Convergence of Space and IT for National Development

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Indian Space Programme: Vision

Providing space-based technologies for the benefit of common man

...we should be second to none in the applications of advanced technologies to the real problems of Man and Society

Dr. Vikram Sarabhai
In Tune with Sustainable Development Goals (SDGs) envisaged by the Government

**SPACE APPLICATIONS VERTICALS**

**SOCIO ECONOMIC SECURITY**
- Food
- Water
- Energy
- Health
- Shelter
- Infrastructure
- Information

**SUSTAINABLE DEVELOPMENT**
- Impact Assessment
- Resources Conservation
- Ecosystem Management
- Climate Change Impacts
- Geo-sphere Bio-sphere

**DISASTER RISK REDUCTION**
- Preparedness
- Early Warning
- Response
- Recovery

**GOVERNANCE**
- Planning
- Monitoring
- Evaluation
- Decision Support
Information to User Community/Fishing Community
Weather Forecast
Governance

SERVICE
Disaster, Weather, Fishing
NAVIC, GAGAN

MONITORING
BHUVAN, MOSDAC, PROJECTS

Alert Message Delivery using NAVIC
User upload message to web server
Message transmission to satellite
Identified User decodes messages through msgID
Geo-fencing App
- Alert message to fishermen from crossing international boundary

Registered users: > 1.5 lakhs
Download: > 1 TB per month

Disaster/Cyclone Warning
Support to Tsunami Warning Centre
Communication support using INSAT
Coastal zone high resolution DEM using ALTM

Data Relay Transponder

SHIP TRACKING

VEHICLE TRACKING

Time Synchronization
WAY FORWARD

- Improving synergistic use of satellite communication observation
- Use of geospatial techniques in different areas
- Sustainable development
- Enhancing capabilities
- Security (food, water, energy)
- Improving delivery of geospatial information
- Sustainable development
- Early warning
Thank You