BRIEF ON VoICE's SMART INTELLIGENT VILLAGE THAT IS DRAWING GLOBAL ATTENTION at ITU, EUROPEAN SPACE AGENCY EU and UK.

Voice of Indian Communication Technology Enterprises (VoICE), a telecom industry society supporting domestic design led solution has successfully implemented the First **Smart Intelligent Village** Pilot Project in the country at Satnavari, Nagpur Rural, Maharashtra in India. **This village was inaugurated by Honorable Chief Minister of Maharashtra, Shri Devendra Fadnavis on 24th Aug 2025. It is a first such initiative in country and possibly the first of its kind globally with 18 solutions integrated under one umbrella.**

Smart Intelligent Village is harnessing potential of IoT devices and Artificial Intelligence for measuring Soil health, NPK (Nitrogen, Phosphorus, Potassium) levels in soil, Drones for fertilizers & pesticide spraying based on soil parameters, Water quality, Animal healthcare (Cow Heat, BP period etc.). Smart Education, Smart Healthcare, Surveillance, Disaster Management Public address announcement, Wi-Fi coverage of the village, Waste management, PM Vani, and other use cases are transforming even education and health sectors at grassroot level. These solutions are delivered by India's Startups under VoICE consortium.

Smart Intelligent Village Project is conceptualized by Director General, VoICE after going through the ITU-T Recommendation Number Y.4218 on Smart Services in Rural Communities Villages from International Telecommunication Union (ITU), a specialized agency of the United Nations headquartered in Geneva, Switzerland. The ITU coordinates global networks, manages radio spectrum and satellite orbits, and develops technical standards, particularly through the ITU Telecommunication Standardization Sector (ITU-T).

Recent economic survey released by Government of India recognized Smart Intelligent Village initiative of Maharashtra Government. Para 13.33 mentioned "Technologies can be leveraged holistically to support rural development, enhancing quality of life, strengthening local economies, and empowering communities. For example, in Satnavari Smart Village, Maharashtra, farmers receive AI powered alerts on Soil, crops and weather conditions. Smart irrigation operates on solar energy with predictive insights, while shared community drone spraying of fertilizers and dashboards ensure transparent governance. Students can learn from AI-driven modules and digital labs, and villagers can access instant telemedicine and e-health records."

On 6th March 2026, Honorable Chief Minister of Maharashtra, Shri Devendra Fadnavis ji presented budget for Maharashtra state and has announced setting up of 75 AI Smart Intelligent Villages in the first phase of commercial deployment.

Smart Intelligent Village initiative leverages fibre network of Government of Maharashtra and Indian Government and acts as backbone for connecting various IoT devices, healthcare system, Smart Education etc. Using this backbone, secured WiFi network is made available in village for governance and internet access to students and farmers.

We believe Smart Intelligent Village initiative will boost the rural economy and Maharashtra's GDP could grow by at least 4% to 5% over the next three years. This project has drawn attention of various state Governments as well as central Government and we will see replication of Maharashtra model across country in next 3-4 years. Even globally interest from some developed countries is also observed.

Following Use Cases have been deployed by 25 "Make-in-India" Companies under VoICE consortium at Satnavari:

- Smart Agriculture
  SmartKheti: An IOT based system to improve farm yield, save water by 35%, save labour by 50% and provide several value-added services through mobile application

- Health and Medicine
  - Teleconsultation with Doctor through Video calls. Further consultation with specialist Doctor on call for expert advice. All records of health and treatment are stored in database.
  - Health POD for 123+ tests in few minutes and further teleconsultation by PHC or Specialist.

- Smart Education through Smart Class Room
  - Digital Anganwadi: Indian Tech, Ai Tools & Experience
  - Smart School: Smart interactive panel for 360-degree learning

- Rural Drinking Water Supply & Quality Monitoring
  Real-time monitoring of water quantity—meeting the government's mandate of 55 litres per capita per day (LPCD)—and continuously checks key quality parameters like TDS and pH

- Smart Cattle Management:
  Continuous monitoring of vital parameters: body temperature, heart rate, movement, and activity patterns. Oestrus cycle prediction for timely artificial insemination and herd management

- Public Protection & Disaster Relief:
  Public Announcements and alerts in case of any emergency / awareness

- Climate Smart Agriculture
  For net zero agriculture and natural farming

- Security Surveillance
  Surveillance through intelligent cameras

- Smart Lights:
  Sensor-based smart lighting that automatically turns on when people or vehicles are detected. This feature reduces electricity consumption and enhances safety.

- Drone Services:
  Spraying fertilizers and pesticides

- Smart Pond for fisheries:
  To Regulate dissolved oxygen in Fishery ponds for improvement in productivity

- Wi-Fi Hotspots:
  Creating Network throughout the Village for connecting various devices and proliferating internet

- Mast with cabin:
  Fast deployable static backbone solution that enables advanced technologies and provides fully equipped workspace

- Smart Kendra
  For delivery of various Government services at village level

- Smart Waste Bin
  For monitoring waste collection and alerts

- Fire Safety
  Fire diffusion using fire extinguishing balls. These small balls can be dropped using Drone.

After the success of Pilot Project, many more are now likely to be supported by State Governments, Indian Government and Private Sector. Interest from ITU Regional teams in Asia as also from developing and developed countries and implementation will support the growth of rural communities globally. Any support required by VoICE for MAKE IN INDIA initiatives can be made available wherever required.

Many of our members are in the fully designed DRONES including Chips, Controller, Software, Encryption Cryptography, surveillance etc also.