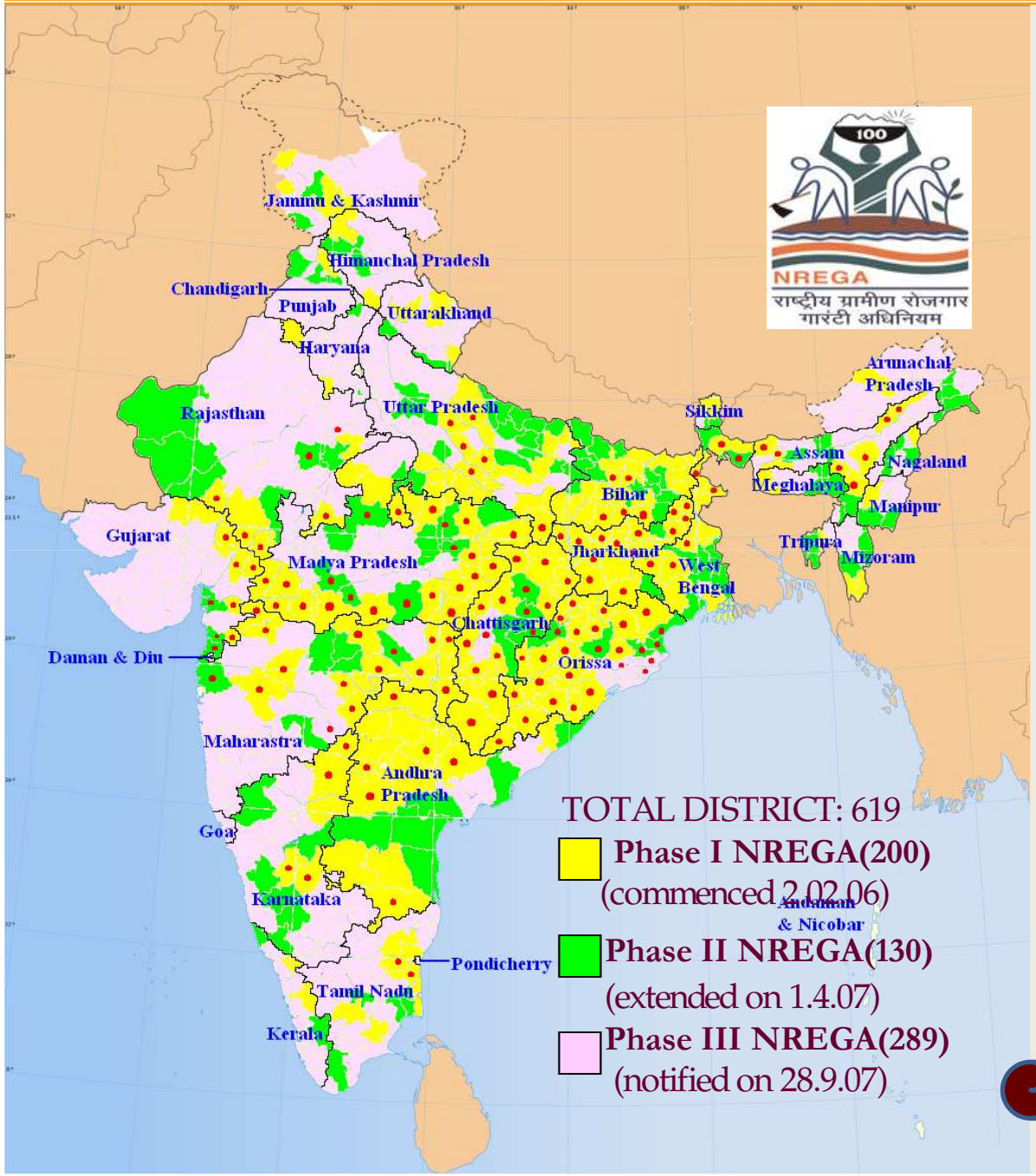
Mahatma Gandhi National Rural Employment Guarantee Act

GIS & Remote Sensing
15th Feb, 2010

To prepare a strategy and evolve parameters for standardization with an objective to link GIS with planning, labour budget and monitoring

THE MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT



An Act to provide for the enhancement of livelihood security of the households in rural areas of the country by providing at least one hundred days of Guaranteed wage employment in every financial year to every household

Objectives

- **Provide employment opportunities**

- **Regenerate natural resource base of rural livelihood for sustainable development**
  - o Water conservation,
  - o Land development
  - o **Plantation Afforestation**,
  - o **Rural connectivity**
  - o Work on individual land of SC/ST/BPL/IAY/ SMF and Land reform beneficiaries

- **In the process of implementation**
  - ✓**strengthen grass root democracy**
  - ✓ **Infuse transparency and accountability in rural governance**

GIS/Remote Sensing under Mahatma Gandhi NREGA

❖It is proposed that a GIS / Remote Sensing based project for Planning of works and Asset Management System with the following objective should be initiated:

- **Resource Mapping**: Appropriate methodology for collection, collation, storage and processing of data on natural resources in a given region & in totality.
- GIS enabled grassroot planning and mapping and linking it with Labour Budget.
- GIS aided preparation of estimates in villages.
- Evaluation and Monitoring of programme activities.
- Keep ahead of the **maintenance curve**.
- Standardized formats for natural resources and socio-economic data in an integrated manner to establish linkage among various hierarchical units
- To develop a methodology for nation-wide monitoring considering time and economic feasibilities
- Making MGNREGA website and interactive website for monitoring the programme

GIS/Remote Sensing under Mahatma Gandhi NREGA

- To utilize information for planning and development
- Develop GIS strategy as a monitoring and decision making tool.
- For effective management and assessment of Natural Resources
- To reduce human interface
- More authentic data collection
- Presents huge volumes of data in most perceivable manner so that decision making becomes easier.
- Focus on Visualization of data through Maps/Pictures ie. shift from reading to Seeing.

OBJECTIVE / PURPOSE

- **Asset Management:**
  - ➢ Capture existing assets with their location, status and other information.
  - ➢ Maintain an up-to-date inventory of created assets.
  - ➢ Perform periodic asset assessments.
  - ➢ Asset maintenance assessment and management.
  - ➢ Keep ahead of the maintenance curve i.e. mange the maintenance of assets in time.
  - ➢ Fund management for asset creation, maintenance, surveys etc.

OBJECTIVE / PURPOSE

Planning and development:

- As-Is views of the area under the program - Existing assets, current coverage, impact.
- Analytical tools for assessing a plan at asset level, region level and program level.
- What-if-Analysis at any stage of the planning.
- Transition view starting from ab initio state to program completion state with provision for interim states.
- Plan for water harvesting structures like tributaries, drains, etc with depth and slope.

Map Management:

- Preparation base maps with relevant terrain data.
- Cataloguing the maps for easy access and retrieval of information.
- Remote Sensing Maps: Village Maps on larger scale.

OBJECTIVE / PURPOSE

Evaluation and Monitoring of activities:

- To prepare a change map that depicts the activities taken up during the implementation phase.
- To develop a methodology for nation-wide monitoring considering time and economic feasibilities.
- To develop methodology for possible identification and mapping of activities by respecting the limitations of satellite data.
- To carry out the impact assessment of the works

THANKS