OVERVIEW

Financial aspects

The expenditure on Scientific Departments during 2006-07 was Rs.20278.23 crore. This represented an increase of 23.33 *per cent* in expenditure in Scientific Departments during 2006-07 over 2005-06. Of the total expenditure on Scientific Departments, Rs.8057.96 crore related to the Department of Atomic Energy. The Department of Space accounted for an expenditure of Rs. 2988.67 crore. With reference to the budget allotment of Rs.23741.40 crore, the Scientific Departments had an overall unspent balance of Rs.3463.17 crore which was 14.59 *per cent*. Department of Atomic Energy, Department of Space and Department of Science and Technology had savings of Rs. 1192.47 crore (12.89 *per cent*), Rs.621.85 crore (17.22 *per cent*) and Rs.602.03 crore (34.20 *per cent*) respectively.

DEPARTMENT OF ATOMIC ENERGY

Development and Application of Technologies in Raja Ramanna Centre for Advanced Technology

Raja Ramanna Center for Advanced Technology (RRCAT) could construct and commission only four out of six beamlines on Synchrotron Radiation Source Indus-1, even after ten years of the scheduled completion of the project. The utilisation of beamlines of Indus-1 was only 39 *per cent* of the available days. Though Synchrotron Radiation Source Indus-2 was to have been commissioned by 1996-97, RRCAT was yet to commission it to designed energy levels as of March 2007, despite an expenditure of Rs.95.77 crore. The projects on "Accelerators for industrial and medical application" and "Accelerators for medical sterilisation and food irradiation" could not achieve the intended objectives, despite an expenditure of Rs.15.04 crore. Another project on "Laser photocathode RF Linac", to be completed by March 2002 could not be completed, even after a delay of more than five years and an expenditure of Rs.3.58 crore. RRCAT also had to shut down a laser production unit constructed at a cost of Rs.6.80 crore as a result of which, expenditure was largely unfruitful.

(Paragraph 2.5)

Delays in Setting up a Nuclear Desalination Plant

Bhabha Atomic Research Centre took up a demonstration project for setting up a nuclear desalination plant which was to provide potable water to the water scarce coastal areas of the country. The project also had the potential of earning foreign exchange through export of the desalination plants to Middle East, North African countries etc. The project remained incomplete despite cost overrun of Rs.35.79 crore and time overrun of more than six years, due to inadequate pre-project feasibility study and poor implementation of the project.

(Paragraph 2.1)

Non-installation of a Rapid Thermal Annealing System

Failure of the Institute of Physics, Bhubaneswar to procure a dry air compressor for installation of Rapid Thermal Annealing System resulted in an investment of Rs.28.48 lakh remaining blocked and the system remaining unutilised for more than two years.

(Paragraph 2.2)

Delay in commissioning of Incinerator System

Inadequate follow up with the supplier to commission the incinerator system purchased by Nuclear Fuel Complex, Hyderabad after spending Rs.52.81 lakh resulted in delay of nine years in commissioning of the equipment. Inaction on the part of Nuclear Fuel Complex has led to 60 *per cent* of the expected life of the incinerator lapsing, even before its full commissioning.

(Paragraph 2.3)

Avoidable payment of penal interest and idle expenditure on vacant flats

Failure of the Saha Institute of Nuclear Physics, Kolkata to ensure availability of funds from the Department of Atomic Energy for making timely payment to Kolkata Metropolitan Development Authority for acquisition of 64 ready built flats resulted in an avoidable expenditure of Rs.72.12 lakh towards payment of penal interest. In addition, 38 flats remained unoccupied, resulting in idle expenditure of Rs.5.16 crore.

(Paragraph 2.4)

DEPARTMENT OF INFORMATION TECHNOLOGY

Avoidable expenditure of Rs.1.21 crore on hiring of office space

Controller of Certifying Authority (CCA) under the Department of Information Technology hired office space from the Sports Authority of India in August 2001. However, in June 2004, CCA vacated the hired premises and shifted back to Electronics Niketan. CCA incurred avoidable expenditure on rent for Rs.1.21 crore towards hiring of space in excess of prescribed norms and further, there was loss of Rs.44.58 lakh due to non-removal of fixed installation for which approval of Ministry of Finance to write off the amount is still awaited.

(Paragraph 3.1)

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Infructuous expenditure of Rs.2.08 crore

Central Electro Chemical Research Institute failed to ensure availability of requisite infrastructure which resulted in non achievement of the objectives of a project for development of batteries with a cycle life of 350 charge-discharge cycles. This led to infructuous expenditure of Rs.2.08 crore.

(Paragraph 4.1)

Blockage of funds

The Indian Institute of Chemical Biology, Kolkata failed to ask the supplier to replace the supplied equipment despite its unsatisfactory performance within the warranty period. As a result, the Institute was saddled with defective equipment for which expenditure of Rs.98.88 lakh has already been incurred.

(Paragraph 4.2)

Non-commercialisation of technology developed for monitoring of toxic gases

Failure of Central Institute of Mining and Fuel Research to conduct further studies on the shortcomings noticed in the system, developed at a cost of Rs.33.24 lakh, resulted in non-commercialisation of the system.

(Paragraph 4.3)

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Unfruitful expenditure

Investment on the scheme 'Experimental Studies on Non-accelerator Particle Physics' by Indian Institute of Astrophysics without ensuring experts to pursue research in this area resulted in laboratory equipment and infrastructure worth Rs.1.20 crore not being effectively utilised for last five years, thus rendering the expenditure largely unfruitful.

(Paragraph 5.1)

Irregular extension of service

Indian Association for the Cultivation of Science (IACS) made irregular payment of Rs.25.68 lakh towards pay and allowances, excess retirement gratuity and excess pension upto February 2007 to 16 academic staff as IACS provided them extension of their services upto 65 years of age instead of re-employment.

(Paragraph 5.2)

MINISTRY OF ENVIRONMENT AND FORESTS

Injudicious decision of construction of Scholar Transit Hostel

In pursuance of a decision of Indian Council of Forestry Research and Education, Tropical Forest Research Institute constructed a Scholar Transit Hostel in October 2001 at a cost of Rs.1.03 crore which could not be utilised till now due to lack of demand and its isolated location.

(Paragraph 6.1)

MINISTRY OF EARTH SCIENCES

Non-achievement of the objectives of modernising the Accounting and Personnel Management functions

Vendor driven purchase by Indian Meteorological Department and lack of adoption of a standard methodology for acquisition and implementation of a computerised system like assessment of user requirements, system requirement specification, system design description, acceptance testing, coupled with lax monitoring, led to non-achievement of the objectives of computerisation despite expenditure of Rs.72.88 lakh.

(Paragraph 7.1)

Avoidable expenditure on interest

Failure of India Meteorological Department to ensure timely payment of premium towards purchase of land and ground rent resulted in avoidable expenditure of penal interest amounting to Rs.55.04 lakh.

(Paragraph 7.2)

Unfruitful expenditure on in-house projects in National Institute of Ocean Technology

National Institute of Ocean Technology undertook in-house projects to develop technology in the field of ocean science and technology and to commercialise the designs, mechanical instruments and other inventions resulting from Institute's activities. During 2001-02 to 2005-06, it undertook eight in-house projects; one project involving expenditure of Rs.60.82 crore failed due to poor project planning and deficient implementation. In another four projects, involving expenditure of Rs.7.21 crore, technologies developed could not be commercialised due to reasons like initiation of the project without market survey, lack of industry participation right from initiation, lack of demand due to technology developed not being cost effective etc.

(Paragraph 7.3)

MINISTRY OF NEW AND RENEWABLE ENERGY

Activities of Solar Energy Centre

Solar Energy Centre (SEC) surrendered 44 to 76 *per cent* of the funds allocated during 2002-07, indicating poor financial management as it had very little work of project implementation. Testing facilities established at SEC were underutilised. SEC did not take up any in-house, joint collaborative research, consultancy, bilateral and multilateral projects with other research institutions/industry. It also did not develop any new technology or have any research papers published in reputed Indian and foreign journals. Three grants-in-aid projects were not completed successfully, resulting in unfruitful expenditure. The scientific manpower responsible for implementation of various projects was frequently transferred from SEC to the Ministry which seriously impacted the activities of SEC.

(Paragraph 8.1)

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

Non-implementation of Dairy Project

Indian Council of Agricultural Research sanctioned a pilot project of Rs.4.90 crore to National Dairy Research Institute for establishment of six dairy centres and for providing scientific & technical support to farmers for production of quality milk and agricultural products. However, the objectives of the project could not be achieved due to inadequate monitoring and poor implementation. Consequently, an expenditure of Rs.30.20 lakh incurred on establishment of the two dairy centers remained unfruitful.

(Paragraph 9.1)

Irregular payment of Island Special Allowance

Failure of Central Agricultural Research Institute, Port Blair to follow the instructions of Ministry of Finance issued in May 2002 to regulate payment of Island Special Allowance resulted in irregular payment of Rs.67.23 lakh from October 2001 to March 2007.

(Paragraph 9.2)

Irregular payment of AMC charges

Indian Council of Agricultural Research irregularly paid Rs.25.04 lakh towards annual maintenance contract of UPS systems procured under a World Bank assisted project, which was required to be paid by respective institutions to whom UPS systems were supplied. The amount was yet to be recovered from the respective institutions/organisations.

(Paragraph 9.3)

Activities of Central Sheep and Wool Research Institute

Central Sheep and Wool Research Institute did not take up any collaborative, sponsored and consultancy projects and also did not develop transferable technologies finding acceptance with farmers. It failed to achieve the envisaged objectives fully, in six of the seven in-house projects test checked. It also failed to put machinery in use resulting in low output. It also failed to modernise its machinery, despite grants being given for modernisation by Indian Council for Agricultural Research.

(Paragraph 9.4)

Non-operationalisation of Quarantine Building

Project Directorate of Biological Control entrusted the work relating to the construction of a quarantine building to Central Public Works Department. However, lack of proper planning and inability to rectify deficiencies in the quarantine building resulted in non-operationalisation of the building even after a lapse of more than eight years and after incurring Rs.1.65 crore.

(Paragraph 9.5)