



Chapter VI

Tangible Results Accrued and Overall Growth:

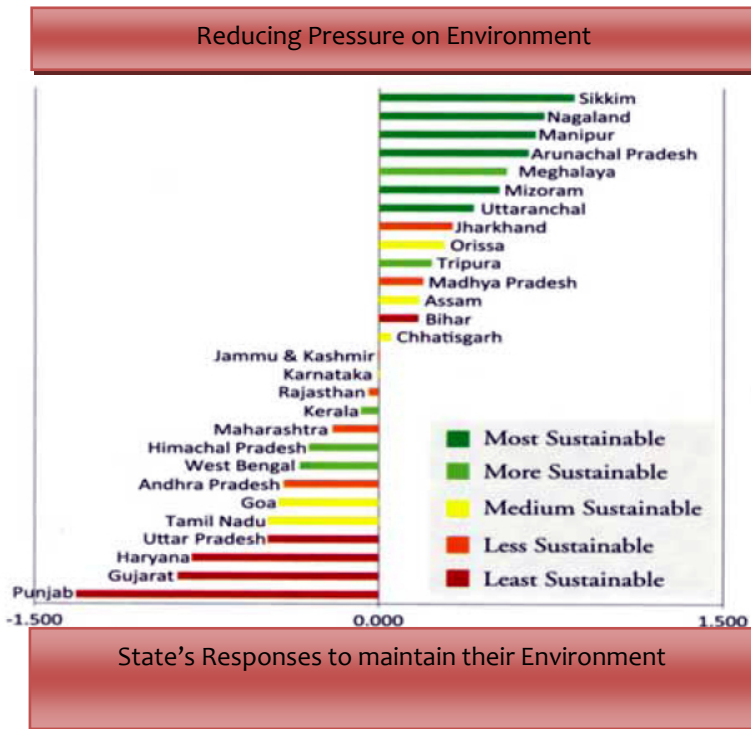
First State in India for:

1. Forest Survey of India recorded increase of forest cover by 2%, (37% in 1975 - 47.59% in 2007)
2. Wildlife Protected Area coverage (34%, highest in country)
3. Ban on cattle grazing in Reserve Forests; Effectiveness studies
4. Launching State Green Mission, an annual ritual on 15 June with focus on mass participation of general public and government
5. Launching "Ten Minutes to Earth", an annual ritual on 25 June dedicated to mass plantation by all dedicated public of Sikkim in 10 designated minutes
6. Environmental Cess compulsory levy for developmental projects through Sikkim Ecology Fund and Environment Cess Act, 2005
7. Ban on non-biodegradable plastic carry-bags through government notification
8. Ban on Vulture killer NSAID (Non-Steroidal Anti-Inflammatory Drug) Diclofenac through government notification
9. Identifying and Recognizing 11 Important Bird Areas (IBAs) throughout state
10. Declaring *Rhododendron arboreum* Town at Rabong Bazar, South Sikkim
11. Launching of environment friendly Eco-Highways, Green Roads
12. Celebrating annual International Rhododendron Festival
13. Establishing State Biodiversity Park at Damthang, South Sikkim
14. Establishing *Smriti Vans* (Memorial Forests) in all Panchayats and districts
15. Constituting "*Himal Rakshak*" (Mountain Guardian) and "*Pokhari Rakshak Sanrakshan Samiti* (Lake Guardian Conservation Committee)"
16. Constitution of State award "*Rajya Van Evam Paryavaran Samrakshan Puraskar*" (State Forest & Environment Conservation Award)
17. Democratic and Scientific Forest Working Plans and Wildlife Management Plans
18. Compulsory Environment Education for all schools, colleges of Sikkim with vision of 100% Environment Conscious Citizens; NGC, NEAC programmes through ENVIS Cell (www.sikervis.nic.in)
19. Notifying Sacred Peaks, Caves, Rocks, Lakes, '*Chortens*' and Hot Springs and banning scaling of important peaks including Mount Khangchendzonga, Regulation of Trekking Rules, 2006 notified.
20. Wetland Conservation Programme formulated and six wetland complexes included in National Wetland Conservation Programme; State Glacial Commission formulated; Potential RAMSAR SITES identified
21. First/BEST in Natural Resource Management by Centre for Development Finance (CDF)
22. Reducing Pressure on Environment and State's Responses to maintain environment on ESI ranking in 2009
23. Going Organic through ban on chemical fertilizers, pesticides and encouraging eco-friendly alternatives
24. Green performance by providing environmental services; by Planning Commission for receiving GREEN BONUS
25. Use of GPS for demarcation of Reserve Forest.
26. Launching state-level Green School Programme in 2009.



Sikkim Stands High on Top in Environmental Sustainability Index for Indian States -2009

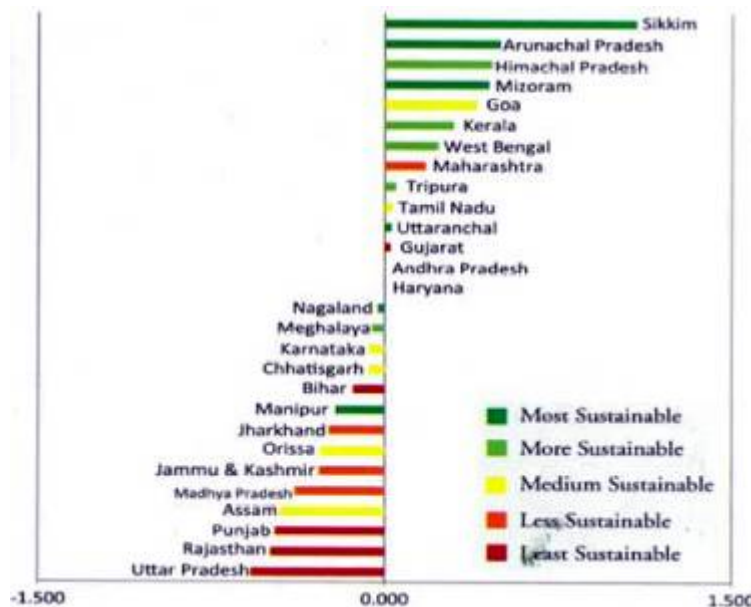
Chennai based, Centre for Development Finance (CDF) at the Institute for Financial Management and Research (IFMR) ranks Sikkim 1st among the Indian States in *Reducing Pressure on Environment* and in *State's Responses to maintain their Environment* for the year 2009.



States on the right of y-axis are doing better than states on the left. For states on the right side, longer the bars, the less pressure is on its environment. For states on the left side, longer bars mean more pressure on environment. All values are in standardized scores.

The Environmental Sustainability Index (ESI) tracks the environmental performance of 28 States of India. ESI tries to capture the state of environment in multiple dimensions based on 44 variables aggregated in to 15

indicators which in turn are aggregated in to one index i.e. ESI.



ESI is developed based on the Driving Force-Pressure-State-Impact-Response framework. Thus the chain of casual links starting with 'driving force' (Anthropogenic activities) through 'pressures' (pollution & waste) to 'states' (air quality, water quality) and 'impacts' on human health, eventually leading to political 'responses' (conservation, emission reduction) is reflected in the ESI. Since a state's long term sustainability is a combination of

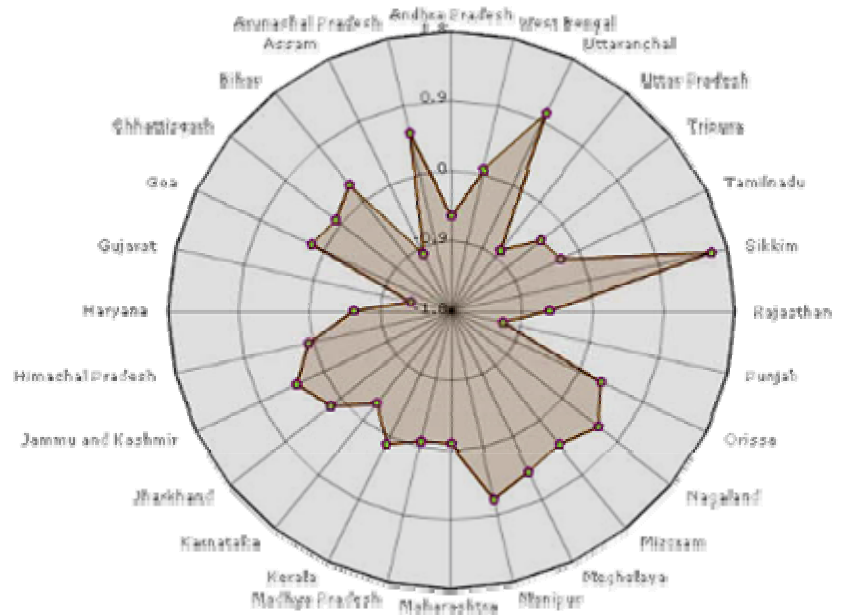


the stock (historical endowment) and flow (environmental resources and rate of resource extraction leading to depreciation of the stock); disaggregation states' overall ESI into these components reveals some interesting patterns of sustainability.

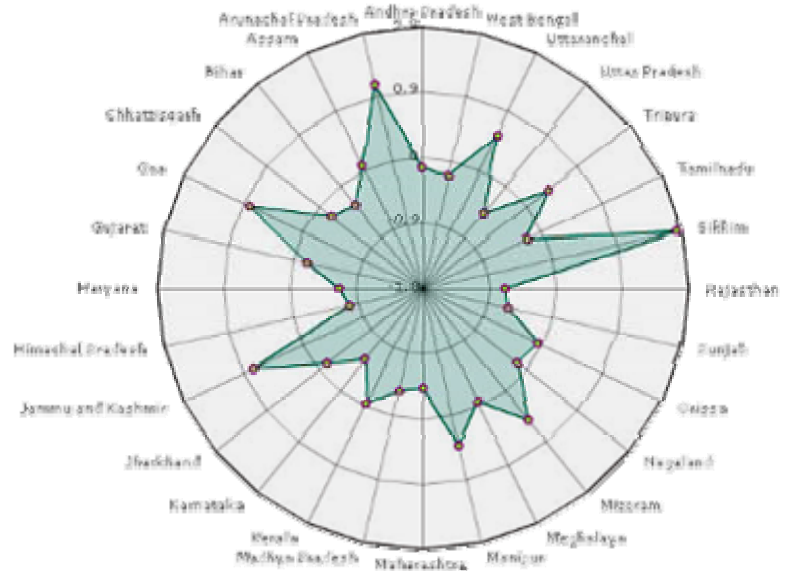
Likewise, in 2008 Sikkim was adjudged 1st among the Indian States in Conservation of Natural Resources and in Performance in Land Use. Sikkim state was awarded the 2nd rank in the overall ESI index.

| States | ESI Score | ESI Rank |
|-------------------|-----------|----------|
| Manipur | 100.00 | 1 |
| Sikkim | 90.99 | 2 |
| Tripura | 85.81 | 3 |
| Nagaland | 82.08 | 4 |
| Mizoram | 81.58 | 5 |
| Arunachal Pradesh | 75.45 | 6 |
| Chhattisgarh | 74.09 | 7 |
| Orissa | 71.88 | 8 |
| Uttaranchal | 71.18 | 9 |
| Assam | 70.15 | 10 |
| Meghalaya | 66.79 | 11 |
| Jharkhand | 64.33 | 12 |
| Himachal Pradesh | 61.26 | 13 |
| Karnataka | 55.79 | 14 |
| Kerala | 53.71 | 15 |
| Bihar | 51.98 | 16 |
| Jammu and Kashmir | 48.73 | 17 |
| Goa | 45.16 | 18 |
| Madhya Pradesh | 43.01 | 19 |
| Maharashtra | 37.28 | 20 |
| West Bengal | 35.72 | 21 |
| Tamilnadu | 33.75 | 22 |
| Andhra Pradesh | 32.55 | 23 |
| Rajasthan | 26.52 | 24 |
| Haryana | 25.59 | 25 |
| Uttar Pradesh | 21.40 | 26 |
| Gujarat | 10.46 | 27 |
| Punjab | 0.00 | 28 |

Natural Resource Conservation



Performance in Land Use





SIKKIM RANKS FIRST AMONG THE TWELVE EASTERN STATES OF INDIA IN THE OVERALL PERFORMANCE

September, 2006

The India Today had organized the 4th State of the states Conclave in New Delhi on 1st September, 2006 with the President of India as the Chief Guest. In its ranking of States, the India Today ranked Sikkim as the first State in the entire 12 Eastern States in overall performance. Sikkim was also ranked first in the sectors of Primary health, investment environment and budget and prosperity amongst 12 Eastern States.

India Today in its assessment states that 12 states that comprise India's east and North-east have several historical and geographical disadvantages ranging from inaccessibility to insurgency. Quite tellingly, states in the North-east, barring Assam, lead their bigger neighbors in the region by huge margin. Good quality primary education has been North-east's traditional strength. Now Sikkim and Mizoram are also showing remarkable improvement in infrastructure and investment environment. With West Bengal, Orissa and Jharkhand beginning to overcome their traditional handicaps and raw unprecedented interest and investments, expect improved scores and ranks from the region in a few years.

In a separate category of the ten small states of the country Sikkim was ranked fourth in terms of overall performance. It was also ranked fourth in the categories of primary education and budget and prosperity. It was ranked third in the sectors of primary health and second in the investment environment category.

Therefore, Sikkim has done well in terms of the parameters laid down for Eastern States.

| | Overall rank | Agri-culture | Consumer Market | Primary Education | Law & Order | Primary Health | Infras-structure | Investment | Budget & Prosperity |
|-------------|--------------|--------------|-----------------|-------------------|-------------|----------------|------------------|------------|---------------------|
| Sikkim | 1 | 10 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| Mizoram | 2 | 4 | 2 | 1 | 1 | 3 | 1 | 4 | 2 |
| Nagaland | 3 | 8 | 1 | 4 | 4 | 2 | 5 | 5 | 4 |
| Manipur | 4 | 5 | 9 | 3 | 11 | 4 | 4 | 6 | 5 |
| Arunchal | 5 | 7 | 4 | 8 | 9 | 5 | 3 | 2 | 3 |
| Tripura | 6 | 2 | 6 | 5 | 10 | 6 | 6 | 3 | 6 |
| Meghalaya | 7 | 3 | 5 | 6 | 12 | 8 | 7 | 8 | 7 |
| West Bengal | 8 | 1 | 7 | 9 | 6 | 7 | 9 | 11 | 8 |
| Bengal | 9 | 9 | 10 | 11 | 3 | 10 | 8 | 7 | 9 |
| Chhatisgarh | 10 | 12 | 8 | 7 | 7 | 9 | 11 | 10 | 10 |
| Assam | 11 | 6 | 12 | 10 | 5 | 11 | 10 | 12 | 11 |
| Orrisa | 12 | 11 | 11 | 12 | 8 | 12 | 12 | 9 | 12 |
| Jharkhand | | | | | | | | | |



Gobar Times Green Schools National Award 2009

Conceptualized by the New Delhi based public-interest group, Centre for Science and Environment, (CSE), and in collaboration with Environmental Information System (ENVIS Centre) under Forest Environment Wildlife Management Department had launched the Gobar Times Green Schools Programme (GTGSP) at the state level for the first time in Sikkim in 2009 of which about 140 schools participated. Three government schools of the state have been conferred National Awards for 2009 based on the all India green school ratings, namely;

- Govt. Sec. School, Reshi, West Sikkim - Top 10 green schools of India
- Govt. Sec. School, Namcheybong, East Sikkim - Best Manager of Energy
- Govt. Sec. School, Linkey, East Sikkim - Best Manager of Air



Ms. Sandhya Pradhan, Programme Officer (ENVIS) and Mr. M. R. Rai (DFO, LUE-North) receiving the award on-behalf from Mrs. Sharmila Tagore, the chief guest on the occasion.

Green School Programme (GSP) is a self-assessment programme in which teachers and students perform precise environment audits of *water, air, land, energy* and *waste* within their school premise.

GSP is being coordinated by ENVIS Center of Forest, Env. & W/L Mgt. Department, Govt. of Sikkim. It aims to encourage and support schools to build up an environmentally aware, active and skilled community of teachers, students and parents.