



## Chapter 2 Scope of Audit

### Scope of Audit

**2.1** The Performance Audit (PA) of activities of NRSC was conducted between June 2008 to May 2009 covering six years, from 2003-04 to 2008-09. Out of a total of 348 projects (132 Government Projects and 216 User Projects), we selected 105 projects (45 Government Projects and 60 User Projects) for audit scrutiny, on the basis of materiality of the projects.

### Why we examined this issue

**2.2** Remote sensing forms an important part of nation's space programme which helps in the efficient management of nation's resources in the fields of agriculture, water resources, urban development, disaster management etc. NRSC undertakes remote sensing application projects of national importance being part of National Natural Resources Management System (NNRMS), a body of the Planning Commission. Further, there was substantial investment of ₹ 2206 crore<sup>5</sup> towards cost of seven satellites and other related programmes. We selected NRSC for a Performance Audit as NRSC was the vital unit in the chain of activities involved in the design, development, realisation, launch and utilisation of remote sensing satellites in the country.

### Audit objectives

**2.3** The objectives of our audit were:

1. To assess the effectiveness of utilisation of the remote sensing satellites, acquisition and processing of remote sensing satellite data.
2. To assess whether the sale of data products resulted in maximisation of revenue.
3. To assess effectiveness of airborne remote sensing and completion of projects on time.
4. To assess whether the remote sensing application projects were helping in the efficient management of national resources in the fields of agriculture, water resources, urban development and disaster management.
5. To assess whether adequate training on remote sensing was imparted to ensure effective usage of data products.
6. To assess whether the financial management was effective in aiding NRSC in carrying out its mandated activities.

<sup>5</sup> ₹ 1469 crore towards the cost on seven satellites in operation and ₹ 737 crore towards expenditure on earth observation programme during 2003-08.

**Audit criteria**

2.4 The criteria for performance evaluation were derived by us from the following:

- Directions from Governing Body of NRSC, its Finance Sub-Committee, Planning Committee of Earth Observation Programme and Project Coordination Committee.
- Agreements of activities of the projects, expected projections of satellite performance and declared objectives.
- Annual budget, five year plans, accounting standards, costing policy, self-sustenance policy, remote sensing data policy etc.

**Audit methodology and sample selection**

2.5 Prior to taking up the Performance Audit, we discussed the scope of audit, objectives and criteria with NRSC in the Entry Conference held on 20 June 2008. We examined the selected project files and analysed data products during the period June 2008 to May 2009. We communicated our findings in May 2009 to DOS for response. After considering their response in July 2009, we held an Exit Conference in December 2009 to discuss conclusions and recommendations. NRSC furnished their responses to the conclusions and recommendations in February 2010. We have incorporated the responses of NRSC appropriately in the report. Most of our recommendations have been accepted by NRSC and they have also proposed an action plan to implement these recommendations.

**Acknowledgement**

2.6 We acknowledge the cooperation and assistance extended by the management of NRSC and DOS/ISRO at various stages of the Performance Audit.

**Organisation of audit findings**

2.7 Our audit findings, conclusions, responses from NRSC/DOS, our recommendations and action plan of NRSC thereon are discussed in the Chapters 3 to 8 of this report.

**Chapter 3** of this report discusses capacity utilisation of remote sensing satellites, returns from these satellites, need assessment, issues relating to acquisition and processing of data. While **Chapter 4** covers sale of data products to domestic and international users, **Chapter 5** brings out issues regarding efficiency of NRSC aircrafts in carrying out aerial remote sensing projects. **Chapter 6** of this report discusses issues in the implementation of remote sensing application projects undertaken by NRSC. **Chapter 7** covers issues relating to training in remote sensing and **Chapter 8** discusses financial management issues.

