1) Introduction:

The Department of Science, Technology & Environment (DST&E) was established in the year 1983 as a Secretariat Administrative Department at Panaji, and is now (since 1997), located in a modern premises at Saligao (Bardez), 12 kms. from Capital City of Panaji.

2) Organization:

The Department is headed by the Director who is also the ex-officio Joint Secretary to the Government. The Department implements various schemes towards popularization of science, environmental awareness, promotions of Science & Technology (S&T) projects relevant to the State, implementation of renewable energy programmes, application of remote sensing technology, and enforcement of “environmental protection/pollution control” laws. The mandate of the Department is executed through various statutory and non-statutory agencies/authorities listed below

1. Goa State Pollution Control Board (GSPCB).
2. Goa Coastal Zone Management Authority (GCZMA).
5. Goa Energy Development Agency (GEDA).

3) MAIN ACTIVITIES OF DST&E

1. Promotion of appropriate S&T and environmental projects relevant to the needs of the State.
2. Implementation of science popularisation and environmental awareness drives.
3. Organization and promotion of scientific exhibitions, seminars and workshops.
4. Publications of papers, brochures and books etc. relevant to S&T.
5. Application of Remote Sensing technology for management of natural resources and planning.
6. Popularisation and dissemination of non-conventional and renewable energy sources and gadgets.
7. Administration of statutory and advisory bodies on S & T and Environment.
8. Drafting of environmental legislations proposed by the Government from time to time.
9. Nodal action to implement State/Central Acts/Legislations on environment and pollution control through the respective enforcement authorities.

Contd…2/-
4) **Services offered by the DST&E:**

(i) **Promotion of S&T projects and Science Popularisation activities:**

Educational and research institutions, bonafide NGOs and relevant government organisations can avail of this scheme. Funds are released in the form of grant-in-aid to undertake appropriate S&T projects, science popularisation activities, environmental awareness drives and scientific workshops/seminars. Applications in the prescribed format (available at DST&E, Saligao) should be made to the Director (DST&E) & Member Secretary (GSCST) on the address at Sr. Nos. 1 & 2 (APPENDIX - I). The proposals are scrutinized for approval within one month of the date of receipt of completed applications.

(ii) **Non-Conventional and Renewable Energy Sources:**

Activities under this scheme are undertaken through the Goa Energy Development Agency (GEDA), an agency of the government under the purview of the DST&E & is located at Saligao, Bardez, Goa. The mandate of GEDA is to promote non-conventional and renewable energy sources and gadgets through popularization campaigns, demonstrations and offer of incentives. While achieving the said objectives, the public is also made aware of energy crisis, and adverse environmental impacts of conventional energy use. For detailed information on the non-conventional energy products and services/schemes offered by GEDA contact the Member Secretary (GEDA) on the address at Sr. No. 4 (APPENDIX – I).

(iii) **Clearances under the Environment (Protection) Act, 1986:**

All constructions/developments (including houses, hotels and resorts) located within 500 mts. of the High Tide Line (HTL) along the sea coast and within 100 mts. (or the width of the water body, whichever is less) along either banks of rivers/creeks/backwaters influenced by tidal action, require prior clearance under the CRZ Notification of 1991. Applications in the prescribed format (available at DST&E, Saligao) should be made to the Member Secretary (GCZMA) on the address at Sr. No. 1 (APPENDIX -I). The proposals are scrutinized for approval within one month of the date of receipt of completed applications. Projects requiring clearance from the Ministry of Environment & Forests (MOEF), Government of India (New Delhi), are first approved by the GCZMA and forwarded to the MOEF.

Contd…3/-
(1) **Environment Impact Assessment (EIA)**

Industries including Thermal Power Plants included in the Schedule of the Environmental Impact Assessment (E.I.A.) Notification No.S.O.1533 of 2006 are required to obtain prior environmental clearance from the Ministry of Environment & Forests, Government of India, (MoEF), (GoI). Public Hearing is mandatory for all such proposed industries and a report of the said Hearing is a pre-requisite for seeking environmental clearance. Applications should be first made to the Member Secretary, Goa State Pollution Control Board (GSPCB) on the address at Sr. No.3 (APPENDIX – I) in the prescribed format available with the GSPCB, to request the conduct of the Public Hearing. In cases of proposed mining leases, Public Hearing is mandatory only for lease area of more than 25 Hectares. Subsequently the proposals in the prescribed format should be forwarded either to the MoEF, GoI, as the case may be, alongwith the Report of Public Hearing, Consent to Establish (NOC) issued by the GSPCB, and all other supporting documents (e.g. EIA Report, EMP Report, etc) as per the EIA Notification, 2006.

(2) **Consent to Establish and Consent to Operate under the Water and Air Pollution (Control) Acts:**

All industries including those which are not listed in the Environment Impact Assessment (E.I.A.) Notification, 2006 have to obtain Consent to Establish (NOC) under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act 1981 prior to the commencement of their construction. On completion of the construction work, all such industries are again required to obtain the Consent to Operate under the said Acts prior to the commencement of industrial production.

Applications in the prescribed format alongwith all the relevant documents and the prescribed fees should be made to the Member Secretary (GSPCB) on the address at Sr. No. 3 (APPENDIX – I). The proposals are scrutinized for approval within one month of the date of receipt of completed applications.

Contd...4/-
(3) **Authorization under Hazardous Waste (Management & Handling) Rules, 1989:**

All proposals involving industries generating hazardous waste, as defined in the said Rules, require prior authorisation to dispose off their hazardous wastes. Those desiring to obtain such an authorisation should contact the Member Secretary (GSPCB) on the address at Sr. No. 3 (APPENDIX – I). The proposals are scrutinized for approval within one month of the date of receipt of completed applications.

(4) **Authorisation under the Bio-medical Waste (Management and Handling) Rules, 1998:**

Every occupier of an institution generating, collecting, receiving, storing, transporting, treating, disposing and/or handling bio-medical waste in any other manner except such occupiers of clinics, dispensaries, pathological laboratories and blood banks providing treatment/services to less than 1,000 patients per month should obtain authorization from the GSPCB. Also, every operator of a bio-medical waste facility should obtain the authorization from the GSPCB.

Applications in the prescribed format (available with the GSPCB) should be made to the Member Secretary (GSPCB) on the address at Sr. No. 3 (APPENDIX – I).

(5) **Authorization under the Municipal Solid Waste (Management and Handling) Rules, 2000:**

All municipal authorities and all operators of waste disposal facilities have to obtain authorization from the GSPCB for setting up municipal waste processing and disposal facilities including sanitary landfills. In this regard, municipal authorities should comply with the implementation schedule as indicated in above mentioned rules.

Application in the prescribed format should be made to the Member Secretary (GSPCB) on the address at Sr. No. 3 (APPENDIX – I).

Contd ...5/-
5) ESTABLISHMENTS AND FACILITIES PROMOTED BY THE DSTE

A. Goa Science Centre located on Marine Highway, Miramar is a unit of National Council of Science Museums (NCSM) functioning under the Ministry of Tourism and Culture, GoI and developed with the support of DST&E, Goa.

Goa Science Center is an excellent Science Education facility perceived and developed to inculcate scientific temper among students in particular and people in general. The center houses modern indoor interactive exhibits consisting various galleries depicting scientific principles and phenomena in biology/physics/chemistry/earth sciences/oceanography/fun science, etc. It also houses outdoor science park for children, renewable energy systems, mobile science exhibition and computer room. State-of-the-art 3-D theater is the attraction of the student community here. The Centre also conducts various activities such as workshops, science quiz contests, science fairs, National Science Day, World Environment Day, science film festival, science drama competitions, and training programmes for teachers and housewives.

Virtual Reality Corner is the latest addition wherein latest Information Technology exhibits are placed in Fun Science Gallery. So also Large Size Models of Prehistoric Animals such as Dinosaurs have also been installed in the Science Park.

The visiting hours for the center is from 10.30 am. To 6.00 pm on all days except Holi and Diwali. The Entry fee is Rs. 10/- per head for general visitors and a concessional entry fee of Rs.5/- per student in organized school/college groups.

For more details, please contact:

The Project Director,
Goa Science Centre
Marine Highway, Miramar,
Panaji, Goa – 403 001.
Ph.No. (0832) 2463426
Email: gscp1@dataone.in
WEBSITE : WWW.goasciencecentre.org.

Contd …6/-
B. Amateurs’ Astronomical Observatories at Panaji (Junta House), Margao (Electricity House) and Ponda (Goa Vidya Prasarak Mandal (GVM), Ponda).

The Amateurs’ Astronomical Observatory at Panaji (Junta House) is managed through the NGO, Association of Friends of Astronomy (AFA). The entry is free and the viewing timings are 19.00 Hrs. to 21.00 Hrs. on weekdays during the months of November to May. Regular lectures, seminars and outreach programmes are organized by the observatory.

For more details, please contact:

Shri. Percival Noronha,
E-426, Fontainhas,
Panjim, Goa – 403 001.
Tel: (0832) 2225726
Email: percivalnoronha@rediffmail.com

The Amateurs’ Astronomical Observatory at Goa Vidya Prasarak Mandal (GVM), Ponda, is established on 18th December, 2004 with state-of-the-art equipments. The Observatory has excellent supporting infrastructure such as an air conditioned seminar room called Antaral housing a library of books on Astronomy, other audio visual aids including Computer, CCD camera, eyepieces, different kind of filters and turbo films. Latest addition to this is the installation of Astronomical Dome for Star Gazing. Viewing timings are from 19.00 to 20.00 on three days in a week (MON-WED_FRI).

For more details, please contact:

Goa VidyaPrasarak Mandal’s (GVMs) Science Center,
Farmagudi, Ponda.
Ph.No.(0832) 2318258/2318498/2313484

The Amateurs’ Astronomical Observatory at Vidyut Bhavan (Power House), Aquem, Margao established on 14th November, 2004 and is managed through the Margao Chapter of the Association of Friends of Astronomy (Goa) The entry is free and it is open only on Saturdays and Sundays from 19.00 to 21.00 hours during the months of November to May. Astronomical models are displayed at the Observatory and night sky observation programmes are conducted throughout Goa during fair season.

For more details, please contact:

Shri. Atul Naik
President, AFA (Margao Chapter),
2nd Floor, Naik Building,
Cloth Market, P.O. Box 9,
Margao – Goa – 403 601.
Ph: (0832) 2702431, 2750581,
Email: atulnaik@sancharnet.in

Contd ...7/-
C. **The Non Conventional Energy Park** is located at Saligao in the DSTE campus. It is equipped with various "new/renewable" systems such as Solar Water Heating System, Solar Drier, Solar Cooker, Solar Lantern, Solar Stand alone Systems, Solar Still, Improved Chulha, Solar Parabolic Cooker, etc. The entry is free and a live demonstration of the systems is given to the visitors.

**For more details, please contact:**

*Member Secretary*
*Goa Energy Development Agency (GEDA)*
*Ph: 2407194 / 2407112*
*Fax: 2407194*
*E-mail: gedagoa@yahoo.com*

C. **Reference Library on Science, Technology and Environment, at Saligao, Bardez, Goa.**

The Library consists of a collection of various books, journals and periodicals on science and environment, various technical reports pertaining to Goa. Popular magazines on science, newspapers, gazettes, notifications on environmental/pollution control laws, etc.

The library is open from 10.00 Hrs. to 17.00 Hrs. on all working days from Monday to Friday.

**For further details, please contact**

Phone: (0832) 2407189
Email: dir-STE.goa@nic.in

- **Two modern Science Education Vehicles (SEVs) for North and South Goa districts.** The SEV is a bus equipped with "Audio-visuals/Tools/Exhibits" to serve as a modern science facility to impart science education especially in "Remote/Rural" localities in the state.

- **Outreach facilities for watershed development projects** at Tuyem (Pernem) & Cola (Canacona) under Integrated Watershed Development Programme (IWDP) scheme of the Ministry of Rural Development, GoI.

- **ENVIS** center for Goa to disseminate information on Sustainable Utilization of Natural Resources of Goa and Management of Ecosystems in the State.

- **Patent Information Centre (PIC)** to scrutinize and forward matters related to Intellectual Property Rights (IPR).

Contd…8/-
### APPENDIX - 1

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Addresses/Telephone &amp; Fax Nos./E-mail</th>
</tr>
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</table>
| 1)      | The Director/Jt. Secretary (DST&E), Department of Science, Technology & Environment, Opp. Saligao Seminary, Saligao, Bardez, Goa - 403511.  
         | & The Member Secretary, Goa Coastal Zone Management Authority (GCZMA), C/o DSTE, Saligao, Bardez, Goa.  
         | Telephone No.: (0832) 2407186/2407187/2407189/2407176  
         | Fax No.: (0832) 2407186  
         | E-mail: dir-ste.goa@nic.in |
| 2)      | The Member Secretary, (GSCST), C/o Department of Science, Technology & Environment, Opp. Saligao Seminary, Saligao, Bardez, Goa - 403511.  
         | Telephone No.: (0832) 2407186/2407187/2407189/2407176  
         | Fax No.: (0832) 2407186 |
| 3)      | The Member Secretary, Goa State Pollution Control Board (GSPCB), Dempo Towers, EDC Complex, Patto, Panaji, Goa 403 001  
         | Telephone No.: (0832) 2438567/2438550  
         | Fax No.: (0832) 2438528  
         | E-mail: goapcb@dataone.in |
| 4)      | The Member Secretary, Goa Energy Development Agency (GEDA), Opposite Saligao Seminary, Saligao, Bardez, Goa - 403.511.  
         | Telephone No.: (0832) 2407194, 2407112  
         | Fax No.: [0832] 2407194  
         | E-mail: gedagoa@yahoo.com |