

CHAPTER 19

SCIENTIFIC SERVICES AND RESEARCH

19.1 The Scientific Services and Research head covers Science and Technology Department, Environment Department and Rajasthan State Pollution Control Board.

19.2 In the Ninth Five Year Plan, an expenditure of Rs. 1010.64 lakhs was incurred, against the outlay of Rs. 3840.00 lakhs. Sectoral details are as under :

	(Rs.in lakhs)
1. Science and Technology Department	501.33
2. Environment Development	169.31
3. Rajasthan State Pollution Control Board	340.00
Total	1010.64

19.3 A provision of Rs. 1417.50 lakhs has been kept for Tenth Five Year Plan and Rs.267.11 lakhs have been kept for Annual Plan 2002-03. Sectorwise break up is as under :

	(Rs.in lakhs)	
	Xth Plan	Annual Plan
1. Science and Technology Department	877.50	215.00
2. Environment Development	520.00	52.10
3. Grant-in-aid to Raj. State Pollution Control Board	20.00	0.01
Total	1417.50	267.11

19.4 Details of financial provisions and major physical activities are discussed below :

Science and Technology Department

19.5 Since the inception of the Department in the year 1983, it has been the endeavour to initiate, support, promote and coordinate the activities in the field of science & technology by taking up of application oriented research and development projects and various programmes relating to transfer of technology, popularisation of science and application of modern technology of remote sensing.

19.6 During the Ninth Plan period, an amount of Rs501.33 lakhs was spent. Emphasis was given on the development of the infrastructure and capabilities in the field of science and technology, transfer of technology and research. Five regional offices at Ajmer, Bikaner, Jodhpur, Kota and Udaipur are working. In addition, SRSAC and CAPE office at Jodhpur, one STED Project at Pali and three Science Centres at Bikaner, Kota and Udaipur are also working. To utilise the talent and potential of the students, scheme of Student Project has been initiated. Science park which was developed during Eight five year Plan period was opened to public on 22nd September 1998 plays very important role in popularization of science in Rajasthan

19.7 During the previous plan periods, the S & T department has established itself as a catalytic agent for development of the project through science and technology inputs and to initiate science and technology related projects/programmes, etc. through various departments / organisations. The spread these projects has been restricted mainly due to inadequacy of infrastructure. In view of this, in the Ninth Plan emphasis would be on consolidation and to provide broad base to the activities so that the impact of activities could be felt across the State. Priority would be on finding solution to the problems of the common people through science and technology. The transfer of rural technology and need based technology developed in various national laboratories to small farmers, village artisans and rural poor was be a priority area in the Ninth Plan period. Science communication and popularisation projects/programmes will be further strengthened.

19.8 A provision of Rs. 877.50 lakhs has been made for Tenth Five Year Plan where as an amount of Rs.215.00 lakhs have been kept for Annual Plan 2002-03. Science & Technology Department. The details of financial provisions are as under:

(Rs. in lakhs)

Item	Tenth Plan Outlay (2002-07)	Annual Plan (2002-03)
1. Direction & Administration	-	-
2. Research & Development Division	143.00	22.00
3. Science and Society Division	391.00	121.00
4. Science Communication and Popularisation	162.00	39.00
5. Support Services		
i. Remote Sensing Division	25.00	5.00
ii. Entrepreneurship Development Division	52.00	9.00
iii. Activities as per the directions of Bio-technology Policy	5.00	1.00
6. Capital works	99.50	18.00
Total	877.50	215.00

19.9 Out of the proposed provision of Rs. 877.50 lakhs for the Tenth Plan, Rs.560.50 lakhs would be required to meet the committed liabilities of continuing programmes.

19.10 Under the R&D scheme, 10 new and 20 on going R&D Projects will be financed. In addition, 20 workshops/seminars will be organised and 100 student projects will be given financial assistance. During Tenth Plan,

19.11 Under the science division, demonstration camps and mobile exhibition van scheme will continue. Rural youths will be trained in new techniques and technology. To cater to the needs of small, tiny and cottage rural industries, it is proposed to establish Technology Demonstrations and Dissemination Centre. The proposed centre will co-ordinate the efforts of promoting and developing the appropriate technologies for rural masses and under-privileged sections of the society as well as for rural industrialisation.

19.12 It is envisaged to carry out a survey for identification of traditional practices in science and technology in some selected fields. During the Tenth five year plan period emphasis will be given to cover priority areas in which science & technology can be utilised for the achievement of socio-economic objectives.

19.13 The department has identified various innovative and need based technologies for different regions of the State. During the Tenth Plan, it is proposed to implement pilot projects covering priority areas such as housing, safe drinking water, energy, food / agro-based industries, agriculture and health. These will include selected projects on specific needs of the areas.

19.14 In the past Technology Demonstration and Training centres (TDTC) were established in various technical institutions. Now it is proposed that these centres will be transferred to regional offices of the department and co-ordination of technology and research institutions will be drawn in order to utilise the expertise available with these institutions.

19.15 For communication and for popularisation of science, existing 3 science centres will be further strengthened. The Science Park has been opened for public on 22nd September 1998. For popularising science, 30 science clubs will be assisted.

19.16 To generate the spirit of self-employment among the youth, the department will organise 1 Entrepreneurship Development Programmes, 20 Entrepreneurship Awareness Camps It is also proposed to strengthen remote sensing training activity and Management Information System. A data bank would also be maintained.

19.17 In the Tenth Plan, it is proposed to construct a building for the Science and Technology Department where facilities for display gallery and exhibition, rural technology demonstration, organising conferences, etc. will be provided.

19.18 Establishment of Gian Centres in Rajasthan:- In order to Scout the creativity of the people at the grass roots level and facilitate People to people net working among the innovators a decision has been taken to establish a Gian Centre in Rajasthan in Co-ordination with Honey Bee net work and SRISTI of IIM Ahembabad.

Environment Development

19.19 The Environment Department was created in 1983 to act as a nodal agency in the State in matters related to preservation of ecological balance, research and studies on environmental matters and prevention and control of soil, water and atmospheric pollution.

19.20 An amount of Rs. 169.31 lakhs was spent by the Environment Department during the Ninth Plan on the activities in the field of environment development relating to preparation of policies for environmental development, execution of minor works of environmental improvement, environmental development programmes, environmental education and awareness, etc.

19.21 An outlay of Rs. 520.00 lakhs has been provided for the Environment Department for the Tenth Plan and Rs.52.10 lakhs for Annual Plan 2002-03 period for the following items :

(Rs. in lakhs)

Item	Tenth Plan Outlay (2002-07)	Annual Plan (2002- 2003)
1. Environmental Education & Awareness	50.00	20.00
2. Publicity and Communication	18.00	2.00
3. National River Conservation Plan (NRCP)	400.00	30.00
4. National Lake Conservation Plan (NLCP)	52.00	0.10
Total	520.00	52.10

19.22 The Government of India has identified the stretch of river Chambal between Kota and Keshoraipatan for its conservation and improvement under the National River Conservation Plan (NRCP). It is Centrally Sponsored Scheme on matching basis. (70:30 basis).

19.23 NLPC project is for conservation of udaipur lakes and this project has been sent govt. of India in 1998. It is a CSS project to the approval of Central govt. So an amount of Rs. 52.00 lakhs is kept for Tenth Five Year Plan and Rs. 0.10 lakhs is kept as a token amount for the year 2002-2003.

Rajasthan State Pollution Control Board :

19.24 Environmental pollution is a serious and growing hazard. Its impact on human health and well being is direct (e.g. inhalation of polluted air and intake of contaminated water) as well as indirect (through impact on the health of environmental resources-loss of soil fertility, corrosion of structures, death of aquatic life, etc.). Water borne pollution, from both community and industrial sources is another important health hazard. For effective control of air and water pollution, the Rajasthan Board for Prevention and Control of Pollution is functioning in the State. The functions under management of hazardous substances and waste have also been entrusted to this Board.

19.25 An amount of Rs.20.00 lakhs has been kept for the Tenth Five-Year Plan period to Rajasthan State Pollution Control Board for Prevention and Control of Pollution. A token amount of Rs.0.01 lakh has been kept for annual plan 2002-2003.