



**ANNUAL REPORT  
2008-2009**

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# Overview

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## *The year 2008-09*

The year 2008-09 was a period when key programme teams looked beyond their current work to both expand ongoing work in terms of scale as well as to grow in terms of their programmatic content.

The Right to Clean Air team which had earlier grown from a focus on air quality to looking at issues of mobility is now set to look at the whole issue of urbanisation, beginning from the area of the building sector. The Green Rating Project, which began with a focus on improving environmental management of the industrial sector, expanded its scope to address the needs of key stakeholders of the industrial sector – the regulators, at one end, and affected communities, on the other. Last year, it decided to intensify its focus on the regulatory sector, as this is a key area, given the rapid privatisation and globalisation of the economy. In the coming years, it will set up a dedicated institute to build the capacities of regulatory officials in the country.

The urban water programme, which began with an exclusive focus on urban rainwater harvesting, made connections with waste, pollution and demand management in cities in addition to rainwater harvesting to augment supply. This team will, in the coming years be expanded to look at the issue of urban water bodies as recharge bodies for cities and also intensify its focus on demand management measures. CSE's anti-toxin campaign, which has elicited substantial policy change till date will be strengthened to look at this sector with further studies and laboratory surveys. At the same time, CSE will also address the issue of food safety more seriously.

In terms of collecting and classifying information, the library made the leap to become a digital library and was able to make its informational resources available on the internet. The team launched the India Environment Portal last year and will, in the

coming years focus on making the portal more interactive. The science and environment reportage team has also moved from a focus on print dissemination to using the web for dissemination and has come up with a variety of communicational products that can be disseminated through the web at low cost.

CSE's advocacy resulted in substantial policy impacts over the year. The Right to Clean Air campaign team was able to get the government nod for putting in place norms for fuel economy for vehicles and also to reduce the excise tax for buses. The idea of dedicated corridors for buses is now widely accepted and as many as 13 cities (Delhi, Ahmedabad, Indore, Bangalore and others) are in the process of implementing it. The government, under its Jawaharlal Nehru National Urban Renewal Mission (JNNURM), will now provide funds for purchase of buses to cities. The anti-toxin team highlighted the presence of trans fats in cooking oils in the country, which resulted in the government

Indian Science Congress Association has awarded the Jawaharlal Nehru Prize for the year 2008- 2009 to CSE along with Hindu Media Center, MSSRF. The award was given for popularization of science. The award carried a citation and a cheque for Rs 50, 000. The award was given away by the Prime Minister Manmohan Singh, at the inaugural session of the Indian Science Congress in Shillong.



Ms Vibha Varshney from CSE receiving the award from Prime Minister Shri Manmohan Singh





agreeing to set standards for trans fats in hydrogenated oils. A sub-committee has recommended to the government to put a ceiling of 10% trans fats in hydrogenated oils immediately and bring this level down to 5% in next three years, which

is the global best practice.

CSE advocates that pollution and river health has inter-linkages not only with sewage but also water use and abstraction, upstream-downstream interactions and most importantly how the catchments of the rivers are protected. CSE made presentations on this issue to the Ministry of Environment and Forests recommending actions to regenerate the Ganga river. This helped to influence government actions to revamp river cleanup programmes and to set up a new Ganga Basin Authority to regenerate the river. As an outcome of participation in EIA training programmes, officials from the Bangladesh government requested CSE to conduct a similar training workshop on EIA for their officials. On completion of this workshop, Bangladesh department of environment requested CSE to design a training course on EIA for their officials and also to prepare guidelines for some of their key industrial sectors.

Given the focussed concern, both globally and nationally, to address climate change, CSE proactively participated in efforts for agreed international commitments. CSE's campaign focuses on issues of equity, emission targets, technology transfer, finance and CDM reforms. CSE participated in the 14<sup>th</sup> Conference of Parties meeting of the UNFCCC, held in Poznan, Poland in December, 2008, by organising a side event titled "Transition to renewables: Need for an equity-based framework". The film, *Mean Sea Level*, on the impact of climate change on the people of the Sunderban delta,



was launched in the Ghoramara island by Gopal Krishna Gandhi, the governor of West Bengal and Kanti Ganguly, Bengal's minister for Sunderban affairs was also present. The event was widely covered by local and national media and served to create public awareness of the impact of climate change, specifically for the island and catalysed people's efforts to save the island.

In addition to focussed programmes to bring policy change, CSE also pushes for change through shorter reports that get disseminated through *Down To Earth*. The report on food security, *Food Crunch*, was circulated to policymakers and received positive responses (Digvijay Singh, Sonia Gandhi, I.K Gujral, Jaswant Singh, M.C Singhi, Gopalakrishna Gandhi). Another report on pest attack on the soyabean crop in Maharashtra, served to bring the issue to the attention of agricultural experts and policymakers.

The report, *Fanning An Alternative*, that highlighted glaring loopholes in the rules regarding investments in the wind energy sector, was widely appreciated and also taken forward in the relevant ministry. Key officials of the Central Electricity Regulatory Commission have taken up this issue to be discussed by the concerned working group of the Forum of regulators. Other officials from the Planning Commission, Department of Science and Technology, Energy Institute, members of Parliament and others also responded positively. CSE also published a report on the CFL programme, to highlight the fact that even as the country is on a fast-track to switch to CFL, there is a need to put in place standards and norms for the products. CSE called for a round-table meeting of regulators, scientists and industrialists to discuss these issues.

The report, *They also serve* highlighted the poor service conditions of the Indian Forest Service who have a crucial role to play in conservation of forests. The report served to bring these issues to the attention of sixth central pay commission and redress some of the anomalies. The report, *Myth of power*, on the huge number of hydro-electric projects on the river Ganga, served to catalyse public opinion and CSE was asked to make a



Dr M S Swaminathan presenting the awards to winners of the Green School Programme

presentation to the Ministry of Environment and Forests on the issue. Based on this, the river clean-up programme was revamped and a national Ganga Authority was formed.

CSE formally launched the India Environment Portal in August 2008. It is one of the largest portals running on open source content management system “Drupal”. The site, on an average, gets more than 0.3 million page views and 3 million hits per month since its launch in August 2008. The Portal offers a variety of informational services to the public as well as participating organisations and individuals, ranging from news, features, dossiers, events calendar, directories, education tools etc.

The Anil Agarwal Green College (AAGC) launched its first course for Indian students. The course, titled, *Agenda for know-how* provides students with a comprehensive understanding of the perspectives and science of environmental and developmental challenges for the country. Students gained valuable skills of research, analysis, reportage, writing and multi-media presentation. The course received positive feedback from participants. The Green School Manual has been incorporated as the official programme of the National Green Corps and Andhra Pradesh, Karnataka, Punjab and Jammu & Kashmir have ordered language versions of the Green School Manual. The media team was

also able to deepen the relationship with the media professionals and CSE media fellows or contacts have undertaken independent initiatives to create environmental awareness in their areas. The response to the Fellowship programmes has been very good.

Institutionally, a key aim was to build up second and third level of leaders to ensure long-term institutional sustainability. Over the years, we have achieved reasonable success in building up mid-level leaders. This is evident in some of the units – the Industry and Environment unit, the Science and Reportage unit, the Water Programme, the Anil Agarwal Green College. The core group of CSE has expanded with more senior staff on board. Most of them have worked close to 10 years or more with CSE. As many as 9 senior staff members took independent charge of programme or sub-programmes, bringing the total senior staff members to about 20. In all these units, programme leaders are independently being able to not only chart the course of their programmes but also direct the programmes.

The marketing team has performed well and sustained the sales income even in a year of recession. During the year, the total sales income was Rs. 63.67 lakh, compared to 56.66 lakh during the previous year. CSE received bulk orders for the Green School Manual in language versions of Telugu, Punjabi and Urdu.

# Research and advocacy

## RIGHT TO CLEAN AIR CAMPAIGN

The work programme for the year 2008-09 was designed strategically to provoke policy response in key targeted areas of campaign. The key campaigns include fuel economy regulations for cars; air quality standards; congestion reduction strategies in cities, support for the bus rapid transit system and public transport.

### Campaign on fuel economy regulations

CSE has been involved in pushing for mandatory fuel economy regulations in the country. CSE was involved with policy analysis, discussions with the concerned ministries and regular media alerts.

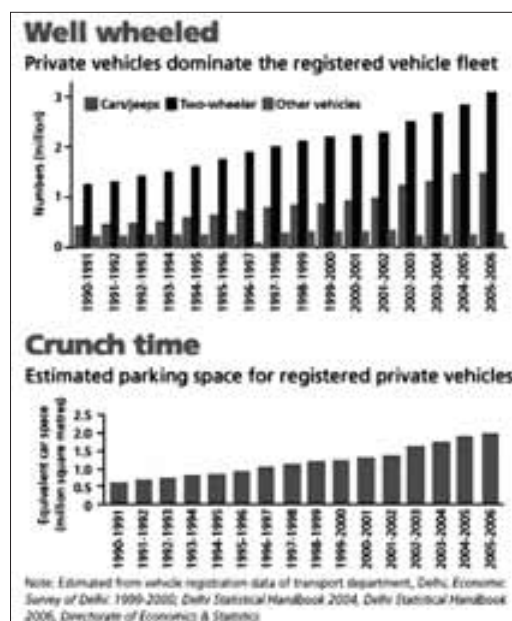
**Analysis of carbon dioxide (CO<sub>2</sub>) emissions and estimation of CO<sub>2</sub> load from vehicles in Delhi:** On June 2, 2008, CSE released findings of its analysis of Automotive Research Association of India's CO<sub>2</sub> emissions data, which pointed to increased

oil guzzling from new personal cars. This was happening at a time when international crude oil prices were skyrocketing and India's energy security was at risk. The heat trapping CO<sub>2</sub> emissions that directly depend on the amount of fuel burnt, are on the rise from newer vintages of cars on Indian roads. This hinted at increased oil guzzling. The study also revealed increasing trend in CO<sub>2</sub> load from vehicles. The study was prominently reported by the media.

On June 5, 2008, when the government announced increase in the fuel prices, CSE released its press release (Fuel price hike without measures to check oil guzzling is meaningless – CSE) stating that fuel price hike without measures to check oil guzzling is meaningless. The Union Ministry of Finance imposed an additional duty of Rs. 15,000 to Rs. 20,000 per vehicle on big cars and utility vehicles on June 13. The decision came as a knee-jerk reaction to the skyrocketing international crude prices.

**Public declaration of fuel economy data of cars:** CSE has raised concern that the certified fuel economy data in km per litre of each make and model of cars has remained secret and was not available in the public domain. Even when CSE filed an RTI, this information could not be found. Since this issue was raised by CSE on many occasions, the apex automobile industry body, Society of Indian Automobile Manufacturers (SIAM) on September 4, 2008 announced that the automobile companies would display the information from 2009 onwards.

**Providing legal backing to the fuel economy standard setting process:** The initiative of the BEE to develop fuel economy standards and labeling programme for cars became highly contentious. Car companies challenged BEE's role in regulating fuel economy of vehicles by raising doubts if vehicles can be treated as 'equipment' under the Energy Conservation Act 2001 for



regulation. MoSRTH and Ministry of Heavy Industries also challenged the legality of the BEE process under the Energy Conservation Act. CSE sought opinion of Rajeev Dhavan, noted Supreme Court lawyer to examine the legal issues and build a strong legal case in favour of fuel economy standards. This legal advice has been shared with the BEE, Ministry of Power, Prime Minister's Office, MoSRTH, the Ministry of Environment and Forests (MoEF) and the Law ministry. This has helped to influence the final position of the law ministry on the matter and also to establish that energy efficiency of the vehicles can be regulated under the Energy Conservation Act.

**Supporting the standard setting process:** Similarly, industry was trying to push for CO<sub>2</sub> regulations in the place of fuel economy standards and this was backed by the Ministry of Shipping, Road Transport and Highways (MoSRTH). CSE has supported the process initiated by the Bureau of Energy Efficiency (BEE) to formulate fuel economy standards under the Energy Conservation Act 2001. CSE has intervened in this matter as well. In the PMO meeting on this matter fuel economy standards have been upheld as the way forward.

On July 21, 2008, CSE did a press release (*Fuel economy standards for cars a step in the right direction – CSE*) supporting the initiative of the Bureau of Energy Efficiency to set fuel economy standards and a labeling programme for cars. CSE demanded immediate implementation as rapid increase in car numbers and steady drift towards bigger cars threaten India's energy security. CSE also stated that auto industry must not be allowed to scuttle the move. It must shoulder the responsibility of addressing the energy crisis and commit itself to the mandatory standards.

The Centre has finally reached a consensus to have mandatory fuel economy standards and a labelling programme for cars to improve fuel efficiency. After rounds of meetings with the concerned ministries, it was unanimously agreed that India would adopt the mandatory fuel economy standards



and fuel efficiency labelling programme for cars to strengthen the country's energy security. Now the BEE would develop the standards and the labelling programme and the enforcement will be the responsibility of the MoSRTH.

#### **Campaign to support bus rapid transit system**

**BRT perception survey:** The BRT trial that began on April 20, 2008 had faced strong opposition from the car lobby in the city. Negative media reportage further aggravated the situation. This had put at risk one of the most important solutions to congestion and pollution in the city. It had therefore become necessary to come out strongly in support of the project, and rally public support.

The APC team organized public perception survey on the BRT corridor. This was organized jointly with two youth groups – the Delhi Greens and the Indian Youth Climate Network, in order to enlist support of a larger constituency. The volunteers interviewed around 1,500 commuters on the BRT corridor between April 30 and May 5, 2008. As the team polled while walking it got overwhelming support for the corridor from pedestrians, cyclists, bus drivers and commuters and – surprisingly – also from car and two-wheeler drivers. On this corridor more than 78 per cent of people walk, cycle and use buses. Contrary to popular notion, 73 per cent of car users agreed that the project can be continued even though they were hassled by the long queues. Many of



Public transport is the way ahead – a view of the BRT corridor

them were even willing to shift from their personal vehicles to BRT if faster and high frequency buses equipped with AC and GPS running on the BRT corridor could be deployed extensively. The vote was against the scrapping of the project. But no one was speaking for them.

On May 21, 2008, CSE released the findings of the survey (*Commuters – including car owners – support the BRT overwhelmingly: finds random survey by CSE and Delhi Greens*). The findings were widely reported in media and the survey findings were also sent to key stakeholders including Delhi chief minister, Delhi Integrated Multi-Modal Transit system Ltd (DIMTS), transport department etc.

**Meeting with schools on BRT:** Along with the green school programme team the air pollution team had organized a meeting of over 150 school children to sensitise them about the BRT system as a solution to congestion and pollution in Delhi. They had only heard that BRT caused traffic jams and accidents, and took away space from car users. Nobody had told them why cities need BRT. Why city roads are choked and the air is so foul

even without BRT. Children and teachers responded very well. Many schools showed interest in including BRT in their summer projects and other school programmes.

**Analysis of traffic data on BRT corridor:**

The team carried out analysis of the traffic volume data for the BRT corridor (Ambedkarnagar to Moolchand) to understand the composition of traffic, modal share, and peak volume. The finding of the analysis was used in all communication on BRT including the press conference organized on April 25, 2008 to support BRT and convey that it is a step in the right direction to contain Delhi's growing air pollution and pollution. CSE and EPCA had issued a joint statement. Mr Bhurelal, EPCA chairperson and CSE Director addressed the media stating that public transport is the only way out of Delhi's deadening traffic and deadly air pollution. BRT can be an environmentally sustainable and cost-effective method of bringing a better bus system to the city. The city needs more buses and more space to run the buses so that people can travel in speed and comfort. This event was reported in newspapers.



**Delhi bus corridor – an evaluation:** CSE invited Dario Hidalgo, senior transportation engineer of EMBARQ, the World Resources Institute Center for Sustainable Transportation to do an independent evaluation of the bus corridor for further improvement. His key observations were; The Delhi bus corridor has improved the mobility of the people along the initial pilot stretch. Bus travel speeds are around 18 km per hour, 150 per cent faster than buses outside the corridor (12 km per hour). As more people use the buses than motor vehicles, the overall reduction in travel time along the corridor for all the users is estimated in 19 per cent. The corridor has also received high ratings from the users: 88 per cent of the bus commuters expressed they were happy with the corridor in a CSE survey in June 2008. In addition, the segregation of bicycles and pedestrians has improved the travel experience and the perception of safety for these important users of the corridor.

On February 7, 2009, a press conference and press release (*International transport expert reviews Delhi BRT*) was done on the findings of the evaluation of the bus corridor. It was highlighted that it has succeeded in meeting some of its key objectives, though it is still in an evolving phase. It has a lot of promise in terms of easing the congestion load in the city.

### Study on walkability

The team has carried out an extensive study to assess the walkability in Indian cities. This is based on primary survey of the pedestrian infrastructure, and evaluation of pedestrian rights in Indian cities. Pedestrian ways are the fundamental link in the modal integration which has not been given a legitimate place in the urban transport planning. If this is neglected in the planning process, it will increasingly reduce public transport trips and increase dependence on personal transport for accessing all kinds of services in cities. The faulty transport designs and urban land use policies are fast razing the walking environment, making it less viable, inconvenient and unsafe. It is clear that

present investment patterns focused on improving conditions for cars are not giving the desired results. This study will now be the basis of campaign on walking mode.

### Analysis of air quality trends in Indian cities

Detailed analysis of air quality trends in Indian cities was carried out on the basis of the proposed air quality standards to understand the compliance status in cities. This shows that even though air pollution levels are showing a declining trend in the big cities, the levels are still very high; smaller cities are getting more polluted. And as the air quality standards are tightened more cities appear in the high pollution bracket. This analysis is being used to push for immediate implementation of the proposed standards.

### Diesel campaign

CSE has been raising concerns on the rapid dieselization of the car fleet and prevailing distortions in the prices of automotive fuels -- diesel and petrol and misuse of under taxed and under priced diesel by the car sector. CSE in its letter to the Finance Minister in 2008 demanded rationalization of fuel taxes to disincentivise use of diesel in cars. It stated that existing taxes on cars must not be reduced to subsidise the car owners further and differential between small and big cars need to be maintained. It also asked for increasing taxes on diesel fuel to be used by cars and introduce annual cess on diesel cars.

A panel constituted by the Prime Minister in June and headed by B. K. Chaturvedi, a Planning Commission member submitted its report in August, which recommended for fuel price rationalization ---- monthly increase in the fuel prices till they are at par with the costs. The panel also proposed to impose metro tax of Rs. 2 per litre of diesel in big cities on diesel cars and SUVs. The ministry of petroleum and natural gas (MoPNG) as part of its dual fuel pricing proposal also proposed a 25 per cent cess on big diesel cars.

**WATER MANAGEMENT**

**C**ommunity water pollution monitoring programme: This year the team ventured into a new area of work—community water pollution monitoring programme (CWMPMP)—a programme to involve local community in pollution monitoring and advocacy. The need for such a programme was realized from the fact that the people affected by pollution are hardly involved in any decision making process. It is also fact that the data on pollution levels in rivers, groundwater and sewage/ effluent treatment plants is hardly available with the local communities. This has led to serious conflicts between communities, local administration, pollution control authorities and industries. It is important that all these stakeholders engage in an informed debate to bring about change.

The river pollution unit launched the community programme in August 2008, in the Bandi river basin polluted by the textile dyeing and printing units in Pali. CSE imparted training to over 60 farmers from about 20 villages affected by pollution. They were given hands- on training on using field test kits for heavy metal monitoring. Two rounds of testing conducted by community in August and September 2008 revealed that the common effluent treatment plants in Pali were violating the effluent discharge standards. The monitoring results were submitted to the local administration and were widely covered in the local media. This



A farmer being trained on using the field test kit for heavy metal monitoring in Pali

initiated a debate and led to a very large public meeting on pollution in Pali on October 1, 2008. Pollution fighters from different parts like Kolhapur (Maharashtra), Jadugoda and Bokaro (Chattisgarh), Bhilwara, Udaipur and Bicchri (Rajasthan) and Vapi and Ankaleshwar (in Gujarat) attended this meeting to learn about the Pali experience and chalk out a national strategy on community monitoring.

A follow-up sampling and testing of Common Effluent Treatment Plant (CETP) water undertaken by CSE showed no presence of heavy metals. This is an indication of the power of community monitoring which helped to put pressure on the CETP officials to clean up the water. The event was covered by major national and regional newspapers such as Dainik Bhaskar, Dainik Navjyoti and Rajasthan Patrika.

**Advocacy for effective river clean-up programmes:** CSE’s work on river pollution has advocated for a revamp of the national river cleaning programmes. The book *Sewage Canal: How to clean the Yamuna* outlined a comprehensive and an integrated approach towards cleaning and preserving India’s river systems. The current programme, which is implemented in about 160 towns across the country has ended up chasing unrealistic targets by laying sewer lines and constructing sewage treatment plants which has had little or no impact on river water quality. CSE advocated that pollution and river health has interlinkages not only with sewage but also water use and



Public meeting on Bandi river pollution in Pali



Building dams on Ganga

abstraction, upstream-downstream interactions and most importantly how the catchments of the rivers are protected.

In September 2008, CSE published a story (The river runs dry) on the projects being planned on the Ganga river, depriving the river of its water. CSE made presentations to the Ministry of Environment and Forests and also to the Cabinet Committee on the issue of management of the river from a holistic perspective. In November 2008, the government of India decided to revamp the river cleaning programmes to address the river issues in a holistic manner. CSE director was actively involved in the formulation of the new Ganga Basin Authority, which will reengineer the Ganga Action Plan.

**Database on wetlands:** India's wetlands are under constant threat of pollution, encroachment, catchment loss, biodiversity loss etc. A database on the legal cases protecting the wetlands across the country has been compiled and has been put up on the website. This is a dynamic database and individuals or NGO can also submit their own case study on lakes or water bodies, which are under threat. The database provides information on the waterford, the people who are involved in actions to protect it, the issues relevant for each lake and details of legal actions. Wetlands help in a great way of recharging the groundwater but are not protected legally under any specific act. This will ultimately help in formulating a policy for legally protecting these water bodies.

Model projects – rainwater harvesting:

During the year, 2 rain centers were established in Vasai near Mumbai and in Burdwan near Kolkata. A CSE partner helped to establish a Rain Centre in Navghar Manikpur Council in Vasai, near Mumbai, Maharashtra established a rain centre. This is the first rain centre established by a municipal council. The Rain Centre was inaugurated by a senior CSE staff member. The municipality has initiated a pilot project for recharging approximately 60 abandoned bore wells in the town and selected government buildings.

At the inauguration of the Vasai Rain Centre, the Chairman of Nagar Palika Parishad, Narayan Mankar declared 2 % rebate on property tax for the people implementing rainwater-harvesting systems until the cost is recovered. Thane municipal corporation's (TMC) Mayor and engineers visited rain centre at Vasai and requested CSE to help establish similar rain center in Thane and train their engineers on RWH.

The team worked to set up the fourth Rain Centre in the country in Burdwan district of West Bengal. The Rain Centre with live demonstration models of water harvesting, panels to provide information on the water issues and solutions of West Bengal is a one of its kind resource centre on water harvesting in West Bengal with facilities available to conduct training and awareness creation programmes. The Rain Centre was launched by Shri Nirupam Sen, Minister of Industry, West Bengal government. The event was attended by



Shri Nirupam Sen, minister of industry, West Bengal launching the Rain Centre in Burdwan

more than 500 persons and was followed up with awareness and training programmes during the week.

A project was designed for the 138 acre-site of Orient Paper Mills plant in Amla, Madhya Pradesh. While designing for the plant area, due care was given to address possibilities of contamination and the design consisted of storage tanks, recharge wells, percolation wells and ponds and the total number of structures were 124 at an estimated cost of Rs. 67.24 lakh. The implementation has begun.

The second project was undertaken at Katni Refractory works, Katni, Madhya Pradesh. As the plant had a high potential for contamination, and was also a very old plant, the RWH design was confined to the residential quarters. The colony area was 1150 acres and the main feature of the design was storage of rainwater in tanks and ponds for potable and non-potable requirements. Rainwater was also diverted to recharge wells and dugwells.

**Model projects – decentralised wastewater treatment:** To popularise the concept of wastewater treatment and reuse, the team provided design for decentralized wastewater treatment units for institutions and residential apartments last year. Scindia School in Gwalior will treat wastewater from the four hostel buildings and reuse for horticulture purpose. Similarly Indo-German hospital at Ghaziabad has also implemented a treatment



Participants of the training programme on decentralised waste water treatment during a site visit



Participants of Urban rainwater harvesting training programme visiting the traditional rainwater harvesting structure in Mehrauli

unit. Design for Disaster management Institute, Bhopal has been given to the EPCO office in Bhopal and the implementation process has begun. Designs have also been provided for Jamia Hamdard University, Yamuna Apartments, Chattarpur Mandir, Salwan School and India International Centre.

**Capacity building:** training workshops were conducted on rainwater harvesting and

**Clean your act (manual)**

This manual is an effort to provide an answer to the question: how does one recycle wastewater? Presented simply, it guides the reader through the basics of this activity. It will be useful for architects, engineers, and other professionals interested in implementing waste water recycling systems.

**Clean your act (film):** This training film is about treating domestic wastewater in a decentralised way. It discusses in detail various techniques and science behind wastewater treatment with the help of comic character to keep the viewer interested. It also shows the current STP based centralised system have resulted in polluting of our rivers and suggests decentralised way of treating wastewater as option to save them. In this film the process involved in treatment in different wastewater systems is explained through three-dimensional animations. It carries different case studies across the country, from places like Pondicherry, Pune, Agra, Ujjain and Delhi. This film will not only help individual household and institutions, but also small towns to treat their wastewater in a decentralised way so that wastewater is reused instead of polluting rivers.



decentralised wastewater treatment. Two workshops were conducted on rainwater harvesting.

A training programme was conducted for PHED engineers in January 2009 at Bhopal and as a follow up there is a request to help to implement decentralized systems in selected localities. Design for are completed and submitted and the projects are expected to be done this year.

**Programme to create capacity on water harvesting and water recycling and reuse:**

The training programmes for capacity building focused on professionals like architects, builders and engineers. The training programme helped the participants to understand the current water and excreta management in Indian cities and brought out the failure of centralized system. As a solution to crisis, rainwater harvesting and decentralized wastewater treatment systems was advocated in programme through classroom lectures from in-house and experts from various governmental and non governmental institutes. Apart from the lectures participants were exposed working models of wastewater system during their site visits, which helped

them to design a wastewater treatment system on their own. A total of four training programmes on recycling and reuse of wastewater and four trainings on urban rainwater harvesting were conducted during the period. More than 100 people were trained through these programmes.

This year we focused specially on municipal engineers. In August 2008, about 15 engineers from Nasik municipality of Maharashtra state participated and now they have started implementing schemes in their work region. In November, another batch of engineers from Maharashtra attended the programme. In January 2009, the team conducted a training workshop for PHED engineers in Bhopal.

**SUSTAINABLE INDUSTRIALISATION**

**Cross-sectoral rating:** The objective of the rating exercise is to benchmark the India companies on energy and water consumption, GHG emissions and other pollution parameters, and use the rating to push for policy and practice changes. Under this programme, the top 199 companies of the country will be rated based on their



The Governor of Meghalaya, Mr R S Mooshahary, releasing the book on mining in Shillong, Meghalaya

energy and water efficiency as well as corporate management practices. This is the first ever cross-sectoral rating exercise, which will identify most sustainable company in the country as well as most sustainable company in each of the sector. The study will benchmark the company's performance against the best practices and will present information on all major companies from 18 most pollution intensive sectors of the country.

The rating exercise has been initiated this year and so far 65 companies have joined the project. During the year, sectoral reports were prepared for 15 industrial sectors, which document the best practice in various industrial sectors on energy, water, GHG emissions and other pollution parameters. The reports include a detailed analysis of environmental issues and impacts including best practise figure for energy and water. The technical advisory panel (TAP) was set-up and two meetings were organized with TAP to finalise the questionnaire and the rating methodology. A questionnaire has been developed and has been sent to the companies. The responses are expected by April 15, 2009.

A network of Green Rating Inspectors has also been established to help collect secondary data from the state pollution control boards. During the year, secondary information on companies was also collected from different pollution control boards including Delhi, Himachal Pradesh, Maharastra, Kerala, Chhattisgarh and Daman Diu. A background paper on environmental due-diligence in financial sector was also completed this year.



Mining book release in Udaipur, Rajasthan

#### **Policy advocacy for sustainable mining:**

During the year the book published by the team on the mining sector (Rich Lands, Poor People: Is sustainable mining possible?), was released in five States, as planned. The Governor of the States released the book in four States. The book release function was also used as a platform for bringing different sections of the society (industry, NGOs, government, academia) together to discuss the various issues related to mining, development and environment. The team has been advocating improvements in the mining policy and practices for the last two years and some of its concerns were addressed in the new National Mineral Policy, 2008. The biggest achievement of the mining campaign has been that decision-makers are now connecting the dots that link poor mining policy and practices with environmental destruction and poverty.

Each of the public meeting were marked with good open discussions on the various issues related to mining such as displacement, development in mining areas, labour issues, mine closure, regulatory failure, etc. These events were also well covered by local and national dailies, which helped in highlighting the need for policy changes to move towards sustainable mining.

In some states like Chhattisgarh, a healthy discussion ensued with the state government on sustainable mining. While in Meghalaya, the state environment secretary as well as mining secretary attended the release function and participated in the open dialogue.

**Community support centre:** A dedicated Community Support Centre (CSC) has also been established to respond to needs of communities quickly and efficiently. The centre receives request for analysis of the EIA reports as well as for technical support from local community and grass root level NGOs. The reports prepared by the centre are mostly used by the local NGOs and civil society to raise relevant questions in the public hearing process as well as to feed their campaign work.

The team undertook technical analysis of 9 EIA reports in response to community



Participants of the training programme on Environmental Impact Assessment (EIA) with CSE director

requests. Some of these included coal mining project of South Eastern Coalfields in Raigarh district, 1000 MW coal-based thermal power of TATA Power Company Ltd in Orissa, iron ore mining projects in Quepem taluka, South Goa, Technical support was also provided on issues of illegal mining in Katni-Satna belt of Madhya Pradesh, environmental audit of company, testing water samples (river and groundwater) for heavy metals in Jaduguda, Jharkhand, etc.

These reports are used by the civil society to approach the judiciary for example in case of Utkal Alumina Expansion in Orissa. In one instance, the local activist raised such pertinent questions based on the report in the public hearing process and as the proponent could not respond, the DM asked for another public hearing process to address those concerns. This was in case of Monet Ispat in Chhattisgarh.

**Building awareness and capacity:** Two training programmes were conducted in the financial year (2008-09). One of the training was specifically on the EIA of mining sector and the other one was on the environmental clearance process. Altogether 57 participants

from civil society, academics, and regulators underwent the training programmes.

The team was invited by the Department of Environment of Bangladesh to train their environment ministry officials on EIA processes for industry projects. The team visited Bangladesh to conduct the training. As an outcome of this training, some of their officials visited India to take a first-hand look at some of the good mining projects in India. The visit was facilitated by CSE. Further, the team was invited by the Bangladesh government to develop EIA guidelines for 3 sectors – coal mining, pharmaceutical and textiles.

**The regulators' programme:** A report was completed on state of the regulatory system and regulations in India. The report was compiled after collecting information through questionnaire from pollution control boards, secondary information such as annual reports and survey of stakeholders (civil society and industry). The findings of the report were discussed in the annual symposium of pollution control boards in May 2008. The findings were also discussed in one-to-one meetings and consultations

with Central Pollution Control Board and other state PCBs such as Gujarat, Karnataka, Rajasthan, and Tamil Nadu.

The report identified training of regulators as a major agenda for most SPCBs and now a programme is being developed to work with MoEF to institutionalise the training of SPCB officers. A training need assessment questionnaire has also been developed and sent to all the 33 state pollution control boards including CPCB. The responses are awaited. These will also be used for developing the training module.

### CLIMATE CHANGE CAMPAIGN

During the year, CSE created awareness and influenced positions through a spectrum of activities – participation in international meetings at Accra, Poznan and Bonn, media fellowships at south Asia level, reports, fact sheets and in-depth web pages on climate change, a film looking specifically on the impacts of climate change in the Sunderbans delta.

**Policy inputs:** Nationally, CSE made a presentation on climate change before the parliamentary standing committee on Science and Technology, Environment and Forests to create awareness among policymakers on the different dimensions of

climate change. CSE director provided inputs at meetings of the Prime Minister's council on Climate Change to discuss the action plans for the different missions. The chief Minister of Himachal Pradesh invited CSE director to address the legislative and administrative officials of the government on the issue of 'climate change and carbon neutrality'. The Himachal government is planning to implement measures to move towards low carbon economy.

Internationally, CSE proactively participated in efforts for agreed international commitments. CSE's campaign focuses on issues of equity, emission targets, technology transfer, finance and CDM reforms. CSE advocates a rights-based mechanism for national mitigation actions, global trading system on emissions based on per capita entitlement, agreement on legally binding targets for Annex-1 countries and a carbon tax on the developed countries that can be used to pay for national adaptation actions.

CSE participated in the 14<sup>th</sup> Conference of Parties meeting of the UNFCCC, held in Poznan in December, 2008, by organising a side event titled "Transition to renewables: Need for an equity-based framework". Speakers included Surya Sethi, Energy Advisor with the India Planning Commission, Hans-Josef Fell, the key architect behind the German Renewable Energy Sources Act, and Stefan Sanger, secretary general of the World Wind Energy Association. CSE prepared and distributed information materials and launched a special web section on the conference.

At the conference, CSE staff issued press releases on developments on negotiations as they were happening and these press releases were put up on the CSE website for further dissemination. There were also blogs posted on the site everyday that generated good response from the public.

CSE director participated in the conference "Civil society on climate change and justice" as a member of the Swedish Commission on Climate Change and development held in Harnosand, Sweden. CSE contributed to discussions at the



Shri Gopal Krishna Gandhi, West Bengal Governor launching the film, 'Mean Sea Level' in the Ghoramara island in the Bay of Bengal



workshop on 'Desired outcomes of international negotiations, characteristics of an equitable agreement beyond 2012'. As a member, CSE director also participated and contributed to discussions at the second meeting for the Swedish Commission on Climate Change that was held in Phnom Penh in Cambodia and in another workshop on innovations and solutions for climate change adaptations organised by SIDA and UNESCAP in Bangkok.

**Creating awareness:** CSE produced a number of informational products to create awareness on climate change issues. For the COP-14 at Poznan, a detailed report was put out that analysed the progress in Bali and set the issues for the Poznan meeting and articulated Southern perspectives on each of the issues on the negotiating table. The report was backed up by a set of fact sheets on some of the key issues relevant for finding the way forward. (Pix of Poznan fact sheet)

A number of editorials were published which brought in good responses from key opinion makers, policymakers and scientists.

CSE also participated in a number of meetings and contributed to the ongoing discussion and debate on climate change.

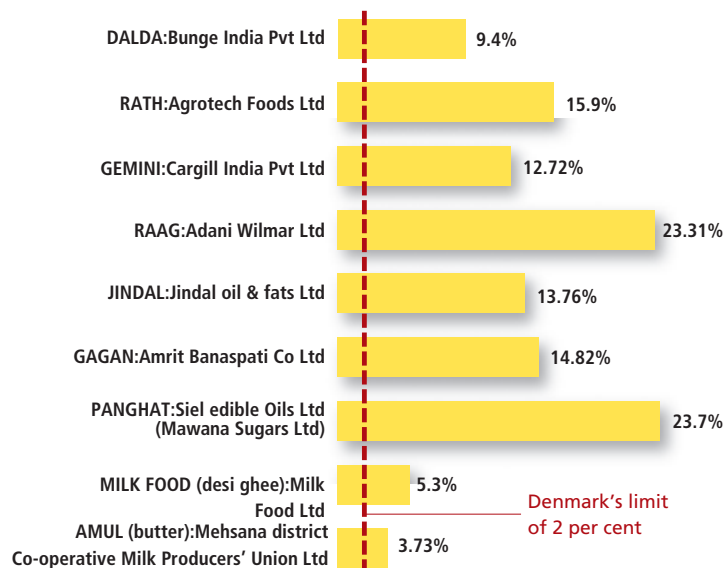
The film, *Mean Sea Level*, on the impact of climate change on the people of the Sunderban delta, was launched in the Ghoramara island by Gopal Krishna Gandhi, the governor of West Bengal and Kanti Ganguly, Bengal's minister for Sunderban affairs was also present. The event was widely covered by local and national media and served to create public awareness of the impact of climate change, specifically for the island and catalysed people's efforts to save the island. The film calls attention to climate change issues of sea-level rise and land erosion by focussing on the plight of people living in the islands of Sunderbans.

#### ANTI-TOXIN CAMPAIGN

CSE continued with its two-pronged strategy of doing lab research to generate empirical data on issues of toxins and food safety and also doing policy research and advocacy to bring about changes in the regulatory and enforcement framework.

#### Trans fats of the land

Levels ranged 9-24 per cent—5-12 times the standard in Denmark





**Food in danger – high levels of transfatty acids are found in cooking oil**

**Study on trans fats in edible oils:** One of the major studies done was on the trans fats in the edible oils sold in India. Thirty brands of major edible oils and fats were analysed for trans fats and other fatty acids. This was the biggest study ever undertaken in India on the fatty acids profiling of edible oils and fats.

The study found very high levels of trans fatty acids in the hydrogenated oils sold in India. High consumption of trans fats has been linked with many health problems including diabetes, cancer and cardiovascular diseases. Many countries have set standards on trans fats. India, so far has not set any limits on trans fats in edible oils and fats.

The study was released in February 2009 and was widely covered in media. Within a month of the release of the study, the Oils and Fats sub-committee of the Union Ministry of Health and Family Welfare agreed to set standards on trans fats in hydrogenated oils. The sub-committee has recommended to the government to put a ceiling of 10% trans fats in hydrogenated oils immediately and bring this level down to 5% in next three years, which is the global best practice.

Analysis of the quantity of lead in paints was another major study done by the PML. Lead is a neurotoxin and is widely used as an additive in paints. The lab tested 25 samples of popular enamel paints for lead with a methodology based on United States Environment Protection Agency (USEPA). Lead was found in 23 out of 25 enamel paint samples tested. 72% (18/25) of the enamel paint samples did not meet the specification for lead content prescribed by BIS (IS 15489 : 2004) which is voluntary. The results also indicate that among the major Indian manufacturers only one manufacturer (ICI India Ltd) has removed lead pigments and other lead additives from all the products. Two manufacturers (Asians Paints and Nerolac) met the lead standards for only white enamel paint but lead levels exceeded several times in other colours (yellow, orange, black and green). The products of the other two manufacturers (Berger and Shalimar) had not met the lead standards for any colour.

PML collected paint samples of all major brands from Delhi and Mumbai and analyzed their lead content. The study will be published in the coming year.

The lab also provides analytical and technical support to communities. In 2008-09, number of studies was done by PML on behalf of communities from different parts of the country – industrial areas of Vadodra, Gujarat, heavy metal analysis of drinking water from Jadugoda, Jharkhand, monitoring of CETP discharge, groundwater quality and river quality in Pali, Rajasthan, training of communities in Pali to test heavy metals in water and wastewater samples using a portable test kit, monitoring of pesticides and heavy metals in soil sample from Nepal, monitoring of ambient air quality in Delhi and others.

# Science and environment reportage

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**Reportage and impacts:** During the year, CSE's environmental reportage captured some of the most contemporary issues. From open source software to nation-wide unrest over coercive takeover of land for industrialization DTE reported on the events as they happened. Unprecedented increase in number of cars on India roads and lack of political will to promoting buses, the cheaper public transport option; failure to cover intentions into actions at the World Food Summit at Rome; the ground realities and problems of implementing the Forest Rights Act; and the scam behind wind energy; a Poznan special issue on climate change; a special good news issue on organic farming; and, the hydroelectric projects on the river Ganga and in the northeast were some of the stories that were covered.

**Food security and agriculture:** The year began with a comprehensive cover story on the global food crisis and rising prices of food. We carried a detailed analysis on the issues involved and also looked at reasons for the rising prices, ranging from climate change to diverting land for biofuels. The story received good responses from Sonia Gandhi Digvijay Singh, and I K Gujral sharing our concern. Also received detailed response from Jaswant Singh and M C Singhi of the planning commission. The Governor of West Bengal, Gopalakrishna Gandhi, in his presidential address at the convocation of the Bidhan Chandra Krishi Viswavidyalaya has referred to the story as an eye opener. The report on illegal distribution of non-



recommended under the National Horticulture Mission evoked an immediate response from Sharad Pawar the union agriculture minister. He said that he was having the matter

investigated. S K Pattanaik, mission director, National Horticultural Mission responded saying that he is taking up the matter with the concerned authorities in the State Government of Rajasthan to inquire into details regarding the use of non-recommended pesticides.

Vilas Muttemwar, the minister of state for new and renewable energy responded to CSE's report on the massive pest attack on the soyabean crop in Maharashtra and said that the facts as brought out in the story will go a long way in helping the people engaged in the cultivation of soyabean. Dr S.A Patil, Director, Indian Agricultural Research Institute also responded and said that there should be further research on the issue.

CSE also brought out a report on the success of non-pesticide management (NPM) in Andhra Pradesh, which has resulted in lowering the suicide rate in the state. As the high suicide rates were directly linked to debts arising from purchase of pesticide and other inputs costs, organic farming helped farmers to break away from the debt trap and move towards prosperity.

**Energy:** *The report, Fanning an alternative* highlighted glaring loopholes in the rules regarding investments in the wind energy sector. It detailed out how government policies were subsidizing only installation of wind



energy and because of this there was very little incentive to actually operate and generate electricity. This was the first analysis of its kind in the country and it received a immediate and widespread response from all concerned. The report was widely appreciated and also taken forward in the relevant ministry. Key officials of the Central Electricity Regulatory Commission

have taken up this issue to be discussed by the concerned working group of the Forum of regulators. Other officials from the Planning Commission, Department of Science and Technology, Energy Institute, members of Parliament also responded positively. The report, *Let there be CFL* highlighted the need for norms for the products. The report was a detailed look at measures being adopted in the country to popularise the use of CFL, which is fast catching on. The only hitch in the otherwise laudable campaign to promote energy saving is the fact the CFL lamps use mercury, a neurotoxin and the amount of mercury used in the lamps is not currently regulated. Nor is there any system or norm for the safe disposal of the lamps. The report was circulated to key policymakers, scientists and industrialists and a round-table meeting was organised that resulted in good discussions on the issue. A video was also posted on the website.

There were two important reports on the new rush for building dams to generate electricity in the northeastern and northern states. One report focussed on the numerous dam projects being undertaken on the Ganga by the Uttaranchal government, which has drastically reduced the water flow in the river. The other report was on the dam building spree by the Arunachal Pradesh government.

The Ganga report was sent to the policymakers and parliamentarians and catalysed action. CSE was asked to make a presentation on the problems and strategies for a rational management of the river. This contributed greatly to the formation of a new national programme to manage the river and



to declare the river as a national river. CSE also reported on the activism by Dr. G D Agarwal which was a major reason for the government siting up and taking notice of the issue. *Electric Rush* was a report that highlighted the

rush in Arunachal Pradesh to build hydro-electric projects ignoring geological and environmental concerns. In just 11 months from April 2007 to February 2008, the government signed agreements for 38 projects with private companies. The report also exposed the fact that these projects have been given to private players without any accepted and transparent selection procedure and without any environmental clearances. The report was well received by the academic as well as the civil societies in the area. The political science department of IIT Guwahati is using as a reference for their research on the sociopolitical implication of the large dams and their down stream impacts.

Yet another report highlighted the good news that the National Board for Wildlife stopped a proposal of the Rajasthan government to build four hydro-electric projects on the Chambal river because these dams would wipe out the gharials and dolphins. The dams were proposed to be constructed in the National Chambal Sanctuary.

#### Forests and wildlife:

The report, *State Inaction*, reviewed the progress of the various governments in implementing the Forest Rights Act, 2006. The report finds that most states have been slow to get off the



mark and some states are even flouting the norms of the Act. Villagers of Mendha Lekha have applied for rights over 18 sq km of forest area under the new Forest Rights Act.

A detailed look at the poor service conditions of the Indian Forest Service, *They also Serve*, served to bring these issues to the attention of sixth central pay commission and redress some of the anomalies. The Forest Service has a crucial role to play in the management of India's forest land and this story received many responses from foresters. Yet another report was one of the few reports



that look at valuation of ecosystem services of natural assets such as forests.

The article 'Unsafe Haven' on Tadoba Andhari Tiger reserve got overwhelming response from a number of people working on the issue saying they found the story quite interesting and shared their concern about protecting wildlife. They include Vishwas Sawarkar, Harini Nagendra, Kundan Kumar, R.S Chundawat, Dr Jhala, Praveen Bhargav, Dr H Sudarshan, Ghazala Shahabuddin, Andre Pittet. In *Unsafe Haven*, CSE reviewed the growing human-animal conflicts, by focussing on Gir in Gujarat and Sunderbans in West Bengal. While people have been traditionally living in harmony with the animals, that harmony has now been disrupted leading to conflicts and there is no solution in sight. Another case in point is the Mudumalai tiger reserve, where people are worried about the latest notification on some parts of the reserve as critical or core reserve area. CSE also reported on the attempt to revive the Sariska tiger reserve by translocation of tigers from Ranthambore sanctuary.

CSE also reported on the Nokrek biosphere, home to the original Indian wild orange and many other rare and endangered plants. The biosphere has been nominated for a world heritage status to the UNESCO.

**Mining and industrialisation:** CSE reported on issues related to mining from different parts of the country. What emerges is a picture of theft of national mineral wealth, destruction of forest land and deprivation of livelihoods of forest communities. Naomundi, in Jharkhand, with rich reserves of high grade iron ore, is the hub of illegal mining. It is estimated that illegal crushers generate around 2000 tonnes of ore every week and the authorities are powerless to stop this theft of national wealth. Similarly, in Karnataka, officials turn a blind eye to



destruction of forest and agricultural land, pollution of water sources, and land degradation, all for private profit. In Goa, activists go together to fight against growing sponge iron plants in the state leading to air and water pollution.

An in-depth report highlighted the craze for industrialisation at any cost as an answer to growth. The state governments -- ranging from Orissa, West Bengal, Jharkhand and Chattisgarh to Maharashtra, Goa, Punjab, Kerala and Karnataka -- are ready to hand over land, forest and water to industry provoking people's protests across the country. The report provokes discussion on answers to the question of pathways to growth even as it highlights the blatant violations by industry on all environmental norms.

**Water management:** *Down To Earth* began the year (issue March 31, 2008) detailing the purifier market and technologies available to treat water at the consumer end. Piped networks are old and lacking systemic refurbishment. Intermittent pressure in water networks, enable ingress of contaminants. But purifiers, the article went on to show, cannot solve the problem of bad water quality. At best, they can offer partial solutions. It is the poor with no access to such coping mechanisms that suffer most. This holds true for most issues pertaining to water.

Survival depends on committing land and people to water management. *Down To Earth* covered several initiatives which highlight the connect. An article (Issue: June 30, 2008) demonstrated how the revitalization of a percolation tank in Maharashtra led to improvements in crop yield, livelihoods and valuation of land. In Madhya Pradesh too, there were cases demonstrating the effectiveness of using traditional wheat varieties that could withstand water scarcity. In 2008, the area, primarily rainfed, received



### Environment and dissemination

This team is in charge of disseminating information about CSE products and generating revenue through sale of CSE publications, *Down To Earth* magazine and advertising space in *Down To Earth*. The main strategy to achieve these objectives is direct mailing. In addition, we also use exhibitions, booksellers, newsstands, schools and CSE meetings to sell disseminate CSE products. *Down To Earth* is available at newsstands in over 50 cities in India.

The year ended with an income of Rs. 1.55 crore from the sales of CSE products, *Down To Earth* and training services. The sale of Green Files was Rs. 16.93 lakh, and the income from sale of publications was Rs. 28.03 lakh. Income from audio-visual products was Rs. 24.88 lakh. The team mobilised a number of bulk orders for both *Down To Earth* and CSE publications. The Andhra Pradesh government's department of National green corps ordered 1000 copies of *Down To Earth*, 1000 copies of Green School Manual and 5,000 copies of the manual in Telugu version. The Punjab government ordered 2500 copies of Punjabi version of the GSP manual. There were other bulk orders for *Down To Earth*, films and water harvesting manual.

The income from advertisements in *Down To Earth* was Rs. 31.28 lakh and income from sales of the magazine was Rs. 36.68 lakh. More than 3187 new subscribers were added and the renewal rate was about 70%. Nearly 50% of the subscribers are individuals followed by schools, colleges, research institutions and NGOs, which together make up another 40%.

less than average rainfall. Two farmers, which used the traditional Malwi strand, had a better yield as compared to farmers who used newer varieties of wheat.

The 400th issue of *Down To Earth* (January 1-15, 2009), highlighted the case of effective wastewater treatment and management of tannery units in Tamil Nadu supplying farmers with treated effluents for re-use. The story highlights the rare case of a farmer-industry simpatico. The same issue de-mystifies the much publicised fact that the poor cannot and do not pay. In Gujarat, 250 poor families aided in setting up and employing a decentralized system to treat their wastewater. The coping costs of polluted surroundings are much higher than

investing in preventive infrastructure.

Floods and drought are annual events in India. But while they receive coverage in the mainstream media, what is often left out is the fact that poor management amplify the effects of these events. In the case of the Kosi floods *Down To Earth* found that the 2008 floods which ravaged Bihar, was not a case of excess water but neglect of the embankment which led to the devastating breach. Likewise, the floods in Orissa were as much a result of heavy rainfall as of poor reservoir management of the Hirakud dam. While proponents argue that dams are can be used effectively to manage floods, this is rarely been found to be the case.

Other issues reported on include India's lake catchments and the sources of pollution, the pitfalls of privatisation, the concept of river front development, water supply and the need for equitable distribution within our cities, the competing needs of industry versus agriculture, and the pollution issues concerning India's freshwater, both surface and ground water.

Cover Story 'Rain Shocked' also received responses from a number of scientists and experts on the issue, agreeing to our concerns and also by sending documents on the issue for our portal. They include

Dr. Krishna AchutaRao, Centre for Atmospheric Sciences, Indian institute of science, A.K Gosain, IIT, Prof P.Balaram, Dr. A.S. Unnikrishnan, National Institute of Oceanography

In Uttar Pradesh, overuse of groundwater led to subsidence and cracks in several districts, prompting action to regulate the use of groundwater through a bill, Uttar Pradesh Groundwater Conservation, Protection and Development (Management and Regulation) Bill.

The story *Narrowcaster* received response from Nripendra Misra, Chairman Telecom Regulatory Authority of India that the ministry of Information and Broadcasting has sought recommendation from us on the rating of channels and Authority shall definitely take into account the relevant material from the CSE report. People in Pune approached the Divisional Commissioner for

redressal of the rights of the tribal people as reported in *Howl of the Hills*. An inquiry was ordered on the land acquisition of tribals and nomads in Lavasa. Responding to the report, 'What a Waste', S.K Pattanayak, Mission Director, National Horticultural Mission is taking up the matter with the concerned authorities in the State Government of Rajasthan to inquire into details regarding the use of non-recommended pesticides.

- The cover story 'Pure Myth' on water purifiers received comments from the industry. Eureka Forbes and Kent RO Systems wrote to the editor appreciating the article and requesting meetings with us so that they can discuss the issues we have raised in the article.
- The article 'Unsafe Haven' on Tadoba Andhari Tiger reserve got overwhelming response from a number of people working on the issue saying they found the story quite interesting and shared the concern. They include Vishwas Sawarkar, Harini Nagendra, Kundan Kumar, R.S Chundawat, Dr Jhala, Praveen Bhargav, Dr H Sudarshan, Ghazala Shahabuddin, Andre Pittet.
- The story 'Brand Ambassadors' and accompanying editorial piece 'The M in IMA' on Indian Medical Association endorsing packed fruit juice also received good responses from readers and experts on the issue. Dr Gopal Dabade has informed that he has circulated the letter from the director and the article to All India Drug Action Network members and they will discuss the issue in their forthcoming meeting. Several doctors and health experts wrote to the editor saying that they agreed with the issues raised in our report and that they would be writing to the union health ministry.
- The cover story 'No Public Transport' received comments from the Lieutenant Governor of Delhi Tejendra Khanna saying that the story is informative and has aptly brought out several positive aspects of public transportation facilities which could be adopted in a Metro like Delhi. The story 'Narrowcaster' which

gave an insight on how televisions rating systems influence content received a response from Nripendra Misra, chairperson, Telecom Regulatory Authority of India that the ministry of Information and Broadcasting has sought recommendation from on the rating of channels and Authority shall definitely take into account the relevant material from DTE.

The report on trans fats in edible oil, Fat of the Matter, received a good response. Britannia India decided to remove trans fats from its range of baked products. A number of experts also wrote to CSE including Dr V. Prakash, Director, CFTRI, Dr Pushpa M Bhargava, formerly head of the Centre for Cellular and Molecular Biology and Dr Usha Chandrasekhar, former Dean, Avinashaingam University. The Agro Tech Foods Limited, wrote saying that they are in touch with the Food Safety and Standards Authority. Dr Umesh Kapil, AIIMS, endorsed CSE's views on the need for strict regulation of trans fats in edible oil and added that such a move will go long way in prevention of coronary artery disease in the country.

**South Asia coverage:** As the entire south Asian region mirrors the state of environment in India, CSE has been trying to expand its research and reportage in the region. The reportage covered impacts of GM and hybrid seeds, climate change issues and developments in Bangladesh, Sri Lanka, and Maldives, waste management in Sri Lanka and other reports.

**Web features:** As a great deal of print and pictorial information is collected, it was decided that these would be disseminated through the web. Webextras have been created as pdf downloads where there is additional reportage that cannot be printed in the Down To Earth magazine. Photofeatures in the form of slideshows disseminate additional visual information. For instance, an info-graphic on flu epidemics for an influenza story, a map based info-graphic for a story on no-pesticide

farmers, another on waste pickers etc. have been put out on the web and met with positive user feedback. Yet another additional feature is citizen journalism where people have been asked to comment on Rajya Sabha bills, walkability in the city etc.

**Down to Earth films:** This is yet another new feature that has been launched in the website. Short videos have been prepared that complement stories published in the Down To Earth magazine. Some of these films are on car parking, vox populi on cooking oils, carbon emission tracker. These have generated thousands of hits even on the first day of release.

**Replication in media:** The reportage on public transport created lot of interest and the issue was widely discussed and the Right to Clean Air staff were interviewed by many channels and news papers. *At 20...40...60*

*km per hour, Air to lung to DNA and Asia's sooty air* were carried by Deccan Herald and Statesman. The report on edible oil was carried by more than 40 national and regional publications.

Earthscan requested permission to reprint a chart *Saga of Two Villages* from the issue dated November 15, 2007, in their forthcoming book "Integrated Water Resources Management in Practice: better water management for development". ELCI requested permission to reprint the article '105 Villages lit' on Jatropha seeds, in their magazine Ecoforum. Apart from national publications, regional language news papers like Madhyamam, the Malayalam News paper translated and reprinted the edit *Slapped But Will not Submit*. Several requests were received to reprint the editorial *Our quality of mercy*. More than 20 different reports and editorials have been reprinted by Indian and foreign newspapers, magazines and newsletters.



# Environment resources unit/ Knowledge Portal

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During the year 2008-09, the Environment Resources Unit mainly focused on launching the India Environment Portal, managing and stabilizing it. At present, it is amongst the largest portals, which has been developed using the open source content management system “Drupal”. It is also the fourth largest portal to use Apache solr, the open source search engine.

The portal was successfully launched in August 11, 2008 by Sam Pitroda (Chairman, National Knowledge Commission). The portal launch was a huge success and received appreciation from various sectors of the society. This was also reported widely by national and international media.

During the year, an effort has been put-in to highlight the recently discussed environmental issues through specialized Environment in-depth sections on the portal, which provide an overview and update on critical environmental issues. These are amongst the widely visited sections on the portal and are used by us to build contacts and networks with subject specialists. As per the latest analysis, the In-depth section on climate change has been the widely visited In-depth section. Other In-depth sections include-Mining, Transport, Wildlife & people and People & toxins. A daily news bulletin service on key environmental news provides a packaged news service to the portal users everyday.

Providing access to information available with the government was one of the key objectives. The “green directory of government organizations” on the portal listing a selection of government institutions brings together all kinds of information generated by these organizations. Thus, information available with the government organisations has been made available through the portal using common tags of environmental terms provided on the portal. The team ensured that latest information available with the government is digitized and highlighted on the portal at the earliest

and accessible to the public.

The message board facility provided on the portal is being used by people to raise queries, inform us about their regional issues, send us their unpublished/published work, etc. The RSS feed service initiated in later half of the year has been providing subject-specific service to users on their desktops. This has been provided with each tag (more than 8000 tags on the portal), existing on the portal

Visits to the portal showed every encouraging results and the portal was revamped once again in the mid of December 2008. The newly designed portal completed in the mid of December 2008 has been widely appreciated and the portal usage statistics for the month of Jan 2009 showed very encouraging results. The visits to the portal went up by an average of 3-4% everyday and till Jan 31 2009, the total no of visits showed an overall increase by 121%.

Within a span of just 6-7 months (since mid August), the portal has undoubtedly become popular amongst people seeking environmental information. This is evident from detailed usage analysis of the India Environment Portal as shown in the table.

Usage Analysis of the India Environment Portal ( <a href="http://www.indiaenvironmentportal.org.in">http://www.indiaenvironmentportal.org.in</a> )			
Summary by Month			
Month	Visits	Page Views	Hits
August 2008	17,456	2,15,088	6,24,634
September 2008	60,717	3,36,134	20,30,856
October 2008	59,972	2,12,504	21,85,720
November 2008	52,025	2,43,815	19,17,947
December 2008	58,406	2,77,721	20,96,775
January 2009	77,027	2,22,020	41,13,645
February 2009	90,609	2,86,110	47,36,077
<b>March 2009</b>	<b>1,37,784</b>	<b>3,61,937</b>	<b>70,66,034</b>

# Education and training

## ANIL AGARWAL GREEN COLLEGE (AAGC)

In the period April 2008 to March 2009, AAGC has conducted more than 17 short-term training programmes and four longer-term courses, training 712 participants. Participants have been drawn from across the country – not just from metro cities, but also from smaller, tier 2 and 3 towns, and districts across India. In addition, over the year, AAGC organised about 13 half- to one-day orientation programmes for various groups, including visiting universities, representatives of government agencies, and civil society groups, among others. A total of 238 participants attended such orientation programmes.

### New programmes and institutional growth

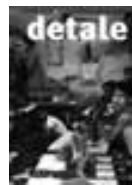
Over the years, AAGC has expanded its bouquet of training programmes and educational outreach efforts. Starting with technical, capacity-building programmes, including rainwater harvesting and informa-

tion management programmes targeted at NGOs and small civil society groups, AAGC's activities have been expanded to include a bouquet of more than 12 kinds of programmes.

These include programmes on challenges of rapid urban growth (Rainwater Harvesting; River Pollution; and Decentralised Wastewater Management); and courses targeted at environmental regulators (the popular Environmental Impact Assessment (EIA) course trains regulators, industry representatives, policy makers and NGOs on the potential of the environmental clearance process for industrial and development projects; while the Clean Air Imperatives offers regulators an orientation on

Feedback from participants shows that AAGC programmes fulfil an acutely felt need among the target groups. Most participants attending the documentation workshops, for instance, were in the midst of creating or reorganising their information management systems in their organisations and institutions, and this programme allowed them to put to practice what they learned at AAGC. Similarly, feedback from many participants attending AAGC capacity-building workshops on rainwater harvesting and wastewater treatment courses said the workshops helped them sharpen their abilities to popularise and implement rainwater and decentralised wastewater treatment systems. Similarly, those attending programmes targeted at regulators said they appreciated the opportunity to learn from the experiences and best practices of pollution monitoring agencies of various states across the country.

Similarly, students reported they learned much at the exposure and orientation they received at AAGC. Many have decided to pursue higher education in an environment-related field. In fact, many students from the University of Oslo have opted to pursue their Master's Thesis on environmental issues in India, and many students continue to remain in touch with AAGC as a vital information and network resource.



Students of the summer certificate programme, 'Agenda for survival' at a class room session



Participants of the summer certificate programme with CSE director and AAGC team

air quality governance and mobility management for urban areas).

A newer constituency AAGC has tapped into include students at the high school level as well as those in higher education, important to further AAGC's aim at building a young, knowledgeable and empowered community of change makers. Towards this end, AAGC programmes for students and the youth include a summer certificate programme for students from India (the two-month 'Agenda for Survival' course offers students from India a broad orientation programme on the policies, politics and practices of environmental management in India, and includes significant field exposure and hands-on communication training); and an orientation programme for students from universities outside India (Challenge of the Balance conducted for students from University of Oslo to orient them to Southern perspectives on the environment-development debate).

Meanwhile, the long-standing programme, *Information Management in the*

*Digital Age*, remains popular. With newer documentation and information technologies commonly available, AAGC's programme on documentation has been up-scaled to build capacities of information managers and librarians on how to digitise and better manage their resource centres by making use of latest techno trends widely available.



Students interacting with a community leader during a field visit

## MEDIA RESOURCE CENTRE

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In the year 2008-09, in keeping with its objective and vision of building an informed and vibrant community of writers on environmental issues, the Media Resource Centre concentrated on upscaling most of its activities, including its media fellowships and briefing workshops.

The 6<sup>th</sup> Citizen's Report (*Rich Lands, Poor People*) had been published the year before, and as planned, CSE continued with its series of state releases through the year, where Governors of respective states released the report in front of audiences of mining experts, regulators, NGOs, media people etc. The MRC was closely involved in the entire preparation of the report, as well as organising all the events surrounding it. In 2008-09, the team worked with CSE's industry unit to successfully release the report in Raipur (Chhattisgarh), Ranchi (Jharkhand), Bangalore (Karnataka), Shillong (Meghalaya – the release venue for the northeast region) and Udaipur (Rajasthan).

In most of these cities, CSE involved local resource persons and organisations as well in conducting the programmes. Panel discussions after each release provided a platform for informed debate on the subject between experts, mining communities and common people. Extensive media coverage preceded and followed these releases in all the states. The response of the official machinery was most dramatic in Chhattisgarh, where the state government took the trouble to go through the report page-by-page and list a series of rebuttals. In essence, the report and its release events achieved their purpose: they put the issue of mining and development on the centre stage and made it a talking point. These events gave the local and regional media in the states valuable insights into the subject, and led to a flurry of very knowledgeable reportage. Journalists writing in other languages (Hindi, for instance) were provided briefing material in their language of choice.

In this year, the team also helped the river pollution team organise a key meeting

and briefing programme in Pali, in Rajasthan. The programme kicked off CSE's pollution monitoring initiative in the Bandi river area. Local journalists from Pali, Balotra as well as Jodhpur covered the well-attended event.

Besides these, the team provided the necessary media coordination support for a host of CSE events – including the launch (in Delhi) of India's environment portal; the CSE team's participation in the Poznan climate meet; release of CSE's study on cooking oils; launch of the film *Mean Sea Level* (in the Sunderbans); and a public meeting on air pollution in Kolkata. The activities of the unit involved contacting and networking with the media to cover these events and issues, writing and distributing press releases and briefs, setting up interviews etc. For the launch of the CSE film in Ghoramara island (Sunderbans), the unit managed to gather a party of around 50 journalists from Kolkata and took them on a field-trip-cum-event coverage journey to the island.

The team also initiated two media fellowship programmes in the year, one of which was the first fellowship programme that CSE has done for journalists from the entire South Asian region. The first of these, targeted at Indian journalists only, focused on the subject of human-wildlife conflicts in and around India's forests. Fellowship grants were provided to 13 journalists from across India to research and report on the subject. The South Asian fellowships were awarded on the subject of climate change, with the focus on impacts and innovations for survival. Among the winners were print, radio and television journalists from Sri Lanka, Nepal, Bhutan, Pakistan, Bangladesh and India. Both the fellowships are generating a rich trove of reportage on their respective subjects.

The effort has been to keep the spotlight on the various debates related to development and environment, and that it has certainly achieved. Media coverage of CSE's initiatives and related issues has been extensive in the national as well as regional/local networks – and this, in turn, has taken our word much beyond our



immediate reach. We have gained a number of new friends in the media over the year; the ensuing advantage to our databases has been immense. In fact, the success of the year's programmes has given the team the confidence and drive to upscale the programme further and infuse more vigour into it in coming years.

### ENVIRONMENT EDUCATION

The Gobar Times Green Schools Programme For the Environment Education Unit the past year has been one of expansion as well as consolidation. While the network of Green Schools, a product of the Gobar Times Green Schools Programme (GTGSP), was further strengthened by the entry of a large number of new members, the existing ones were encouraged to review their work more analytically, in a bid to ensure that they developed a deeper insight into the key issues of the programme.

The GTGSP was launched in 2006, responding to the Supreme Court directive making Environment a compulsory subject at the school level. Its main component is the Green Schools Manual, a hand book that

explains step-by-step, how to audit natural resources like water, air, energy, waste, and land, within the premises of a school. The end product is a report card prepared by its own students assessing the school's performance as a manager of natural resources. Now in its fourth phase, the programme has almost 7,500 schools, representing 24 states and Union Territories, in its network. This includes schools in cities, towns and villages, catering to students from every strata of society.

At the end of each year, CSE organises the Gobar Times Green Schools Programme Awards Ceremony where top 20 performers from across the country are rewarded for their enterprise and innovative skills. The objective is to acknowledge the effort made, and also to encourage more institutions to come forward and take part in this movement. The day is celebrated as a festival, when school children from every part of India are invited, not only to witness the award giving ceremony but to take part in painting competitions, perform in street plays, watch films and mingle with each other.

This year the event was planned in a slightly different mode. The awards were



Children performing a street play at the Gobar Times Green School festival in New Delhi

divided in two different categories, one targeting the participants who were taking part in it for the first time; and the other assessing those who were enlisting themselves for the second or the third time. The newcomers were judged as per the parameters set in the first two phases. But the veterans had to prove that they had initiated policies and practices within the school with the objective of bringing about long-term lifestyle changes. A new set of quality benchmark had been formulated for this category.

More than 50% of participating schools have opted to repeat the audit process year after year. To motivate such schools to make a lasting impact and influence others outside the school community, a new category of awardees, titled The change makers, was instituted. It brought to the fore new initiatives that were being led by parents and neighbours, in partnership with the schools. The schools have now set up detailed monitoring, documenting, and accounting systems to conduct day-to-day work. These are long-term changes that will remain with the schools, even if they drop out of the GSP circuit. Interestingly, in many schools GSP coordinators have been inducted into the institution's policy-making process. They are invited to comment on and review decisions taken by the management.

**The partners:** The National Green Corp units—working under the aegis of the Ministry of Environment and Forests--through the

Environment Directorates of the state governments, are one of the key partners of the GTGSP. The fundamental concept and methodology of the programme have reached even the district level schools now. At present, seven to eight NGC units are working with CSE, actively. CSE has produced resource materials and provided training to teachers and master trainers in collaboration with these units. Besides this, all institutions affiliated to the Navodaya Vidyalaya and the Kendriya Vidyalaya Sangathana, along with several private and public school chains like DPS, Apeejay and Amity are members of this network.

**Gobar Times:** The monthly magazine published by the EEU for students and teachers has emerged as a very effective tool for change, in more ways than one. By featuring a vast variety of issues every month, ranging from food crisis, to green careers to urban mobility, it has helped spread the basic message that the connotation of the word “environment” is not limited to tigers, birds, and trees.

The magazine has encouraged its readers to interact with one another, share experiences and opinions. The GSP pages of the magazine are sometimes used as a billboard to present activities and initiatives being undertaken by schools across the country. At other times these pages highlight personalities, institutions and issues that help the students to develop a comprehensive understanding of environment as a subject.

# Institutional development

## Human resource development

The core group of CSE has expanded with more senior staff on board. Most of them have worked close to 10 years or more with CSE. The second rung has taken up individual responsibility. In this context this year we saw as many as 8 senior staff members namely taking charge of the programme units. They have also shown tremendous presence in the electronic media - over 20 electronic media appearances have been shared between senior researchers from different units. Some of them are now also on various government-appointed committees. Last year, second rung staff has also been traveling abroad on official assignments.

During the year 2008-09, a total of 24 new recruits were joined. CSE has decided to hike the health insurance cover from Rs. 75,000 to Rs 1 lakh, under Oriental Insurance Company with many added benefits compared to last year.

**Staff Turnover:** Staff turnover has come down progressively and there is reasonable stability as the organisation has a healthy number of staff members.

Chart II shows that there is also a healthy trend of staff leaving for better prospects and other personal reasons rather than due to



Chart II: Decreasing number of staff leaving CSE due to poor performance (%)

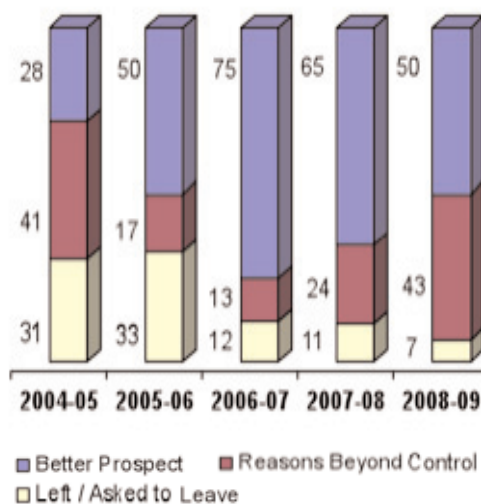
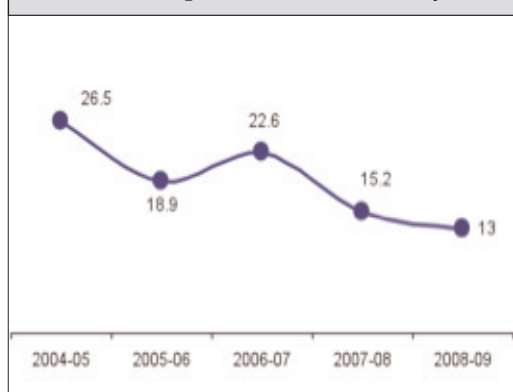


Chart I: Lowering staff-turnover over the year (%)



poor performance. This is an outcome of improved on-the-job training and management systems.

**Gender:** As at the end of last year, the proportion of female employees in the organisation is 45% as compared to 39% last year.

**Volunteer support programme**

During the year, 30 volunteers and 37 interns worked in CSE for various programmes and activities, with a total contribution of 3490 human days, equivalent to the contribution of 15 regular staff members. Of these, interns contributed roughly 40% and volunteers about 60%. A total of 16 volunteers and interns were from universities abroad and about 16 joined us from other states of India. Volunteers and interns were in the age group of 18 to 50 years and some school children also volunteered in special summer project with CSE during the year. The total strength of CSE's volunteers' database now stands at 4300 and during the year 2008-09, the number of new registration is 876.

**Collaboration with foreign agencies**

- All Jewish World Service (AJWS, USA)-sent 1 candidate, was placed with Industry and Environment Unit.
- Mount Holyoke College, USA, sent 2 volunteers this year to work with Air

Pollution Unit and Environment Education Unit.

- EWB (Engineers without border), UK has been sending 2-3 interns every year since 2004. This year 2 volunteers have worked with DTE and River Pollution Unit.
- volunteer, Delhi chapter sent 1 volunteer to work with River Pollution Unit.

**Financial performance**

The bulk of funds for the organisation came as programme grants from donors. CSE received a total grant income of Rs. 781 lakh, earned Rs. 85 lakh from the sale of its products and earned Rs. 209 lakh as interest and investment income. CSE's core fund (corpus + own fund) stands at Rs. 26.60 crore. Of the total of Rs. 85 lakh that CSE generated, Rs. 20 lakh is from training activities. In terms of revenue expenditure, the maximum expenditure was on Knowledge dissemination and awareness creation activities (Rs 305 lakh) followed by research and advocacy (Rs. 254 lakh).