



# ENVIS

## News Letter

on State of Environment

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## World Environment Day Celebration

### Don't Desert Drylands

*The slogan emphasizes the importance of protecting drylands, which cover more than 40% of the planet's surface. This ecosystem is home to one-third of the world's people who are more vulnerable members of society.*

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The World Environment Day is celebrated on 5<sup>th</sup> of June all over the world. The theme of the World Environment Day for the year 2006 is “Deserts and Desertification” and the slogan is “Don’t Desert Drylands!” To commemorate the World Environment Day in Tamil Nadu, a rally was organized in Chennai by the Department of Environment involving 12 schools consisting of 200 NGC and Eco club members. **Thiru K.S. Neelakantan, I.F.S.**, Director of Environment flagged off the green rally that started from Guindy National Park, and concluded at Birla Planetarium. **Thiru T. P. M. Mohideen Khan**, Hon’ble Minister for Environment presided over the function and released “Arivukkan” a special issue and a compact disk on “Air Pollution”. **Thiru Vishwanath Shegaonkar, I.A.S.**, Secretary, Environment and Forests, **Thiru K.A. Mathew, I.A.S.**, Chairman, TNPCB also spoke on the occasion. Tree saplings were planted by the dignitaries at the premises of Birla planetarium. The World Environment Day was also celebrated in other districts of Tamil Nadu. A State level function was also organised on June 6<sup>th</sup>, at Palayamkottai and the Hon’ble Speaker of Tamil Nadu Legislative Assembly, Hon’ble Minister for Environment, Hon’ble Minister for Social Welfare and other dignitaries participated.

In **Dindigul**, **Tmt. R. Vasuki, I.A.S.**, District Collector flagged off the cycle rally where hundreds of students, NSS volunteers and members of Green Club participated. A workshop on “Dry land Management and Promotion of Horticultural Crops” was organized by Parkkavan Trust in Trichy District. Around 107 school students participated in the drawing competition, and 200 saplings were planted. Maruthi (Multipurpose Association for Rural Upliftment Technology and Human Integrity) celebrated the World Environment Day at the premises of Tamil Nadu Pensioners Society at Manamadurai, Sivagangai district. They conducted a one day awareness programme for the students, villagers and members of Self Help Groups on Green Belt Development, Solid Waste Management, Pollution Control, Ground Water and Modern Agricultural Practices for better living.

In **Madurai** district, the Chief Education Officer (CEO), **Tmt. K.Sridevi**, presented the ‘Jessie Jeyakaran best National Green Corps rolling shield’ to Capron Hall Girls higher secondary school. About 800 young boys and girls from X and XII standard gathered in the campus of Sri Meenakshi Government College for Women to demonstrate their concern over the diminishing green cover.

In **Erode** district, **Tmt Sonal V. Misra, I.P.S.**, flagged off the World Environment Day awareness rally. **Thiru P. Kuppusamy**, CEO released stickers and pamphlets on environmental awareness. About 480 students participated in this programme.

In **Coimbatore** district, World Environment Day was celebrated in Pollachi Municipal Girls Higher Secondary School. **Thiru D.N. Venkatesh, I.A.S.**, Sub Collector, presided over the seminar, **Thiru K.R. Varadarajan I.F.S.**, Wildlife Warden, Indira Gandhi wildlife sanctuary flagged off the rally.

*Thiru T.P.M. Mohideen Khan planting the tree saplings at Birla Planetarium, Chennai*



*Centenary hall at Palayamkottai, Tirunelveli*



*Rally at Tirunelveli*



*Minister Dr. Poongothai Aladi Aruna launched the NGC website*



*Minister Thiru T.P.M. Mohideen Khan releasing the SoE Report 2005*



## Environmental Awards 2005 - 2006

The Government of Tamil Nadu has instituted ten Environmental awards to recognize excellence in the different fields of environment. The award ceremony of the Department of Environment was held on 6<sup>th</sup> June at Palayamkottai, Tirunelveli district. **Thiru K.S. Neelakantan, I.F.S.**, flagged off the school children's rally that started from V.O.C Park, and concluded at Centenary hall. Hon'ble Minister for Environment **Thiru T.P.M. Mohideen Khan**, presided over the function and released the SoE Report and SoE CD. Hon'ble Speaker **Thiru R. Avudaiyappan**, distributed the Environmental awards to the winners and graced the occasion. **Thiru V. Karuppa Samy Pandian, M.L.A.**, delivered the inaugural address. During the celebration, **Thiru T.P.M. Mohideen Khan**, Hon'ble Minister for Environment, handed over a cheque for rupees one crore to the Tamil Nadu Water Supply and Drainage Board on behalf of TNPCB for constructing the underground drainage system in Tirunelveli district.

## NGC Website Launched

**Dr. Poongothai Aladi Aruna**, Hon'ble Minister for Social welfare launched the NGC website on the 6<sup>th</sup> June at Palayamkottai, Tirunelveli district. The NGC website includes information on NGC, Eco Clubs, Clean and Green street project, list of experts, teaching modules for school students, discussion forum, online chat, online quiz and video conferencing facilities using skype software. Adequate links have been provided to the national and international environmental educational resources. Separate e-mail IDs were created for all the NGC coordinators to interact with the Resource and Nodal agencies to facilitate online interaction. This interactive and informative website was designed by the ENVIS Centre.

## Environmental Award Winners 2005-06

### ENVIRONMENTAL EDUCATION AND AWARENESS AWARD

**First Prize: Arignar Anna Virudhu** was conferred on **Sri. R.K.M Saradha Vidyalaya Model Higher Secondary School**, Chennai for their contribution in disseminating Environmental awareness among school children. This school has taken many eco-campus initiatives such as constructing rainwater-harvesting pit, vermi-compost pit and planting medicinal plants. They are also creating environmental awareness to

the school students through nature camps, rallies and human chain and implementing Clean and Green street project.

**Second Prize: Thiru S.K. Shankar**, Scientist, WaterX, Eureka Forbes, Institute of Environment was honoured with **Sutru Suzhal Sudaroli Virudhu** for his contribution in creating environmental awareness among school and college students by organizing Water Wiz, Euro Enviro quiz, and Inter college quiz contest in collaboration with ENVIS Centre. He has organized many environmental awareness programmes for the medical doctors, public and school students on environmental pollution and its impact on health.

**Third Prize: Sutru Suzhal Seyal Veerar Virudhu** was conferred on **Thiru K. Arumugam**, Eco-club coordinator, Inba Seva Sangam, Karur for creating environmental awareness. He has conducted Environmental education training programmes for 8,300 students and 775 school teachers. He is also creating awareness among the rural mass and school students on rain water harvesting, herbal gardening, vermi-composting, green belt development and editing Eco's – Echo a news letter published by Inba Seva Sangam.

### ENVIRONMENTAL PROTECTION AWARD

**First Prize: Dr. Gurusamy Mudaliyar Virudhu** was conferred on **Global Society for Eco Development and Environmental Protection (GSEDP)**, Theni for carrying out various environmental protection and awareness programmes on waste management, vermi compost technology and herbal gardening. They have published many books on herbal soup, research articles on Western and Eastern Ghats of Tamil Nadu towards Environmental protection.

**Second Prize: Thiru N. Chidambaram** from "Madurai Green" was awarded with **Sutru Suzhal Kavalir Virudhu** for his involvement in aesthetic development of Madurai city by planting trees, developing eco-parks and creating environmental awareness among the common people. "Madurai Green" has planted 4 lakhs and 75 thousand saplings towards Environmental protection.

**Third Prize: Dr. N. Ramasubramanian** was honoured with **Sutru Suzhal Seyal Veerar Virudhu** for publishing research articles on Environmental education for the past three years. He continues to create awareness through writings in various journals and newspapers, speaking in various forums and disseminating environmental information towards environmental protection.



## ENVIRONMENTAL MANAGEMENT AWARD

**First Prize: Karma Veerar Kamarajar Virudhu** was awarded to **Prof. A. Ragupathy**, Former Dean, TNAU, Coimbatore. He has published many research papers in the field of Integrated Pest Management and bio-fertilizer and contributed immensely in promoting bio-pesticides. His research papers have been accepted in many national and international journals.

**Second Prize: Dr. S. Rajendran**, Lecturer in Botany, Saraswathi Narayanan College, Madurai was honoured with **Sutru Suzhal Puravalar Virudhu** for developing a novel technique to extract liquid and solid manure from seaweed and also for extracting bio-pesticides from neem trees. He has propagated these techniques to the farmers for their economic upliftment.

**Third Prize: Kongu Polytechnic** has been awarded **Sutru Suzhal Seyal Veerar Virudhu** for promoting green belt in their premises. They have also constructed tanks and pits, for harvesting rainwater in their premises and recycling wastewater for the garden using sprinkler technology and also using human excreta for producing biogas.

**Best Research Paper Award: Dr. N. Kannan**, Associate Professor in Chemistry, Ayyanadar Janaki Ammal College, Sivakasi was awarded the “**Best Research Article**” for his research paper on “**Comparison of cadmium ion adsorption on various activated carbons**”. He has studied the removal of cadmium (II) ions from aqueous solutions using activated carbon with the objective of treating effluent contain cadmium ions.

## Earth Day Celebration

Federation of Science clubs of Tamil Nadu in collaboration with DoE celebrated Earth Day on 22<sup>nd</sup> April 2006. Exhibition, film show, drawing and debate competitions for school children were organized by CPR Environmental Educational Centre, Chennai. Dr. Mrs. Nanditha Krishna, Honorary Director, CPR Foundation, delivered the welcome address. Mrs. Anne Seshadhri of U.S Consulate, Chennai enunciated significance of Environmental protection. **Thiru K.S.Neelakantan, I.F.S.**, Director of Environment, delivered the keynote address and distributed the prizes for the winners of the drawing and debate competitions.

## Post Tsunami Coastal Protection Projects

A workshop on “Post Tsunami Coastal Protection Projects” was organized by TRINET in collaboration with DoE. The workshop was conducted towards a better understanding of the damages caused by Tsunami. **Thiru K.S. Neelakantan, I.F.S.**, Director, DoE, presided over the function and said that an Integrated Coastal Zone Management Plan was essential to achieve economic prosperity without sacrificing ecological security. **Thiru R. Santhanam, I.A.S.**, State Relief commissioner delivered the inaugural address and five scientific presentations were made by the experts on the various aspects of coastal protection.



## “Deserts and Desertification” – theme of the World Environment Day Celebration

Desertification has long been recognized as a major environmental problem affecting the living conditions of the people. In 1997, a United Nations Conference on Desertification (UNCOD) was convened in Nairobi, Kenya to produce an effective, comprehensive and co-ordinated programme for addressing the problem of land degradation. The major factors for desertification are population pressures, inappropriate land use and agricultural practices, social conflicts and drought. Desertification was recognized as a major global concern affecting over 250 million people directly and with over one billion at risk, changing the traditional lifestyle, culture and composition of the rural societies. The UN Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in June 1992 highlighted the problem of desertification and recommended to prepare a convention to Combat Desertification. (National action programme to combat Desertification, MoEF, 2001).

### Desertification in India

India occupying 2.4% of the world's geographical area supports about 16.2% of the world's human population. India is endowed with a variety of soils, climate, biodiversity and ecological regions. About 228 mha (69%) of its geographical area falls within the dry lands. In India, the cause of degradation of environmental resources lie ultimately in a broad range of policy, and legal institutional regimes, including regulatory shortcomings, leading to the direct causes. In addition, there is lack of awareness of the causes and effects of environmental degradation, and how they may be prevented, among both specialized practitioners of the relevant professions, including policymakers, as well as the general public, which needs to be redressed. (NEP 2006).

### Land degradation

The degradation of land, through soil erosion, alkalinisation, water logging, pollution, and reduction in organic matter content has several proximate and underlying causes. The proximate causes include loss of forest and tree, unsustainable grazing, excessive use of irrigation, improper use of agricultural, diversion of animal wastes for domestic fuel, and disposal of industrial and domestic wastes on productive land. These proximate causes of land degradation in turn, are driven by implicit and explicit subsidies for water, power, fertilizer and pesticides. Grazing lands are usually common property resources, and insufficient empowerment of local institutions for their

management leads to overexploitation of the biomass base. The absence of conducive policies and persistence of certain regulatory practices reduces people's incentives for afforestation, and leads to reduced levels of green cover. In addition, to such policy review, the following specific initiatives would be taken:

- a) Encourage adoption of science-based, and traditional sustainable land use practices.
- b) Promote reclamation of wasteland and degraded forestland.
- c) Prepare and implement thematic action plans incorporating watershed management strategies.
- d) Promote sustainable alternatives to shifting cultivation where it is no longer ecologically viable.
- e) Encourage agro-forestry, organic farming, environmentally sustainable cropping patterns, and adoption of efficient irrigation techniques. (NEP 2006).

### Desert Ecosystems

The arid and semi-arid region of India covers 127.3 m.ha (38.8%) of India's geographical area and spreads over 10 states. The Indian desert fauna is extremely rich in species diversity of mammals and winter migratory birds. However the pressures of a rapidly increasing population on the natural resource base necessitate the adoption of innovative and integrated measures for conservation of desert ecosystems. The needed measures include:

- a) Intensive water and moisture conservation through practices based on traditional and science based knowledge, and relying on traditional infrastructure.
- b) Enhancing and expanding green cover based on local species.
- c) Reviewing the agronomic practices in these areas, and promoting agricultural practices and varieties, which are well adapted to the desert ecosystem. (NEP 2006).

### Desertification in Tamil Nadu

In Tamil Nadu, the degraded land of the state extends to an area of 20845.24 sq.km. (Atlas of the sustainability of food security – MSSRF & WFP). The state has predominantly red, black, and alluvial soil types. Sandy soil regions of southeast Tamil Nadu suffer from chronic droughts. The district of Tirunelveli has the maximum area under wasteland (2.64 lakh ha) followed by Erode district which is 2.03 lakh ha. Apart from these two districts, the districts of Villupuram, Thiruvannamalai, Coimbatore, Tiruchirapalli, Karur, Pudukkottai, Dindigul,



Virudhunagar, Sivagangai and Thoothukudi have more than one lakh hectares under waste land. (Agriculture development strategy report for Tamil Nadu, 2004).

## Factors causing land degradation

### A. Erosion

In Tamil Nadu the wind-eroded soils are found along the coastal belt of the Bay of Bengal, in the taluks of Tuticorin, Srivaikundam, Tiruchendur, Sattankulam and Radhapuram, in Chidambaranar district and soil erosion is observed in 13 lakh ha. (Agriculture development strategy report for Tamil Nadu, 2004). This soil, commonly known as *theri* soil, is a problematic soils in Tamil Nadu, including saline, alkaline, acidic and coastal sandy soils. *Theri* soil, which is formed by wind erosion, is red to dark red in colour, sandy in texture, single-grain in structure, wet, non-sticky, non-plastic, non-calcareous and neutral in reaction. The soil particles are deposited elsewhere, forming sand dunes. (Manoharan, TNAU, 1995).

### B. Salinity and Alkalinity

The adverse effect of salinity in soil is that it hinders crop growth and results in reduction in crop yield. The estimated extent of soils affected by salinity and alkalinity is estimated at 2.48 L.ha. Besides 1.23 L.ha. suffering from acidic soils. Among the various districts of the State, 51,859 ha. of saline/alkaline soils occur in Tirunelveli followed by Kancheepuram district (30,956 ha), Thoothukudi (29,961 ha.) and Coimbatore district (28,621 ha.). (Agriculture development strategy report for Tamil Nadu, 2004).

### C. Water Logging and Marshy Land

The coastal regions of Tamil Nadu face heavy damages due to water logging. The command areas in major

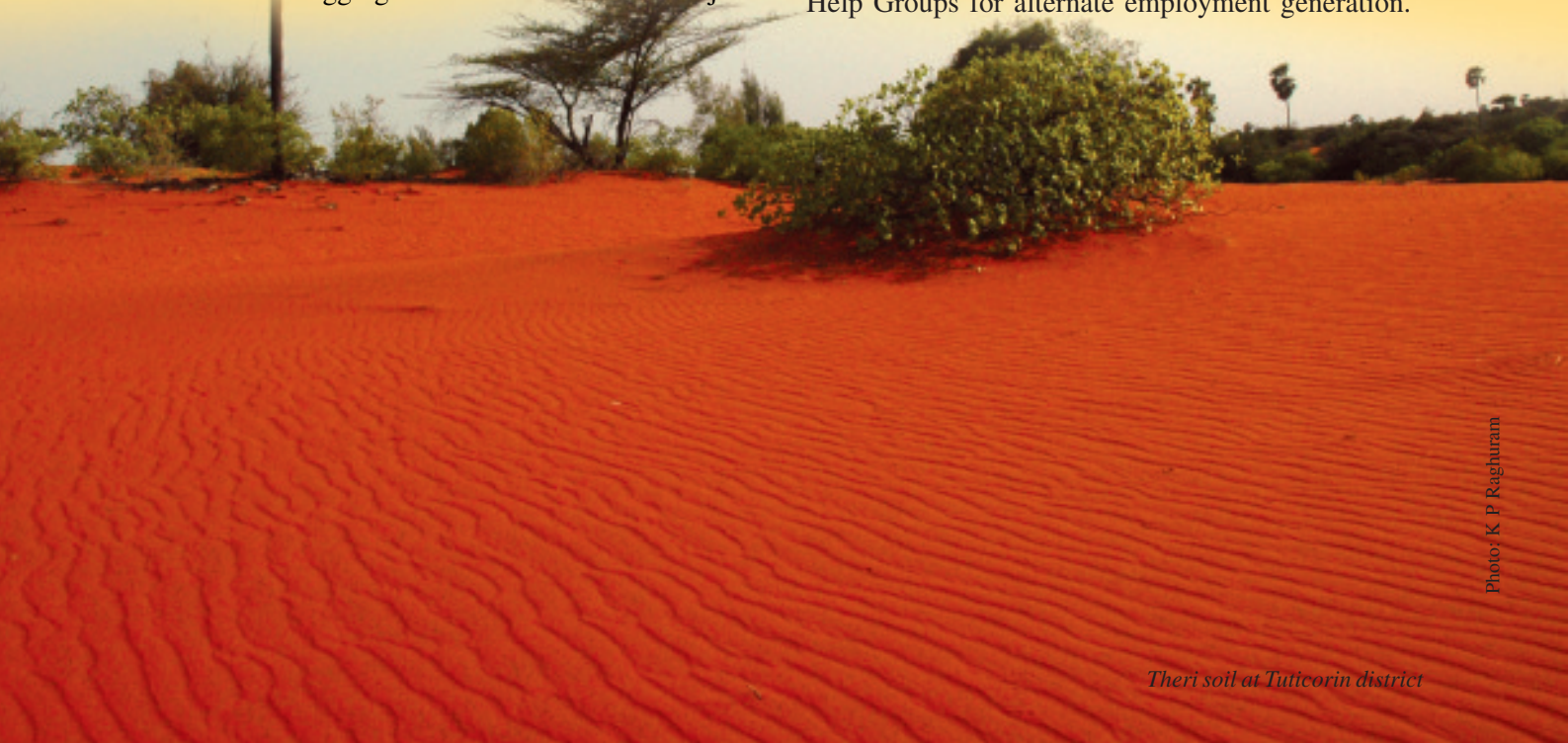
irrigation projects like Cauvery Mettur, Lower Bhavani, Periyar, Vaigai, Parambikulam, Aliyar, Tamirabarani and Amaravathy experience water logging problem. These areas are under high risk of total crop failure or crop damage due to flooding. In Tamil Nadu 44,820 ha. is estimated as marshy lands, Nagapattinam has the maximum area under marshy land (17,499 ha.) followed by Thiruvarur (9,750 ha.) Cuddalore (5,502 ha) and Kancheepuram (5,903 ha). (Agriculture development strategy report for Tamil Nadu, 2004).

### D. Gullied/Ravine lands

The gullies are formed as a result of localized surface runoff affecting the area friable unconsolidated material resulting in the formation of perceptible channels and in undulated ravine. The ravines are extensive system of gullies developed along nullas, streams and river course. It has been estimated that Tamil Nadu has 22,550 ha. under gullied/ravine lands. Among the various districts, Perambalur district has largest area with 11,062 ha. followed by Tiruchirappallai with 3,370 ha. (Agriculture development strategy report for Tamil Nadu, 2004).

## Government Initiatives

The major programmes launched by the Government to control desertification are the Afforestation programmes, Drought Prone Area Programme, Desert Development Programme, Indira Gandhi Nagar Project, National Watershed Development Project for Rainfed Areas, Soil Conservation in the Catchments of River Valley Projects and Protected Area Network. A pilot project under implementation in Ramanathapuram district, which include *Oasis Plantation for stabilisation of sand dunes*, construction of check dams and percolation ponds for soil and moisture conservation and formation of Self Help Groups for alternate employment generation.



The scheme will involve planting of legumes and grasses to support animal husbandry in these areas. This project may become a model for tackling larger areas in future under the “United Nation Convention for Combating Desertification Programme. (Department of Environment policy note, 2005-06).

### Enviro Clippings

#### **Mangrove forest area to be increased**

Thiru Gagandeep Singh Bedi, I.A.S., District Collector, Cuddalore has formulated a proposal to increase the mangrove forests from 650 hectares to 750 hectares by raising mangrove forest at Pichavaram at the cost of Rs. 28 lakh. The project would be taken up under the National Rural Employment Guarantee programme.

- June 12, 2006 *The Hindu*

#### **Tamil Nadu tops in Industrialization**

Tamil Nadu stands number one in the number of industrial units in the country. Out of 42.12 million units in the country it has about 44.66 lakh units which are 10.56 percent of the total enterprises in the country. Maharashtra follows with 43.74 lakh units (10.39 percent), next comes West Bengal 42.85 lakh (10.17 percent), Andhra Pradesh 40.23 lakh (9.55 percent) and Uttar Pradesh 40.15 lakh (9.52).

- June 12, 2006 *The New Indian Express*

#### **Need for Fisheries Development Board**

The Union Cabinet approved for setting up of a National Fisheries Development Board (NFDB). The Board will focus on fisheries and aquaculture. It will also promote professional management to improve production and to achieve sustainable management by carrying out intensive aquaculture, reservoir fisheries, brackish water aquaculture, Mari culture, seaweed cultivation, development of infrastructure and streamlining domestic marketing.

- June 17, 2006 *The Hindu*

#### **Clean mechanism on pollution issue urged**

Thiru Sasikant K. Panigrahi, Director, Environment and Forests, Planning Commission, Government of India said that Tamil Nadu ranks fourth in carbon credits with wind energy, bio-diesel plantation and renewable energy sectors taking to Clean Development Mechanism (CDM).

- June 17, 2006 *The New Indian Express*

### **International Day for Biological Diversity 22 May, 2006**



The United Nations proclaimed May 22 the International Day for Biological Diversity (IBD) to increase understanding and awareness of biodiversity issues. Dry lands ecosystems receive very erratic rainfall, and as a result are very fragile. Biodiversity in these ecosystems is under threat from a variety of human activities. The transformation of habitats for human use, mostly agricultural, and increases in overexploitation, including overgrazing, has led to the degradation of up to 20% of dry lands ecosystems – with stark results: desertification and drought, the endangerment of 2,311 species, the loss of over 40 billion dollars a year in lost agricultural production and the resulting rise of social, economic, and political tensions. Poverty has forced populations who are dependent on natural resources to overexploit already marginal lands in order to sustain their livelihoods. Existing incentive frameworks do not encourage the sustainable use of resources. The urgency of these issues has been recognized in the decision of the United Nations General Assembly to proclaim 2006 the International Year of Deserts and Desertification. Parties to the Convention on Biological Diversity are also committed to the conservation and sustainable use of biological diversity in dry lands, and are working to ensure equitable sharing of the benefits from the use of genetic resources in these ecosystems. Actions to conserve biodiversity include:

- a. Reducing overgrazing in delicate ecosystems.
- b. Reducing pollutants produced by intensive agriculture.
- c. Slowing the conversion of grassland and savannah systems to agriculture and urban settlement.
- d. Taking steps to control invasive alien species into these ecosystems.
- e. Helping to build institutions that will alleviate poverty and allow the poor to realize sustainable livelihoods.
- f. Mobilizing sufficient financial and technical resources, particularly for developing countries, to achieve the Millennium Development Goals and the 2010 biodiversity target.

Source: [www.biodiv.org/programmes/outreach/awareness/biodiv-day-2006.shtml](http://www.biodiv.org/programmes/outreach/awareness/biodiv-day-2006.shtml)



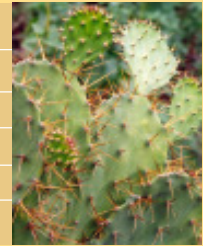


*World Environment Day speech by Mr. Kofi Annan, UN Secretary General*

Across the planet, poverty, unsustainable land management and climate change are turning drylands into deserts, and desertification in turn exacerbates and leads to poverty. It is estimated that between 10 to 20 % of drylands are already degraded. The problem is particularly acute in sub-Saharan Africa and South Asia, where dryland degradation is a serious obstacle to eradicating extreme poverty and hunger. These goals, which the world's governments have pledged to achieve by 2015, are essential components of a broader commitment to achieve a more secure future for humankind. Desertification is hard to reverse, but it can be prevented. Protecting and restoring drylands will not only relieve the growing burden on the world's urban areas, it will contribute to a more peaceful and secure world.

**Weblinks on Combating Desertification**

1. Convention to Combat Desertification	<a href="http://www.unccd.int">www.unccd.int</a>
2. Food and Agriculture Organisation (FAO)	<a href="http://www.fao.org/desertification">www.fao.org/desertification</a>
3. Drylands Development Centre	<a href="http://www.undp.org/drylands">www.undp.org/drylands</a>
4. United Nations Environmental Programme	<a href="http://www.unep.org">www.unep.org</a>
5. Protect biodiversity in drylands	<a href="http://www.biodiv.org">www.biodiv.org</a>

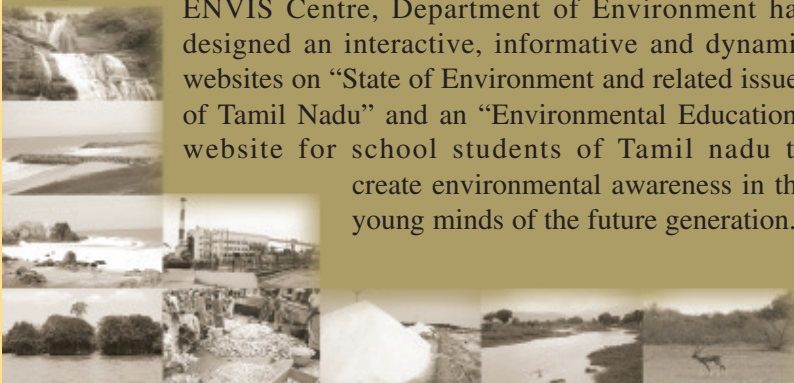


*e - governance Initiatives of the Department of Environment*

The Government's National Minimum Programme accords priority to improving the quality of basic governance and in that context proposes to promote e-governance on a massive scale in areas of concern to the common man.

The vision of the National e-governance plan is to "Make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at a affordable costs to realise the basic needs".

ENVIS Centre, Department of Environment has designed an interactive, informative and dynamic websites on "State of Environment and related issues of Tamil Nadu" and an "Environmental Education" website for school students of Tamil nadu to create environmental awareness in the young minds of the future generation.



[www.envis.tn.nic.in](http://www.envis.tn.nic.in)



[www.greencorpstn.net](http://www.greencorpstn.net)

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