

CHAPTER - 11

SCIENTIFIC SERVICES AND RESEARCH

11.1 The Scientific Services and Research head covers Science and Technology Department and Environment Department.

11.2 An outlay of ₹ 24206.50 lakh was kept for the Twelfth Plan and an outlay of ₹ 11513.27 lakh is proposed for the Annual Plan 2014-15. Sector-wise break up is as under:

Table 11.1
Financial Outlays

(₹ in lakh)

S. No.	Name of Department	Twelfth Plan (2012-17)	Annual Plan (2014-15)
1	Science and Technology Department	5568.04	2266.23
2	Environment Department	18638.46	6562.04
3	Rajasthan Pollution Control Board	0.00	2685.00
	Total	24206.50	11513.27

SCIENCE AND TECHNOLOGY DEPARTMENT

11.3 The department of Science and Technology was established in the year 1983 to develop scientific temper in the society and to uplift the socio economic status of the masses especially weaker section of the society residing in the rural areas with the input of science and technology.

11.4 The Department caters the need of science and technology requirements of the state and advises Government on policies and measures necessary to promote utilization of science and technology for enhancing socio economic status of the State. Various programmes and activities of the department are executed through well established regional offices located at Ajmer (H.Q. Jaipur), Bikaner, Kota, Jodhpur and Udaipur. Addition to these regional offices, State Remote Sensing Application Center, Jodhpur is also working under this Department.

Vision

11.5 Application of Science and Science based approaches for tangible improvements in people's lives and strategically apply science and technology (S&T) outreach for the management of resources and to serve as a powerful tool to reach important segments of civil society.

Mission

11.6 To strengthen the R&D base of the State through funding, development and utilization of technologies, building entrepreneurship and innovation, popularization and demonstration, generating S&T database, mounting mission mode initiatives, attracting talent to science

and rejuvenating research in university and promotion of public-private partnerships.

Objectives

- Formulation of S&T Policy for the state and other enabling policies/ Vision Documents for development of Science, Technology & Innovation in the state.
- Strengthening basic research and expanding R&D base- Human Capacity.
- Expanding S&T education base & strengthening basic research- Institutional Capacity.
- Implementing Technology Development/ Diffusion programme.
- Societal interventions of S&T;
- Preparation of data bases of natural resources of State using GIS and Remote Sensing Techniques and further in the efforts for utilizing the data for preparing developmental schemes and projects

Priorities of the sector

- Science and Technology has its viability in terms of products processes and development models which have tremendous potential to address the problems of rural masses. The Department of Science & Technology has been implementing programmes in various sectors such as Agriculture, Water, Health, Energy, Rural Industries and Biotechnology etc. The approach taken while implementing these programmes has been to involve S&T field groups with a view to ensure people participation at various stages of planning, project formulation and implementation.
- While all projects implemented so far have distinct features of Science & Technology, a few stand out because of their extremely innovative approach regarding need identification, choice of suitable technology, appropriate scaling, technology modification and optimum uses of local resources. The Department attempts to not only develop technologies but to successfully replicate it as sustainable and viable models.
- At present, the Department is actively engaged in Application of Remote Sensing & G.I.S techniques, Communication & Popularization of Science, Diffusion of Technologies to the rural areas, Research and Development, Promotion of Biotechnology, Entrepreneurial activities and Intellectual Property Right (IPR) awareness etc.

11.7 An outlay of ₹ 5568.04 lakh was kept for the Science and Technology Department for the Twelfth Five Year Plan. An expenditure of

₹ 974.81 lakh has been incurred in 2013-14 against an outlay of ₹ 1089.79 lakh. An outlay of ₹ 2266.23 lakh is proposed for the Annual Plan 2014-15. The scheme wise details are given below:

Table No.11.2
Financial Targets and Achievements

(₹ in Lakh)					
S. No.	Name of Scheme	12th Plan Outlay	Outlay 2013-14	Likely Exp. 2013-14	Outlay 2014-15
1	Science & Technology	505.33	15.09	14.05	120.31
2	Research & Development	809.50	201.50	91.80	227.81
3	Science & Society	631.60	112.60	56.84	112.60
4	Science Communication & Popularization	1511.05	423.68	347.33	635.55
5	Biotechnology	153.55	36.00	11.34	36.00
6	State Remote Sensing Application Centre	704.00	101.00	295.68	250.01
7	Entrepreneurship Development	95.37	17.17	2.49	9.25
8	Patent Information Centre	40.00	8.00	3.37	13.00
9	Management Information System (MIS)	36.28	8.56	5.85	46.56
10	Biotechnology Research Centre	0.00	0.00	22.47	0.02
11	Construction works in Science & Technology	1081.36	166.11	123.59	365.00
12	Science City	0.00	0.03	0.00	450.00
13	Others (token provision)	0.00	0.05	0.00	0.12
	Total	5568.04	1089.79	974.81	2266.23

Achievements of the year 2013-14

- For creating scientific awareness amongst general masses specially amongst students “Sub Regional Science Centre, Jodhpur established in collaboration with National Council of Science Museum,” and Science Park Nawalgarh developed by the department.
- Additional 250 Receive Only Terminals (ROT's) installed under SATCOM Network for expanding the reach of Free Coaching Facility for Medical & Engineering entrance exam to students belonging to weaker section of the society.
- 550 Science clubs established in Secondary and Sr. Secondary Schools are strengthened for encouraging spirit of enquiry among younger generation; create awareness about new technologies and foster creativeness.

- To recognize and honor, the scientist of Rajasthan origin for their outstanding contributions towards the development of science and technology, Dr. D. S. Kothari Science Excellence Award is instituted
- For providing safe water to rural populace residing in rural areas, communities managed reverse osmosis pilot demonstration plants being commissioned in 9 water quality affected villages of Churu, Sikar and Nagaur districts.
- Financial support extended for 11 Research & Development Projects.
- Financial support extended for 195 student projects under research & development division of the department.
- Under Remote Sensing & G.I.S Application, maps of all 200 legislative constituencies prepared in coordination with Election Department and are used in State Assembly Election 2013.
- Maps of available infrastructure and natural resources provided to Nuclear Power Corporation of India Limited (NPCIL) for proposed Atomic Power Station at Banswara.
- Evaluation process of the Detail Project Report (DPR) of the first phase of Advance Research Centre to promote research in the area of Bio-technology and Medical Bio-technology prepared by PDCOR undertaken.

Annual Plan 2014-15

11.8 An outlay of ₹ 2266.23 lakh is proposed for the Annual Plan 2014-15. The scheme wise details are as follows:-

Science and Technology

11.9 An expenditure of ₹ 14.05 lakh has been incurred in 2013-14. An outlay of ₹ 120.31 lakh is proposed for the Annual Plan 2014-15 for establishment related expenses of various divisions of the department, Science Park, Jhalawar and Sub Regional Science Centre, Jodhpur including ₹ 74.11 lakh for State Council under 100 per cent CSS.

Research and Development Division

11.10 The main objective of R&D division is to promote application oriented research in the field of Science & Technology so as to uplift the socio-economic status of the general masses of the State. To achieve these goals, department proposes to undertake following major schemes/ programmes/ activities during the year 2014-15:-

- a. Assistance to Research & Development Projects
- b. Technology Based R&D Projects
- c. Student Project Programme

- d. Workshop/Seminar/Conferences etc.
- e. Applied Research Centre
- f. Travel Support
- g. Assistance to Traditional Technology Projects
- h. Best Research & Development Award
- i. Center of Excellence for Nano-Technology
- j. Organizing of Group Monitoring Workshop (GMW)/ Student Project Seminar/ Expert Advisory Committee Meetings

11.11 An expenditure of ₹ 91.80 lakh has been incurred in 2013-14. An outlay of ₹ 227.81 lakh is proposed for the Annual Plan 2014-15.

Science and Society

11.12 The broad objective of the programmes related to Science & Society Division is to provide technology-based intervention for overall development of the State through optimal utilization of the resources. Efforts will be made to cover a few priority areas in which science & technology could be utilized for the achievement of socio-economic objectives.

11.13 In 2013-14, an expenditure of ₹ 56.84 lakh has been incurred on pilot project, Science & Technology Resource Centres (STRC's) & different training & awareness programmes.

11.14 In the Annual Plan 2014-15, an outlay of ₹ 112.60 lakh is proposed for technology diffusion programmes including pilot projects, under which proposal based support is provided for addressing specific problems requiring S&T interventions.

Science Communications and Popularization

11.15 The main objective of communication & popularization of Science programmes is to generate scientific temper among the masses and make the people think, scientifically at every stage and happening in their day-to-day life to make their life easy & simple. This can be achieved by encouraging spirit of enquiry among younger generation, create awareness about new scientific approaches/ technologies, foster creativeness and many more methods by organizing carefully drawn programs.

11.16 Department has been thriving through to popularise Science & Technology in the State by establishing Science Cities/Science Centres/ Science Parks. At present following Centres are in operation:

- Regional Science Centre, Jaipur
- Sub Regional Science Centre, Jodhpur
- Science Park, Jhalawar

- Science Park, Nawalgarh
- Science Centres, Bikaner, Kota, Udaipur

11.17 Science Centres / Science Parks are proposed to be strengthened in 2014-15 by:-

- Installation of outdoor models, indoor models based on different principals of energy, mechanic, sound, light & sight, environment, wild life.
- Wider publicity of these centres and activities, printing material such as Brochures, Pamphlets and Display Panels will be prepared. Hoardings will also be displayed on important locations.
- Development of greenery/ medicinal plants. New galleries are also to be installed. Portable Taramandal (planetarium), temporary exhibitions, Earth Museum, educational kits, honorarium to experts for organizing activities etc.

11.18 **Science Club:** 5500 Science Clubs established in secondary/senior secondary schools shall be strengthened by providing financial assistance for activities and also through organizing of interactive science club workshops through regional offices to cover all districts.

11.19 **National Science Day:** The National Science Day the 28th Feb. is being celebrated every year throughout the State to mark the occasion of discovery of "Raman Effect" by Dr C.V. Raman, for which he was awarded with the Nobel Prize for Physics in the year 1930.

11.20 **School Science Centre:** Department has 24 school science centers which are running in the leading schools of a district. These are aimed to cater the need of promoting scientific activities in remote areas.

11.21 **Contest Programmes:** Following competitions/contests shall be organized in year 2014-15:-

- State level Science Talent Search Competition.
- State level Science Quiz Competition (incorporating regional level competitions).
- State level Science Model & Teaching aid competition (incorporating regional level competitions).
- Science Painting Competition
- Science Drama Festival

11.22 **Programme & Activities of Popularization of science:** The basic theme of the scheme is to train and activate the children through "Do It Yourself" type activities. The activities planned are:

- Astronomy and telescope making workshop,
- Scientific explanations of myths and miracles,
- Model Rocketry workshop etc.
- Programme for testing of food adulteration
- Workshop on introduction & application of remote sensing technique,
- Quality improvement in science teaching
- State level Excellence Award for Pioneer Science Education to Secondary and Senior Secondary schools.

11.23 **Children Science Congress/Teachers Science Congress:** With the focal theme based on scientific activities the children science congress is being organized every year. Action and activities are the key elements which National Children Science Congress aims to get involved in for "Learning by doing". It would involve the use of scientific methodology. The children of the state will be provided by an opportunity to participate in national level Children Science Congress by organizing District level & State level congress; on the similar themes that of National level.

11.24 **Dr. D. S. Kothari Science Excellence Award:** Dr. D. S. Kothari Science Excellence Award is instituted in year 2013-14 in the memory of Dr. D. S. Kothari. This award shall be conferred every year starting from the year 2013-14 to the scientist of Rajasthan origin to recognize and honor their contributions towards the development of science and technology. The award carries a cash prize of ₹ 5.00 lakh, a memento and a citation.

11.25 An expenditure of ₹ 347.33 lakh has been incurred in 2013-14. An outlay of ₹ 635.55 lakh is proposed for the Annual Plan 2014-15 for science communication and popularization activities.

Biotechnology Division

11.26 The science of Biotechnology is taking rapid strides. A new field has emerged by integrating Life Sciences, Biochemistry, Molecular Biology, Chemical Engineering and Computer Sciences to combat difficulties arising in biological sciences in day to day life.

11.27 Following activities are proposed to strengthen the activities under "Biotechnology Division" in financial year 2014-15:-

- Support to minor projects.
- Centre of Excellence.
- Financial assistance for major projects.
- Work Shop/ Seminar for Biotechnology.

- Participation in International Biotech Fair/ Exhibition.
- Bio-Technology Policy.

11.28 An expenditure of ₹ 11.34 lakh has been incurred in 2013-14. An outlay of ₹ 36.00 lakh is proposed for the Annual Plan 2014-15.

State Remote Sensing Application Center

11.29 The details of different programme are given below:-

11.30 National (Natural) Resource Information System (NRIS): National (Natural) Resource Information System (NRIS) is oriented towards providing information for decision makers and encompasses information on natural resources related to land, water, forests, minerals, soils, oceans, etc. and socio economic information such as demographic data, amenities, infrastructure etc. The integration of these sets of data aid the decision making process for systematic resources utilization and also aid sustainable development goals. It is a Department of Space Collaborative project under which district level planning database on natural resources and infrastructure resources in GIS environment through computer is being generated. It provides information on land use, Soil, Ground Water Prospect, Drainage, Watershed, Transport network, Infrastructure facilities like School, College, Hospitals, Dispensaries, Veterinary facilities, Communication facilities etc. in digital formats. Query functions integrating and quick retrieval is the biggest advantage of these database. This database is to be updated every 5 years particularly Land Use/Land Cover theme.

11.31 Strengthening of Remote Sensing Cell at Jaipur and Establishment of Remote Sensing Cell at Regional Offices Kota, Udaipur, Bikaner: Remote Sensing Cell established at Jaipur in compliance to the decision taken in the meeting of State Natural Resource Information System (NRIS) Management Board, shall be strengthened. Further, the activities of remote sensing and GIS shall be expanded by creating Remote Sensing Cell at regional offices of the department at Bikaner, Kota and Udaipur.

11.32 Satellite based Communication Networks (SATCOM): SATCOM is operational in State, Integrated HUB at Indira Gandhi Panchayati Raj Sansthan (IGPRS), Jaipur is being used for Telemedicine, Edusat and Gramsat activities. Under Gramsat activity Satellite Interactive Terminals (SITs) at Zila Parishad Headquarters and Receive Only Terminals (ROTs) at the Panchayat Samiti Headquarters have been installed. Studio is also operational at IGPRS, Jaipur. The Network is being used by various departments of the State for training, extension activities and relay of their development activities. ROT at 237 Panchayat Samiti Headquarters and SIT at 32 Zila Parishad have already been installed.

11.33 **Starting Diploma in Remote Sensing & GIS:** A diploma course in Remote Sensing will be started after approval from AICTE.

11.34 **Engineering/Medical Entrance Coaching Through Satellite Communication:** A new Programme of Coaching of 7000 students of poor families from rural background for preparation of engineering entrance examination through Satellite network (SATCOM) was started from 1st June 2011. Coaching lectures from eminent lectures in the subject of Maths, Physics, Chemistry and Biology are being relayed from studio established at Indira Gandhi Panchayati Raj Sansthan (IGPRS), Jaipur.

11.35 An expenditure of ₹ 295.68 lakh has been incurred in 2013-14. An outlay of ₹ 250.01 lakh is proposed for the Annual Plan 2014-15 for expanding Remote Sensing and GIS activities, expansion of Engineering & Medical Entrance Coaching through Satellite Network and related operational expenditure.

Entrepreneurship Development Division

11.36 Entrepreneurship Development Activity is viewed as one power tool for alleviating the all pervading unemployment. The prime focus should have been to utilize this highly talented workforce in just setting up business but re-orienting their inherent skills so that they come out with products that are high tech, globally competitive not just import substitute but export worthy precision parts, not generally within the capabilities of an ordinary state entrepreneur etc. Developing entrepreneurship amongst S&T graduates can provide the highest dividend to society as compared to any other category. Entrepreneurship Development Programme, Entrepreneurship Awareness Camps and skill development programme are being organized.

11.37 An expenditure of ₹ 2.49 lakh has been incurred in 2013-14 and an outlay of ₹ 9.25 lakh is proposed for the Annual Plan 2014-15.

Patent Information Centre

11.38 Patent Information Centre (PIC) has been set up to provide patent search and filing facilities at the door step of innovators, researchers, R&D establishments and entrepreneurs. The activities proposed for the year 2014-15 are as under:-

- IPR Camps
- IPR workshops and Training programmes
- Geographical Indication application filing & awareness programmes
- Establishment of Regional IPR (Intellectual Property Right) Facilitation Cell

11.39 An expenditure of ₹ 3.37 lakh has been incurred in 2013-14. An outlay of ₹ 13.00 lakh is proposed for the Annual Plan 2014-15.

Management Information System and Library

11.40 An expenditure of ₹ 5.85 lakh has been incurred in 2013-14. An outlay of ₹ 46.56 lakh is proposed for the Annual Plan 2014-15 for Computerization & related communication expenses for development of application software for science club, development of IT gallery in Science Center Kota and Science Park Jhalrapatan, Web Portal & e-Magazine.

Bio-Technology Research Centre

11.41 An advance Research centre is proposed to be established with following specific objectives:-

- To provide central instrumentation facility to the Researchers of the State in the areas of Biotechnology and Medical Biotechnology to support advance research.
- To provide advanced training in latest genomic and proteomic techniques to the students of the State at subsidized rates.
- To provide research support to the students and staff of biotechnology and medicine on cost sharing basis.
- To collaborate with similar institutions of national and international standing on mutually important areas of research.
- To provide rapid diagnosis of respiratory diseases, water borne diseases during the times of emergency.
- To genotype at least 100 susceptible patient cohorts to understand identify candidate genes
- To provide genetic testing facility to neonates suffering from hereditary developmental and metabolic disorders
- To sequence disease causative genes of life-threatening diseases as well as Life-style diseases
- To sequence at least 50 microbial genomes of agricultural importance.
- To investigate Biomarkers for effective diagnosis (Proteomics & Metabolomics)

11.42 An expenditure of ₹ 22.47 lakh has been incurred for DPR formulation of phase-I in 2013-14.

Capital Works

11.43 An expenditure of ₹123.59 lakh has been likely to be incurred in 2013-14. An outlay of ₹ 365.00 lakh is proposed for the Annual Plan 2014-15 for the following works:

**Table No. 11.3
Financial Outlays**

(₹ in lakh)

S. No.	Name of Scheme/ Programme	Total
1	Sub Regional Science Centre/ Science Centers and Science Parks	165.00
2	Development of Science and Technology new Office Building	100.00
3	Science Park Jhalawar/ Science Centre Kota/ District Science Centre's	100.00
	Total	365.00

Science City

11.44 Establishment of Science City in Jaipur under technical backup and support of National Council of Science Museum (NCSM) by up-gradation of existing Regional Science Centre, Jaipur is proposed to be taken up in year 2014-15.

11.45 An outlay of ₹ 450.00 lakh has been proposed for the Annual Plan 2014-15 for Science City, Jaipur.

Note on Gender Budgeting

11.46 In financial year 2014-15, under activities of Science & Society Division of the Department, a provision of ₹ 5.40 lakh is proposed for undertaking activities under “Science & Society for Women” program.

11.47 This scheme focuses women as a specific target group with following specific objectives.

- To promote research, development and adaptation of technology to improve the quality of life, working conditions for women.
- To provide newer opportunities for gainful employment of women especially in rural areas.
- To increase the contribution of women scientists to technology based development. Following priority areas have been identified under the scheme.
- Specific Science & Technology application programs to solve problems of women in different region.
- Drudgery removal techniques.
- Involvement of women in low cost preservation & processing.
- Use of income generation technologies.
- Health, Water Management and Sanitation.

- Involvement of women in modern industries, particularly in electrical & electronic industry.
- Studies, workshops and seminars concerning women problems.

11.48 Beside above referred dedicated scheme, under following schemes participation of girl students studying in schools/ colleges/universities and self employed women is ensured for promotion of Science & Technology related programs

RESEARCH & DEVELOPMENT DIVISION

- Assistance to Research & Development Projects
- Technology Based R&D Projects
- Student Project Programme
- Travel Support
- Assistance to Traditional Technology Projects

PATENT INFORMATION CENTRE

- IPR Camps
- IPR workshops and Training programmes
- Geographical Indication application filing & awareness programmes

ENTREPRENEURSHIP DEVELOPMENT DIVISION

- Entrepreneurship Development Programmes
- Entrepreneurship Awareness Camps
- Skill Development Programme

BIOTECHNOLOGY DIVISION

- Support to minor projects
- Financial Assistance for Major Projects
- Work Shop/ Seminar for Biotechnology

SCIENCE COMMUNICATIONS AND POPULARIZATION

- Science Club
- School Science Centre
- Contest Programmes
- Programme & Activities of Popularization of science
- Children' Science Congress/Teacher Science Congress

MUKHYAMANTRI NISHULK COACHING YOJNA

11.49 Initiative has been taken by the department for imparting free coaching to 7000 students including girls for engineering /Medical entrance examination through Satellite network (SATCOM).

ENVIRONMENT DEPARTMENT

11.50 The Environment Department deals with the matters relating to maintenance of ecological balance, environmental protection, research & study on environmental issues and creating environmental awareness through education and awareness programme. It also deals with the policy issues related to Rajasthan State Pollution Control Board (RSPCB) and Rajasthan Bio-diversity Board. Lately, the Government of India has also delegated the powers for granting Environmental Clearance to certain development projects including mining activities in Alwar District under the Aravali Notification. The Department is also coordinating the schemes of National River Conservation Plan (NRCP) for river Chambal and the National Lake Conservation Programme for different lakes in Rajasthan.

Objectives

- To function as a nodal department in the matters of Environment and Ecology with respect to:-
 - Maintenance of ecological balance
 - Study and research on environmental issues.
- To deal with issues of Rajasthan Pollution Control Board (RPCB) and Rajasthan Bio-diversity Board.
- To solve and control all matters regarding Soil, Water, Air and Sound pollution with the help of RSPCB, District administration, Police Department, Transport Department and other organizations.

11.51 An outlay of ₹ 18638.46 lakh was kept for the Environment Department for the Twelfth Five Year Plan. An expenditure of ₹ 415.36 lakh has been incurred in 2013-14 against an outlay of ₹ 3265.70 lakh. An outlay of ₹ 6562.04 lakh is proposed for the Annual Plan 2014-15. The scheme wise details are given below in the following table:-

Table No. 11.4
Financial Outlay

(₹ in Lakh)

S. No.	Programme / Schemes	XIIth Plan Outlay	Outlay 2013-14	Likely Exp. 2013-14	Outlay 2014-15
State Plan					
1	Environment Clearance Cell	85.60	11.47	8.82	13.02
2	Computerisation & Communication	20.00	2.35	2.13	2.34

3	Environment Education and Awareness Programme	0.10	0.01	61.80	61.80
4	Communication & Extension & Publication	250.00	40.00	38.89	40.00
5	Rajeev Gandhi Paryavaran Sanrakshan Puraskar	55.00	11.00	7.62	11.00
6	Rajasthan Biodiversity Board	1569.44	277.83	222.58	305.25
7	Health Care Facilities & Bio-Medical Waste	0.00	550.00	55.14	0.02
Centrally Sponsored Schemes					
8	National River Conservation Plan	7008.13	1273.40	0.00	2858.00
9	National Lake Conservation Plan	8949.38	999.64	18.38	3070.61
10	Common Effluent Treatment Plant	700.81	100.00	0.00	200.00
Total		18638.46	3265.70	415.36	6562.04

Achievements for the Annual Plan 2013-14:

- Publication of appeals and messages through print/ electronic media regarding awareness for environment conservation on the occasion of three international days i.e. Earth Day (22 April), Environment Day (5 June) and Ozone Layer Conservation Day (16 Sept.)
- Rajeev Gandhi Paryavaran Sanrakshan Puraskar has been awarded in the categories to an organization and to an individual on the occasion of World Environment Day.
- 24 Biodiversity Management Committees have been constituted at District, Panchayat Samitte and Gram Panchayat levels. Organisation of 1 State level and 7 Divisional level workshops for awareness towards Biodiversity Conservation.

Goals/Objectives & Vision for the Annual Plan 2014-15

11.52 The basic objective of the Department is to promote environmental friendly development. The priorities are:

- Optimum utilization of available manpower, print and electronic media for environmental awareness.
- Dissemination of information relating to environment education through display of posters, hoarding, banners etc.
- Organizing seminar, workshops, lectures, *pad-yatra* etc. for different groups of people
- Inculcating in individuals & masses the habits of judicious use of available natural resources, particularly water, food matter and paper/fiber etc.

- Strengthening of Research and Development aspect of environmental sector.
- Judicious and optimum sustainable use of resources through the concept of 3R's viz. Reduce, Recycle and Reuse to conserve different natural and manmade resources.

11.53 In order to achieve the above objectives following activities are proposed for the Annual Plan:-

Environment Clearance Cell

11.54 The Ministry of Environment and Forest had on 14th September, 2006 issued a Notification for constitution of a State Level Environment Impact Assessment Authority (SEIAA) in consultation with the State Government.

11.55 This notification empowers the Authority to issue environmental clearance in Group 'B' Category projects/ activities. The work involves scrutiny, scoping and appraisal of proposals by an Expert Committee constituted to assist SEIAA and their timely clearance which is a massive task in the Department of Environment. For this work an Environmental Clearance Cell has been constituted. An expenditure of ₹ 8.82 lakh has been incurred in 2013-14. An outlay of ₹ 13.02 lakh is proposed for the Annual Plan 2014-15.

Computerization & Communication

11.56 An expenditure of ₹ 2.13 lakh has been incurred in 2013-14. An outlay of ₹ 2.34 lakh is proposed for the Annual Plan 2014-15.

Environmental Education and Awareness Programmes

11.57 Since 1983 the Department of Environment has been actively involved in organizing Educational Awareness Programmes through different agencies. A policy decision has been taken that expenditure on this item shall be incurred by RSPCB. An expenditure of ₹ 61.80 lakh has been incurred in 2013-14. An outlay of ₹ 61.80 lakh is proposed for the Annual Plan 2014-15 for payment of IInd and IIrd installment to National Environment Engineering Research Institute (NEERI) regarding study report.

Communication and Extension (Publicity)

11.58 Different activities of the department, legislative decisions, various on-going schemes and various facts related to Environment and messages on the occasion of 3 international days viz. Earth Day (22 April), Environment Day (5 June) and Ozone Layer Conservation Day (16 Sept.) will be publicized through print and electronic media. An expenditure of ₹ 38.89 lakh has been incurred in 2013-14. An outlay of ₹ 40.00 lakh is proposed for the Annual Plan 2014-15.

Rajiv Gandhi Paryavaran Sanrakshan Puraskar

11.59 From the year 2012 onwards, following prizes are being given to an Organization/Institution/Individual for outstanding work in the field of Conservation & Protection of Environment:-

1. A prize of ₹ 5.00 lakh/ 2.00 lakh along with silver lotus trophy is given to an organization/ individual respectively, who has done outstanding work in the field of conservation of environment.
2. A prize of ₹ 3.00 lakh along with silver lotus trophy is given to a Municipality/Municipal Corporation who has done outstanding work in the implementation of Environmental Laws.

11.60 An expenditure of ₹ 7.62 lakh has been incurred in 2013-14. An outlay of ₹ 11.00 lakh is proposed for the Annual Plan 2014-15.

Rajasthan Biodiversity Board

11.61 Rajasthan State Biodiversity Board has been constituted under the provisions of Biological Diversity Act, 2002 notified by Govt. of India. State of Rajasthan has notified the Rajasthan Biological Diversity Rules, 2010 under section 63 (1) of Biological Diversity Act, 2002. This Board was constituted vide Govt. of Rajasthan, Forest Department, notification in 2010. Major activities to be conducted by the Board are as under:-

- To make people aware of the biodiversity and its importance in human well being.
- Constitution of Biodiversity Management Committees (BMCs) at the Panchayat & Municipality Level.
- Documentation of Biodiversity, its uses, traditional knowledge and practices associated with it, in the form of People's Biodiversity Registers (PBRs), involving local people through the concerning BMCs.
- Initiating Conservation activities and Bio-resource Management depending upon the PBR of the particular area.
- Identification of Heritage Sites and Sacred Groves of the State & preparation of management plans of these areas in consultation with the concerning BMCs.
- Maintaining Digitized data related to floral & faunal resources of the state.
- Conducting studies on bio-diversity related issues of the State.
- Regulating commercial activities related to bio-resources of the State.
- Regulating activities that affect the biodiversity of the State.
- Conducting biodiversity related workshops for different target groups viz; School, College & University students, teachers,

researchers, scientists, policy makers, BMC members, industries, farmers, breeders, holders & creators of indigenous & traditional knowledge.

- Regulatory activities according to the Biological Diversity Act, 2002 and Rajasthan Biological Diversity Rules, 2010, granting permission to access biodiversity of the State.

11.62 An expenditure of ₹ 222.58 lakh has been incurred in 2013-14. An outlay of ₹ 305.25 lakh is proposed for the Annual Plan 2014-15.

Healthcare Facilities and Bio Medical Waste

11.63 As per new draft Bio-Medical Waste (Handling & Management) Rules, 1998 the State Government has to provide adequate funds for the development of healthcare facilities and Bio-Medical Waste Management in the State. Annual authorization fee under Bio Medical Waste (Handling & Management) Rules, 1998 of these government health care facilities will be about ₹ 50.00 lakh. Therefore, an expenditure of ₹ 55.14 lakh has been incurred in 2013-14.

Centrally Sponsored Schemes

National River Conservation Plan (NRCP)

11.64 Under National River Conservation Plan, Kota and Keshoraipatan cities on river Chambal have been taken up and a project of ₹ 14959 lakh was sanctioned by Government of India. Fund sharing of this project is 70:30 between the Central and the State Government. No expenditure has been incurred in 2013-14. An outlay of ₹ 2858.00 lakh is proposed for the Annual Plan 2014-15 including ₹ 2000.00 lakh of central assistance.

National Lake Conservation Plan (NLCP)

11.65 National Lake Conservation Plan is a centrally sponsored scheme with funding pattern 70:30 between the Central and the State Government. At present 5 lakes namely Anna Sagar (Ajmer), Puskar Sarover (Ajmer), Fateh Sagar & Pichhola of Udaipur and Nakki Lake of Mount Abu are covered under this project. An expenditure of ₹ 18.38 lakh has been incurred in 2013-14. An outlay of ₹ 3070.61 lakh is proposed for the Annual Plan 2014-15 including ₹ 2000.00 lakh of central assistance.

Common Effluent Treatment Plant

11.66 The Government of India has launched a Centrally Sponsored Scheme for construction/ up gradations of Common Effluent Treatment Plant (CETP). Under this scheme 25 per cent subsidy of the total project cost is borne by Central Govt., 25 per cent of cost is borne by State Government, 20 per cent share is borne by Entrepreneurs and 30 per cent is arranged by loan from financial institutions. The State Government has forwarded proposal for up gradation/new construction

of CETPs at Pali, Balotra, Jodhpur, Jasol and Bithuja (new construction of 4 CETP and upgradation of 2 CETP and new construction of Jiggars) involving total cost of ₹ 12722.00 lakh. Total state share for these schemes comes out to be ₹ 3180.00 lakh. An outlay of ₹ 200.00 lakh is proposed for the Annual Plan 2014-15 for state share and central share of these CETPs.

Rajasthan State Pollution Control Board

11.67 The Rajasthan State Pollution Control Board is a body corporate constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974. It was first constituted on 7th February 1975, with the objectives of prevention, and control of water pollution and maintaining or restoring of wholesomeness of water. Later, it was also entrusted with the responsibilities of prevention, control and abatement of Air Pollution under the provisions of Air (Prevention and Control of Pollution) Act, 1981. Water (Prevention and Control of Pollution) Cess Act, 1977 has been enacted to make the State Board financially independent. Under this act the State Board has been given powers to collect Cess on the basis of water consumed by the industries etc.

11.68 Enactment of the Environment (Protection) Act, 1986 has further widened the scope of the activities of the Board. This Act being umbrella legislation, different rules for addressing the problems of various sectors have been enacted under this Act. Provision of ₹ 2685.00 lakh is proposed from Board sources for the year 2014-15 for the following activities:-

**Table No. 11.5
Financial Outlays**

(₹ in Lakh)

Sr. No.	Activity	Proposal For 2014-15 from Board Sources
1.	Land Acquisition	100.00
2.	Construction of Building	913.00
3.	Acquisition & installation of Office Furniture, Machinery and Equipment	367.85
4.	Acquisition & installation of Lab Furniture, Machinery and Equipment	1001.75
5.	Computerisation	202.00
6.	Purchases of Vehicles	100.00
7.	Others	0.40
	Total	2685.00