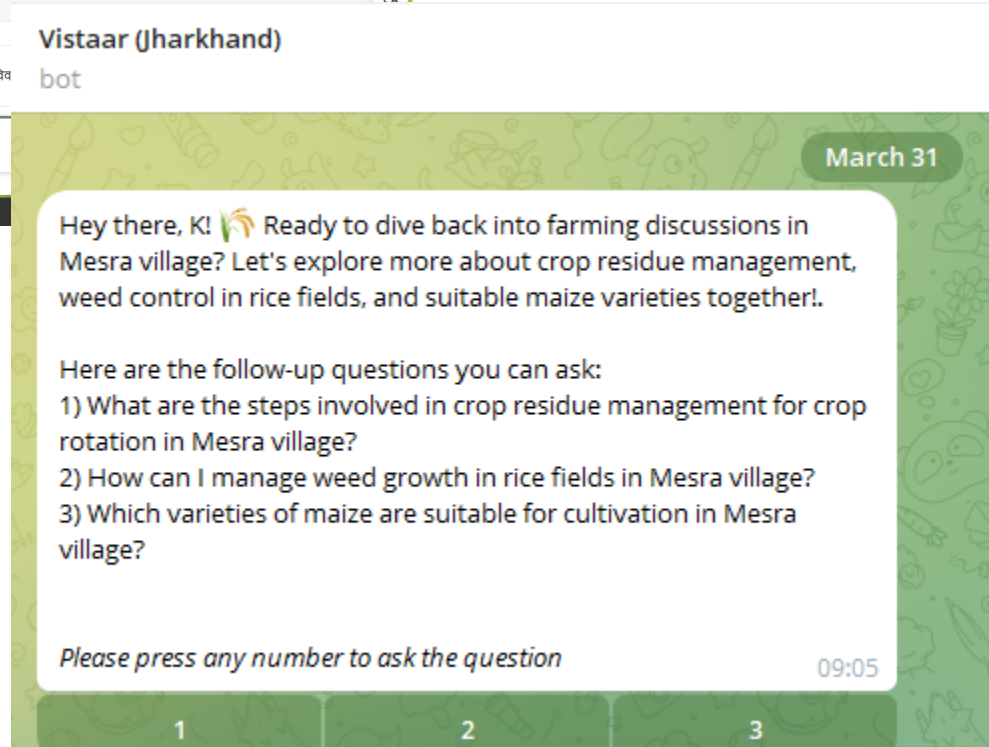
Ask AI 🗣️

Few examples to ask!

What are the most effective methods for pest control on cabbage?

What are the most effective methods for pest control on mango tree?

More Examples



Vistaar (Jharkhand)
bot

March 31

Hey there, K! 🌾 Ready to dive back into farming discussions in Mesra village? Let's explore more about crop residue management, weed control in rice fields, and suitable maize varieties together!.

Here are the follow-up questions you can ask:

- 1) What are the steps involved in crop residue management for crop rotation in Mesra village?
- 2) How can I manage weed growth in rice fields in Mesra village?
- 3) Which varieties of maize are suitable for cultivation in Mesra village?


Please press any number to ask the question

09:05

1 2 3

Homework to Work.

How do we use GenAI in the Government

Basic Information Gathering: 


- Research assistant
- Personal assistant

1

Conversational Agent: 

- Chatbot
- Call centre agent

2

Analyse Data, Documents: 

- Summary creation (of large docs)
- Analyse data in csv/excel and create graphs

3

Productivity Tool: 

- Co-pilot for Excel/Word/Outlook
- Dashboard reader
- Doctor's assistant

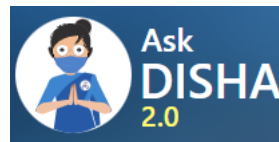
4



- [ChatGPT](#)
- [ChatGPT Plugins](#)
- [Be My Eyes](#)
- [GPT-4 Launch](#)



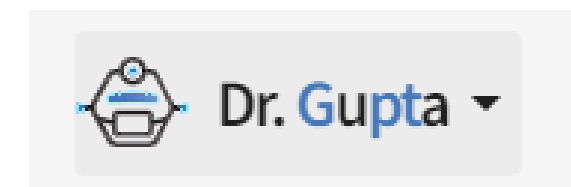
 **Kissan GPT**
[AI Agricultural Assistant](#)



Claude
ChatGPT Plus
ChatPDF



- [Excel Copilot](#)
- [PowerPoint Copilot](#)
- [Word Copilot](#)



Homework to Work.

How do we use GenAI in the Government

Decision Support System:



- Analyzing and summarizing complex datasets
- Analyzing policy documents, identifying trends, and predicting potential outcomes

5

Training and Education:



- Design interactive and personalised training modules
- Collaboration and brainstorming: LLM could provide suggestions, insights, and even alternative approaches

6

Office:



- Translation and multilingual communication
- Legal and regulatory compliance

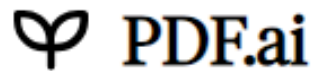
7

Creative Writing:



- Speech drafting
- Email reply drafting
- Improving language
- Content generation

8



[Monic.ai](https://monic.ai)



<https://anuvaad.bhashini.gov.in/>

Build an Itinerary for a City



Dr. Gupta ▾



Thank you

If you have questions, get in touch with

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