Annual Report 2010-11

Department of Science & Technology and Climate Change
Government of Sikkim, Gangtok
&
Sikkim State Council of Science and Technology
Development area ,Gangtok

Science & Technology Department in the State was created in the year 1996 mainly for generation of scientific awareness and for transfer of appropriate technologies for economic up-liftment of weaker sections of the society.

Keeping in view the importance of Science & Technology for overall development of the State and to provide sufficient autonomy for implementation of various scientific programmes, the Sikkim State Council of Science & Technology was also created.

The Department of Science & Technology through Sikkim State Council of Science & Technology has implemented various scientific programmes related to (i) Bio-Technology (Bioinformatics & Tissue Culture, Medicinal Plants, Scientific programmes on bio-fertilizers and biopesticides related to Organic farming; Establishment of Sikkim Biotechnology Research and Application centre) (ii) Glaciers and Climate Studies (iii) Environmental Information System; (iv) Patent Information Centre; (v) Remote Sensing and GIS; and (vi) Technology Transfer and Scientific Awareness, Capacity Building and Skill Development Programmes.

The details of work carried out under the different projects are as under:

Science Awareness, Communication and Science Popularization Programme:

DBT-Natural Resources Awareness (DNA) Clubs programme in Sikkim State:

The Department of Biotechnology, Government of India has sanctioned a project DNA Clubs project in Sikkim as a part of major project for entire North Eastern States.

The objectives of the project are as follows:

- To enhance understanding among students about the immense value of biological diversity of our country, the importance of locally available bioresources, their sustainable use and conservation;
- To equip them with relevant skills for bioresource conservation;
- To familiarize students with scientific and technological issues related to biotechnology;
- To provide students with an experimental learning opportunity;
- To create opportunities for hands on experiments in the field at the school level;
- To organize field trips to National Institutes and National Biological parks of the country;
- To facilitate interaction with leading experts in the field including the core and visiting faculty at the Institutions.

In Sikkim 35 schools has been identified for taking up DNA club programme. The programme was formally launched by Hon'ble Chief Minister of Sikkim on 14th October 2009 during Platinum Jubilee celebration of Namchi Senior Secondary School at Namchi, South Sikkim.

The Sensitization Meeting of teachers of DNA CLUB of Sikkim was organized on 22.10.2010 at Sikkim Science Centre, Marchak, Ranipool, Gangtok.

The Sikkim State Council of Science & Technology have identified 35 schools for DNA Club and invited all the schools. Out of which 25 schools attended the meeting. Mr. D.T.Bhutia, Senior Scientific Officer, State Coordinator of DNA Club had explained about the DNA Club, its terms &

condition etc. He told about the details of equipment that the schools will be getting along with some cash money to organize the programmes. He also discussed about the various activities that the schools can organize in their respective school and to maintain the record of activity with date, types of activity, Resource Person invited etc. and also to maintain the expenditure details for submission of Statement of Expenditure and Utilization Certificate later(after taking the programme). The schools has also signed memorandum for taking up the DNA Club programme in the schools. The microscopes, computers and various essential lab equipments for biological experiments are also being provided to these schools.

Innovation in Science Pursuit for Inspired Research (INSPIRE):

INSPIRE Programme is centrally funded flagship programme of the Department of Science & Technology, Govt. of India which is being implemented through State Governments and UT administrations. The objective of this programme is to develop scientific temper amongst the young and to motivate them to take up scientific career for the scientific and technological advancement of the country. This programme has five components covering entire range of education and research from class VI to post doctoral stage of a student. The first component of this programme is INSPIRE Award which recognizes the talents among students at a very early stage. Each INSPIRE Awardee receives a onetime award of Rs.5000/- in his /her school carrier and with this money the awardee will be required to make a project / model which will subsequently be displayed at the exhibition organized at various level , including national level.

Accordingly 22 schools have submitted the name of their student for the award and the list was sent to the Ministry of Science & Technology, Government of India, New Delhi. DST, Sikkim received the Cheques for INSPIRE Award programme. The cheques were distributed by the Honble' Minister –Science & Technology, Government of Sikkim on 28th of July 2010 to students. Further, nominations of 136 students from various schools have also been forwarded during January 2011 to DST, Government of India for issue of INSPIRE Award.

Training Workshop on Telescope Assembling at Sikkim Science Centre

The Sikkim State Council of Science & Technology has organized a three days training workshop at Sikkim Science Center from 21st to 23rd April 2010 regarding **Telescope Assembling.** The training Workshop has been organized jointly with the Vigyan Prasar which is an autonomous organization under the Department of Science & Technology, Government of India. The workshop was attended by science teachers from different schools from various parts of the state, along with the students.

During this workshop, **60 nos of telescopes were assembled** by the participants and these telescopes were handed over to participants for taking back by them to their respective schools to initiate astronomical activities like night sky watching in a regular way. All teachers were also been given a set of kit comprising about 30 activities for understanding the basics of astronomy along with a log book comprising about 30 observation based projects/activities on astronomy to keep the record of the activities undertaken by them.

Dr. B. K Tayagi, Senior Scientist, Vigyan Prasar, Department of Science and Technology, Government of India and Shri. Sandeep Bhattacharya, Director, Birla Planetarium, Jaipur, Rajasthan were the resource persons for the workshop. During the workshop documentary films on 'Eyes *On The Sky', 'The Expanding Universe' and 'Cosmic Collision'* were also shown.

The resource persons have given the elaborate presentations on "Telescope – A Light Bucket"/ "Stars and Constellations"/ "Brightness and Colours of Stars" and "Working of Human Eye" during 1st day. During 2nd Day, presentation on "How to navigate through the stars"/ "Determination of resolution of the telescope"/ "Phases of Moon, How to observe the Moon using the telescope"/