

Tripura Chief Minister demands "Green Bonus"

The 14th Finance Commission led by Chairman Y.V. Reddy arrived at Agartala on 12th November 2013, on a three-day visit. During its stay, the Commission Members met the Council of Ministers, officials, leaders of various political parties and elected representatives of Local Government Bodies. "Tripura has sought Rs 67,104.82 crores as Special Grant from the 14th Finance Commission for all-round development of the State" said Hon'ble Chief Minister Sri Manik Sarkar in a Press Meet. "The State has also demanded 'Green Bonus' for its forest cover measuring 73% of its geographical area that releases huge quantum of oxygen in the environment" he added.

Festival Season Noise Pollution Reduced

Laxmi Puja and Deepabali (Kali Puja) Nights used to become unbearable mostly to the children, elderly persons & the ailing people, in Tripura due to bursting of high dB sound producing fire crackers. Fire crackers are generally classified as light emitting and sound emitting. But several hybrid types are now available which are both light emitting and sound emitting. They also generate a lot of sound. The Tripura State Pollution Control Board (TSPCB) issued direction banning use, sale, purchase, storage and/or transportation of fire crackers generating noise more than 90 decibels at 5 metres distance from the point of bursting. The Board requested the Taxes and Excise Department, Tripura, to keep a check on the entry of banned fire crackers in the State. The Board requested the District Administration as well for help in implementing the direction issued in this regard.



The Sub-Divisional Magistrate, Sadar, West Tripura along with his team, police personnel and officials of TSPCB conducted raids and seized banned fire crackers worth Rs. 20 lakhs. During

monitoring and subsequent vigilance it was found that the noise level has become reduced considerably.

Wetlands in Tripura

Area estimates of various wetland categories for Tripura have been carried out using GIS layers of wetland boundary, water-spread, aquatic vegetation and turbidity. In the state, 432 wetlands have been mapped and 2983 small wetlands (< 2.25 ha) identified by ISRO. Total wetland area estimated is 17542 ha (Table 1).

Table 1: Area estimates of wetlands in Tripura: Area in ha.

Sl. No.	Wetland Category	Number of Wetlands	Total Wetland area	% of wetland area	Open Water	
					Post-monsoon area	Pre-monsoon area
Inland Wetlands - Natural						
1	Lakes/Ponds	60	300	1.71	180	153
2	Ox-bow lakes/Cut-off meanders	78	387	2.21	229	170
3	Waterlogged	244	2946	16.79	1872	647
4	River/Stream	17	7420	42.30	4488	5115
Inland Wetlands -Man-made						
5	Reservoirs/Barrages	12	3320	18.93	2936	796
6	Tanks/Ponds	21	186	1.06	142	142
	Sub-Total	432	14559	83.00	9847	7023
	Wetlands (<2.25 ha), mainly Tanks	2983	2983	17.00	-	-
	Total	3415	17542	100.00	9847	7023

Area under Aquatic Vegetation	1779	5232
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Area under turbidity levels		
Low	2672	641
Moderate	7149	6328
High	27	53

Inland natural wetlands dominated in the state with 63% share. The major natural wetland types are River/stream (42.30 %) and waterlogged (16.79 %). There are 60 Lakes/Ponds with about 1.7 % area. Under manmade wetlands, Reservoir/Barrage is the major wetland type with 18.93% share. In terms of open water area, the natural wetlands showed 6769 ha in post-monsoon and 6085 ha in pre-monsoon seasons. The reduction in open water area is mainly due to change in Waterlogging. In case of man-made wetlands, the open water area is 3078 ha and 938 ha respectively for post- and pre-monsoon days.



Wetland Vegetation

Lake/Pond, Ox-Bow Lakes/Cut-off Meanders, Waterlogged, Reservoir/Barrage and Tank/Pond are the only wetland types that have vegetation. Together the all classes comprise 1779 ha in post-monsoon season while it increases to 5232 ha in pre-monsoon season (Table 2).

Table 2: Area estimates of wetland vegetation in Tripura; Area in ha.

Sl. No	Wetland Category	Post-monsoon (2006)	Pre-monsoon (2007)
Inland Wetlands - Natural			
1	Lake/Pond	120	147
2	Ox-Bow Lakes/ Cut-Off Meanders	157	217
3	Waterlogged	1073	2299
4	River/Stream	-	-
	Sub-total	1350	2663
Inland Wetlands -Man-made			
5	Reservoir/Barrage	383	2524
6	Tank/Pond	45	45
	Sub-total	428	2569
	Total	1779	5232

Source: ISRO - National Wetland Atlas, Tripura

Captive breeding of vultures to start in Tripura

Vultures are an important component of the forest eco-system. They maintain the balance of the living and dead by devouring remains of dead animals. Vultures are scavengers which consume all dead beings but never spread germs. In their absence, the carcasses will be consumed by dogs, crows or other animals and birds all of which will spread deadly germs, viruses and bacteria. Concerned over the drastic decline in vulture population in Tripura, the forests department has decided to start captive breeding of the scavenger bird at the Sipahijala Wildlife Sanctuary. There are only 55 vultures in the State which came to light following a survey by the department. The Forests Department of Tripura has decided on captive breeding to conserve the bird. Of the 55 vultures, 27 were sighted in Khowai district, 26 in South Tripura district and only two in Sipahijala Wildlife Sanctuary in Sipahijala district. White-rumped vultures found in Tripura were identified as critically endangered by environmentalists.

The Bombay Natural History Society and Zoological Survey of India would tie up with the Forests Department for the project once Tripura was declared a Dichlophenic-free State. A survey

commissioned by the governments of Gujarat and Maharashtra in 2001 found that vultures died after feeding on the carcasses of animals given Diclofena in their diet. In Tripura, though animals were not widely fed Diclofena vultures still disappeared. The reason for rapid decline in the number of vultures is due to loss of habitat like tall and leafy trees in forests and loss of carcasses lying in nature. Human corpses are rarely dumped in the open, while animal carcasses are now safely disposed off. This has deprived the vultures of their natural food. Bombay Natural History Society reported that in the early eighties of the last century, India had a total vulture population of 20 million, but by 2009, their population dipped to less than one per cent of that figure.



Large flocks used to be sighted on the small islands of the 42 sq. km. Dumbur Lake and its immediate environs in Gomati district as a large number of animal carcasses were available there at one point of time. The Rudra Sagar Lake and its surroundings and Sipahijala sanctuary, with its large lakes and forests, used to be the favorite haunt of the species till the late eighties.

Source: Forests Department, Tripura

Priceless North East India - Nature's Paradise



North East of India is one of the greenest places of India having many precious environmental jewels.

The North-East, is a fascination place with enchanted frontiers. Bounded by China on the North, Bangladesh on the West and Myanmar on the South and East, The region encompasses 2.55 lakh sq. kms, about 8% of the contry's land and is home to 38.5 million people, which is 4% of the India's population. The region comprises the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

The Diversity of the region is as much breathtaking and awesome as its verdant hills, meandering rivers and lush valleys. Two third of the region consists of hilly terrain and rest is flat land and valleys including the Brahmaputra, Barak and Imphal valleys. Ethnically this diverse and heterogeneous region boasts of 209 tribes and 192 languages and dialects. It is also a gene pool of rich biodiversity.

Today, the region is rich in natural resources of "TOT" (Tea, Oil and Timber). It is indeed a veritable powerhouse with a potential of 50000 MW of hydroelectric power, more than 30 billion cubic metres of natural gas and an abundant reserve of fossil fuels.

Northeast is known for its scenic beauty and unspoiled environment. Harmony of men and nature comes out very well in their art works and paintings. Come to the world of aesthetics and fine arts like paintings, the North easterners are very highly gifted. Presently in this global village, even their voices and works are getting the attention that it deserves.

Source: www.nezcc.in

TURTLE TALES

Exotic facts

Red-eared slider turtles became popular after the cartoon characters Teenage Mutant Ninja Turtles were modeled after them. They are hardy and invasive in nature. They can be very aggressive about food. A baby turtle can be bought in China or Indonesia for as little as \$2 and sold in India for Rs. 500/-



The Route

Native species are procured mostly from Trichur and brought to Howrah station or Kolkata airport before being smuggled out to Southeast Asian countries. Exotic species are mostly procured from Australia and brought to the city via China and Bangkok.

Demand of native species

These species are in huge demand in Britain, Germany, Japan and USA. In London alone, there are 10,000 reptile and turtle breeders. London recently allowed Indian pit vipers to be kept as pets.

Rules for procuring exotic species

- ❖ Approval from joint controller of exports and imports
- ❖ Permission from State Chief Wildlife Warden
- ❖ Permission for inter-state movement if it's sent to other States

Source: *Times News Network*

Glaciers around Mount Everest & Ice Lingam retreating fast

Majority of scientists agree that humans have caused global warming and one of the major consequences of global warming is loss of snow and ice cover in the Polar Regions and on the world's mountains. A glaring example is the extensive retreat of glaciers in the Mount Everest region in the Himalayas. A recent study has shown that glaciers in the Mount



Everest region have shrunk by 13 percent in the last 50 years and the snowline has shifted upward by 180 metres. The researchers suspect that the decline of snow and ice in the Everest region is from human-generated greenhouse gases altering global climate.

The statistical analysis shows that there is a significant increase in the rate at which majority of the glaciers in the Everest and the surrounding 1,148 square kilometres Sagarmatha National Park are retreating. Glaciers smaller than one square kilometre in area are disappearing the fastest and have experienced a 43 percent decrease in surface area since the 1960s. Nepal Climate Observatory stations and Nepal's Department of Hydrology and Meteorology found that there has been a 0.6 degree Celsius increase in temperature and 100 millimeter decrease in precipitation during the pre-monsoon and winter months in the Everest region since 1992.

For India, this is worrying news because the Himalayan glaciers and ice caps are considered a water tower for much of Asia, and especially India, since they store and supply water downstream during the dry season. A large part of the Indian population, especially in the Indo-Gangetic Plain, is dependent on the melt water for agriculture, drinking, and power generation during the summer months.

Blame it on the global warming; the naturally formed Ice-lingam of Lord Shiva has melted in the Amarnath cave shrine



even before the annual pilgrimage enters into the last phase. Experts say increasing temperature, less snowfall in winters and rising ambience temperature of the cave has resulted in the melting of the Ice-lingam this year.

On an average the maximum temperature has been hovering between 18 to 19 degrees Celsius near the Amarnath cave site. Minimum temperature has been hovering between seven to eight degrees Celsius. Minimum temperature never dropped to zero degree Celsius since the onset of yatra 2013. The Ice lingam of Lord Shiva that is formed naturally, which waxes and wanes with the moon. This year there was less snowfall in winters which also affected the overall climatic conditions in the Himalayan region. Last year we had a formation (ice lingam) till the end of the yatra. This year the formation has disappeared. Dr R.K. Gunjoo, head department of Geology, University of Jammu, said it is not global warming but anthropogenic warming (which affects the lingam). He also said plastics and non-biodegradable should be checked or preferably not used at all because when the threshold limit is crossed the nature is not going to pardon.

Source: Vigyan Prasas - Dream 2047 & DNA

Government approves new scheme to create awareness on water conservation

The Union Government has approved a Rs 351 crore scheme to generate awareness about water-use efficiency, conservation and management. The proposal, Human Resources Development and Capacity Building Scheme, was approved by the Cabinet Committee on Economic Affairs. The scheme will be implemented by the Ministry of Water Resources.

The scheme proposes to generate awareness by targeting various stakeholders including general public, school children, agriculturists, industrialists and other water users through



highlighting the importance of water conservation. The average annual potential of utilisable water in the country remains constant at 1,121 billion cubic metres (690 BCM surface water

and 431 BCM ground water). The demand for water is, however, rising rapidly with an estimated requirement of 1,180 BCM by the year 2050. Since supply side management has limitations as most of the options of harnessing available water have already been utilised, the government will under the awareness scheme try to convince users about the need to use the available resources judiciously.

Source: Urban News Digest

Tripura Ranks 20 in Environment Performance Index (EPI)

The planning commission is in the process of developing an Environmental Performance Index (EPI) to incentivise states for environmental performance through budgetary allocations. The major aspects taken into account for this are – Air pollution, Forests, Water quality, Water management and Climate change. This information was given by Shri Rajiv Shukla, the Minister of State for Parliamentary Affairs and Planning, in written reply to a question in the Loksabha. The state-wise EPI and ranking are given on the right side.

State/UT	Final EPI 2012	Rank
Andhra Pradesh	0.7898	1
Sikkim	0.7478	2
Himachal Pradesh	0.7414	3
Madhya Pradesh	0.7334	4
Maharashtra	0.7167	5
Odisha	0.7118	6
Gujarat	0.6944	7
Karnataka	0.6851	8
Tamil Nadu	0.6616	9
Meghalaya	0.6524	10
Chhattisgarh	0.6478	11
Mizoram	0.6448	12
Chandigarh	0.643	13
Assam	0.6426	14
Kerala	0.6311	15
Uttarakhand	0.6142	16
Goa	0.5991	17
Rajasthan	0.5905	18
Puducherry	0.5636	19
Tripura	0.5624	20
Jharkhand	0.5491	21
Jammu & Kashmir	0.5483	22
Punjab	0.546	23
Uttar Pradesh	0.5388	24
West Bengal	0.533	25
Nagaland	0.496	26
Haryana	0.4933	27
Manipur	0.4811	28
Dadra and Nagar Haveli	0.4684	29
Bihar	0.4494	30
Arunachal Pradesh	0.431	31
Delhi	0.4246	32
Daman and Diu	0.3944	33
Andaman & Nicobar Islands	0.3072	34
Lakshadweep	0.2925	35

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