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1. Policy Research and Advocacy

I. SUSTAINABLE URBAN MOBILITY AND TRANSPORT

1. CLEAN AIR TRANSPORTATION AND TRAINING

1.1. Policy review, transportation-related strategy under the Jawaharlal Nehru National Urban Renewal Mission

This is the key national framework for the central government's reform-based investment for transportation and mobility management in Indian cities. The programme seeks to promote safe, affordable and sustainable transportation through integrated land use and transport planning, multimodal public transport, equitable allocation of road space and promotion of clean technologies.

As it is an ongoing programme with the second phase of its implementation underway, the Centre for Science and Environment (CSE) undertook a review of the first phase to understand its effectiveness in meeting the objectives of sustainable mobility in order to provide policy inputs to the government.

The Union ministry of urban development (MoUD) announced a stimulus package for buses. It made the reform agenda conditional to the grant for bus purchase. These include bus sector reforms, parking policy as a travel demand management measure, tax reforms and drawing up an advertisement policy to generate funds for public transport. The aim is to meet the objective of the National Urban Transport Policy and reduce congestion, energy and pollution impacts of motorisation.

CSE has prepared factsheets compiling the emerging issues and challenges facing this reform process in cities like Delhi.

We are continuing our review of the programme. This will help us to build dialogue to influence the policy decisions and implementation strategies under the programme. A workshop focussed on this programme is being planned.

1.2. Advocacy action to push for pedestrian guidelines

A series of campaign activities were planned with key stakeholders to apply pressure towards finalisation and mandatory implementation of the reformed pedestrian guidelines.

Extensive pedestrian infrastructure is needed to support public transport in a city such as Delhi, where even today one third of the populace walk to work. We are now building in the 'walk to work' concept into our city programmes. We would like to influence urban and road planners to focus on the integration of the metro rail, bus and pedestrian ways – especially last mile connectivity.

The Delhi Metro's Central Secretariat-Qutub link has been selected on a priority basis for this purpose. Based on extensive field visits (along with key stakeholders – the MCD, NDMC, Traffic Police, etc) key interchange issues have been identified to provide last mile connectivity and convenience to passengers and to ensure pedestrian access on metro lines. This exercise has also been linked with the UTTIPEC initiative on development of design guidelines for interchange integration.

Currently, we are focussing on the extended Central Secretariat-Qutub-Gurgaon metro line and Gurgaon segment. There are five stations on the line in Gurgaon. It has been decided after the intervention that at all stations will be provided by the Haryana Urban Development Authority (HUDA):

- HUDA will provide pedestrian lights at stations to facilitate movement,
- Provide TSR (three-wheeled scooter rickshaw) and cycle rickshaw parking,
- Provide/repair pedestrian way along all roads with a minimum width of 1.7 metres (m), provide cycle/MUV lane on the road,
- Provide bus shelters and crossing on roads to facilitate public transport.

At all stations, the Delhi Metro Rail

Corporation (DMRC) will undertake the following:

- Ensure that there is parking facility (in consultation with HUDA) for public intermediary transport (TSR and cycle rickshaw),
- Promote cycle parking at stations,
- Ensure that car parking in the station area is clearly demarcated and no unauthorised parking takes place,
- Ensure that parking for cars is priced so that it matches parking prices in the area.

1.3. Campaign for fuel economy regulations for cars

The objective of this campaign is to develop fuel economy and air pollution ranking for car models in order to influence consumer choices through wide publicity.

CSE is campaigning for mandatory fuel economy standards for vehicles. During the project period it has raised concerns with the key ministries and the agencies – Union ministry of shipping, road transport and highways, and Bureau of Energy Efficiency (BEE, under the ministry of power) and also the Prime Minister's Office (PMO).

In 2009 CSE, through a press note, had released its assessment of the CO₂ emissions from cars and the implications of the delay in setting these standards for energy security and climate. In its note, CSE pressed for the need to set the standard at the earliest. This was also communicated to the concerned agencies.

The campaign has now reached a decisive moment as government has proceeded on setting up a fuel economy labelling programme for car models. Through various activities we are keeping up the pressure. CSE has also briefed the Union minister of shipping, road transport and highways on the critical policy issues related to the fuel economy standards as this ministry is also involved in the process.

The fuel economy regulations have hit a roadblock largely because of the turf war between the power ministry and the transport ministry. After the initial campaign, the deadlock was resolved to an extent, with a decisive directive from the

PMO that the BEE will set the standards under the Energy Conservation Act, 2001 and the Union ministry of surface transport will implement this. But this has been challenged and opened up once again.

CSE continues to push the authorities for implementation of the fuel economy standards.

1.4. Campaign on car restraint measures to discourage use of personalised transport and promote public transport

This will feed and support the ongoing process at UTTIPEC (unified traffic and transportation infrastructure – planning & engineering – centre of the Delhi Development Authority) and high level task force of the Delhi government that is developing these strategies.

Indian cities are beginning to eye revenue from car tax reforms and congestion-related fiscal measures to meet the growing cost of public transport and non-motorised infrastructure. Delhi's transport department has taken up the matter with the finance department.

A study undertaken by CSE shows that cities the world over are putting a check on their car population to free their road space. Published as a cover story (*Unlock the grid* – August 31, 2010) in *Down To Earth*, it gives details of the traffic problems and strategies implemented to decongest the city. Besides monitoring the growth of vehicles, the adoption of public transport is seen as a critical measure to improve air quality. The cities covered are London, New York, Stockholm, Berlin, Singapore, Shanghai, and Delhi.

1.5. Policy analysis of parking policy to support the ongoing effort of the Delhi government

As part of this activity, CSE is now pushing for these strategies with various government bodies such as the Supreme Court-mandated EPCA [Environmental Pollution (Prevention and Control) Authority], the Delhi government and UTTIPEC. The cover story *Unlock the grid* on car restraint measures published in *Down To Earth* also highlights this issue.

1.6. Policy analysis of Urban Transport Fund

This project aims to develop a model of urban transport funding for Delhi by evaluating all possible revenue sources that can facilitate the formation of this fund. This will also complement the initiatives of UTTIPEC and Delhi transport department.

CSE sent a proposal to the Delhi government to assess ways to implement tax measures towards a dedicated fund for financing public transport such as buses and also restrain personal vehicles. The government will have to find new or additional sources of revenue to create the fund.

CSE has offered to study:

- i) Tax measures to reduce the cost of the bus itself so that the capital investments can be lowered.
- ii) Find alternative sources of revenue to create the dedicated fund for funding of public transport and to offset the revenue losses on account of waiving off taxes on buses. These tax measures should also simultaneously work on the principle of reducing car usage and improving public transport ridership.

Delhi government has taken the CSE

proposal on board and based on this a Cabinet note has been prepared. At the same time the UTTIPEC working group in Delhi Development Authority (DDA) has been directed to work out the strategies to create the dedicated urban transport fund. CSE is also a member of the working group and has contributed to the deliberations during this period

1.7. Roundtable on air quality and Commonwealth Games, 2010

This roundtable with air quality regulators, medical practitioners, sportspersons, transport planners was conducted by the Right To Clean Air team of CSE to leverage the games for the longer term air quality and public health benefits.

In the past year, CSE had organised a campaign to leverage the Commonwealth Games for clean air, public health and energy efficiency. The campaign was kick-started with a public dialogue on 'Leveraging Commonwealth Games for Clean Air and Public Health' on May 10, 2010 which was attended by about 36 participants (key regulators, academics, scientists, health professionals, civil society groups, international experts) and media. The results of the deliberations were released through a



Public dialogue on 'Leveraging Commonwealth Games for Clean Air and Public Health'

press note *Clean air before the Games: Are we living up to it?*

CSE presented its analysis of air quality and brought out how air pollution levels were daunting. Cutting these levels during the Games would need scale, stringency and a frenetic pace of action to ensure that the public health benefits last beyond the event, recognised as the first ever 'green' Commonwealth Games. CSE said that Delhi would have to make a sharp break with its current car-centric framework, and identify ways to leapfrog so that 'blue sky days' increase in the city.

CSE said that in addition to the ongoing implementation of the permanent measures, Delhi would also have to be ready with an emergency plan for the Games and test it out before the event. The new monitoring and forecasting systems that were being put in place for the Games would have to guide this action. It was stressed that planning for the Games venues should not be seen in isolation from the rest of the city. Only the compulsion to meet clean air targets can deepen public understanding of what it takes to protect public health and build public support for aggressive action needed for green Games as well as long term sustainability of the city.

This event and extensive media reportage on CSE's analysis of the air quality and public health imperatives of the Commonwealth Games made significant impact. All the leading newspapers carried the findings and strategies discussed to achieve clean air during the games. The very next day, the Chief Minister Sheila Dikshit called a meeting with Sunita Narain, Director General and Anumita Roychowdhury, Executive Director, research and advocacy, CSE to discuss the roadmap ahead. The heads of department of all the key concerned agencies were asked to respond to the concerns raised by CSE' and also suggest a way ahead.

The Chief Minister's meeting on May 15, 2010 reviewed progress of air pollution control strategies to meet clean air targets during the Games. At the meeting, the high-powered group identified the primary thrust areas for time-bound improvement. It proposed to speed up action on public

transport strategies to meet the increased demand during the Games: service hours and frequency of metro and buses would be increased on the key routes to enable an effective shift from personal vehicles. It was decided that pedestrian and bicycle paths would be scaled up and integrated with the metro and bus transport. There would be zero tolerance for polluting and smoky vehicles. Public transport linkages with the National Capital Region (NCR) would be strengthened to reduce the traffic load from NCR. There would be stricter control over transit traffic.

As part of the way ahead, the Delhi government has formulated a '13-point agenda' programme which will be monitored.

The environment and science fortnightly *Down To Earth* carried a story (*Delhi's wake up call*, June 15, 2010) highlighting the air quality challenges for the city, special air quality monitoring and forecasting that was planned for the Games and the kind of measures that the Delhi government should take to minimise pollution.

2. CITY ACTION PROGRAMME

The city action programme in selected cities is aimed at focused policy awareness and action and this further helps in informing the policymaking stakeholders on a nation-wide scale.

The objective of the city action programme is to get the key agenda for clean air implemented in the cities by creating a public demand through awareness events and dialogues. The key agenda points for city action are:

- 1) public transport improvement, reforms and augmentation,
- 2) car restraint measures – parking, taxes etc,
- 3) improving walkability and cycling, and
- 4) clean fuel programme – introduction of cleaner fuels and new emission norms etc.

The participation of civil society, academia, policymakers, regulators and citizens ensures that the city dialogue and

stakeholder consultations remain relevant to local challenges. Participation of the media ensures regular coverage, especially as the fourth estate is able to grasp the issues better. Participation of the media to understand the issues helps in follow up. City regulators and NGOs also participated in the orientation programmes organised by the team. The orientation programmes truly are the platforms for experience sharing and shared learning.

During 2010-11 the team has continued the focussed programme of city action assessment and stakeholder consultations. Simultaneously, new work has been initiated in two metro cities – Kolkata and Hyderabad. The work in Delhi has been accelerated as part of the ongoing programme.

2.1. City dialogue in Kolkata

The city action team prepared and presented a citizens report card on Kolkata's air quality and urban mobility based on stakeholder consultation and a citizens' survey. This aims to deepen public and policy understanding of the growing public health and mobility crisis in our cities.

Kolkata was selected to represent the dilemma of the mega cities that are experiencing rapid growth and enormous challenges in achieving clean air and mobility targets. If ignored, this can lock up

enormous pollution, lead to energy guzzling and increased carbon emission as the city preferences moves away from sustainable modes of transport.

The team also organised a city dialogue in Kolkata in partnership with Kolkata Metropolitan Development Authority (KMDA). Citizens, policymakers, regulators, civil society were present to discuss the roadmap for the city. Around 300 stakeholders participated.

The team is following up on the discussions with the KMDA to work out future strategies. Official representatives have also shown interest in participating in the orientation programme organised by us.

2.2. City dialogue in Hyderabad

A round of consultation and a survey was organised in Hyderabad. In October 2010 'The Hyderabad City Dialogue on air quality and transportation challenge: An agenda for action' was organised by the Andhra Pradesh Pollution Control Board (APPCB) and Clean Air and Mobility Programme of CSE. The panelists represented the key stakeholders of the city. They included the APPCB, transport department, the Institute of Health Systems, Greater Hyderabad Municipal Corporation, Bhagyanagar Gas Limited, Citizens for Better Public Transport and The Right to Walk Foundation. The city dialogue was attended



Participants interacting with the panel at the City Dialogue on air quality and transportation challenge: An agenda for action' held in Hyderabad.

by more than 100 participants. APPCB has shown interest in joint assessment of an action plan on air quality for the city.

During the workshop many civil society groups raised the issues regarding government's penchant to go for high-end projects and the utter neglect of common people's travel needs and infrastructure like footpaths, safe crossings, proper lighting, properly designed bus stops etc. This has led to a critical recommendation that public hearings be organised on key public transport projects in the city. This recommendation has also been included in the official deliberations on the city action plan. The APPCB sought information from CSE on the various tax measures implemented in Delhi and Hyderabad with regard to the CNG programme in order to assess its application in the city.

3. TRAINING AND ORIENTATION PROGRAMME

3.1 NGO ORIENTATION PROGRAMME ON CLEAN AIR AND MOBILITY

A two-day orientation programme – 'Solutions to pollution and mobility crisis:

learning from each other' – was organised in Delhi from September 21-22, 2010 and brought together a select group of regulators and change makers from selected cities to share the experiences and action to combat pollution and congestion.

The objective of the forum was to capture the changes initiated in Delhi in different spheres of pollution control and mobility management and also an opportunity to learn from the participants from other cities their unique imperatives and challenges to strengthen the roadmap and build the support for future action in our cities.

A total of 15 senior level participants including two from South Asia participated in this forum. The orientation programme had representation from 11 Indian cities (Fazilka, Chandigarh, Kanpur, Kolkata, Guwahati, Delhi, Agartala, Mumbai, Pune, Hyderabad, Bangalore) and also Kathmandu, Nepal.

3.2. Regulators' Orientation programme

In the ongoing series of orientation programmes for policymakers, a three-day orientation programme on 'Urban transportation reforms for clean and liveable cities' was organised during November 18-



CSE Executive Director Anumita Roy Chowdhury at the orientation programme, 'Solutions to pollution and mobility crisis: learning from each other'



Participants of the workshop, 'Urban transportation reforms for clean and liveable cities'

20, 2010 in Delhi focusing on mobility management and the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) reform agenda.

A total of 24 senior level regulators from urban development departments, city municipal corporations, transport departments and transport corporations from Indian and South Asian cities participated in this orientation programme.

These included regulators from 15 Indian cities – Rajkot, Shimla, Dhanbad, Gwalior, Bhubaneswar, Coimbatore, Noida, Lucknow, Tirunelveli, Meenambakkam, Chennai, Auroville, Ahmedabad, Indore, Jaipur. Participants from Kathmandu and Colombo, Sri Lanka also attended

4. OUTREACH ACTIVITIES

4.1. Reportage on air pollution and mobility issues in Down To Earth

A series of articles have been published in *Down To Earth* on these issues. Some of these articles have been published in other newspapers and also through a feature service. Sometime these articles also help with advocacy. For instance, the cover story *Unlock the Grid* that gave a snapshot of the

global experiences and lessons to control car usage was widely disseminated to all the concerned stakeholders from various cities. Lt Governor of Delhi referred that article to UTTIPEC and the Delhi transport department for deliberation and action. Taking off from the article, the media highlighted the issue of pollution and traffic congestion and advocated car restraint measures that Indian cities are in dire need of.

Listed below are some of the articles:

- *Automobile companies get tighter emission norms deferred* – Priyanka Chandola (Web special May 15, 2010)
- *Delhi's wake up call* – Priyanka Chandola, June 15, 2010
- *Unlock the grid* – Anumita Roychowdhury, August 31, 2010
- *No parking* – Priyanka Chandola, August 31, 2010
- *Fund crunch hits Mumbai Metro* – September 15, 2010
- *Suppressed CNG facts* – Arushi Mittal, January 15, 2011
- *Retina visuals capture heart* – Priyanka Chandola, January 31, 2011
- *Europe sets fuel-efficiency target* – Vivek Chattopadhyaya, January 31,

2011

- *Remove the perverse incentive* – Anumita Roychowdhury, February 28, 2011
- *Flawed, but accepted* – Arushi Mittal, March 15, 2011

4.2. Newsletters

In order to disseminate our advocacy issues and information on air pollution and mobility, CSE's air pollution bulletin is sent out to a select network of professionals, regulators, NGOs and communities that are specifically working on air pollution and mobility issues. This e-newsletter has about 5000 direct subscribers. Some of our information is also posted on the general CSE newsletter that has a direct subscriber list of 2.75 lakh. It is encouraging to see the feedback we receive from the readers.

4.3. Website

CSE has created a dedicated website to disseminate information on air pollution and mobility. This widely covers issues related to air quality and public health, public transport and mobility, energy and transport and vehicle technology and fuel and so on. Updates on these issues are regularly put up on these sections. The India Environment Portal or the IEP (promoted by the National Knowledge Commission and managed by CSE) also carries a sub-portal on transport, which updates and disseminates information on all air pollution and related issues.

4.4. Factsheets

The following factsheets were prepared by the team during the last year:

- For whom the horns blare – September 2010
- Pollution under control results: Out of control – September 2010
- Why clean diesel is a myth in India? – November 2010
- Diesel hides behind CNG – December 2010

4.5. Press releases

- CSE welcomes Delhi government's move to make diesel cars dearer – March 23, 2011

- Kolkata City Dialogue on Air Quality and Transportation Challenge: An agenda for action – March 16, 2011
- CSE analyses recently released six-city study on air pollution sources from environment ministry, finds flaws in it – February 8, 2011
- Alarm over worsening air quality and traffic congestion in South Asian cities, ongoing action must gather momentum – January 27, 2011
- Winter pollution is back with a difference. City now faces the threat of multiple pollutants going up together – December 13, 2010
- CSE supports Jairam Ramesh on restraints on SUVs and dieselisation of personal cars – November 17, 2010
- City action – Hyderabad: CSE conducts city dialogue on air quality and transportation challenges, proposes agenda for action – October 7, 2010
- Delhi agrees to use Commonwealth Games as an opportunity to address air quality concerns – May 15, 2010
- Clean air before the Games: Are we living up to it? – May 10, 2010

II. WATER MANAGEMENT PROGRAMME

1. URBAN RAINWATER HARVESTING

During the year, the team focussed primarily on three activities – capacity building through training, research and advocacy, networking and knowledge dissemination.

1.1. Capacity building through training workshops

Five training programmes were conducted for municipal officials, and two trainings were organised for the general public on rain water harvesting (RWH). The participants were engineers from different states who were trained for the concept, policy and implementation of RWH. The Ghaziabad Development Authority and Rajkot Municipal Corporation showed interest in implementing the projects with CSE's assistance. The training helped enhancing knowledge and skills of the participants in augmenting the water availability and supply in their



Participants of the training programme on Urban rainwater harvesting

municipality areas.

The following training programmes were undertaken for municipal engineers:

Several experts interacted with participants on the issues related to water management and rainwater harvesting – Sarvagya Srivastava from Central Public Works Department, Sanjam Cheema from Delhi Jal Board, Prof. P S Datta, Project Director, Nuclear Research Laboratory, Indian Agricultural Research Institute, New

Delhi and C R Garg from Tihar Jail, Dr S K Sharma, Former Member-Secretary, Central Ground Water Board/Authority (CGWB/A), architect Vandana Menon and Mr Parveen from ITC-Welcomgroup's Maurya-Sheraton hotel in New Delhi, Dr A R Shivakumar from Karnataka State Council for Science and Technology, Dr S K Jain from CGWB, shared their experience in the workshop and relevant case studies on rainwater harvesting.

S. No.	Date of training	State	No of participants
1	May 18-21, 2010	Assam, Delhi, Haryana, Jharkhand, Madhya Pradesh, Punjab, and West Bengal	24
2	June 15-18, 2010	Delhi, Haryana, Rajasthan, Manipur, Uttar Pradesh, and Chandigarh	31
3	August 10-12, 2010	Uttar Pradesh	18
4	November 23-26, 2010	Uttar Pradesh, Delhi, West Bengal, Gujarat, Karnataka, Tamil Nadu, and Rajasthan	29
5	February 2-3, 2011	Delhi, Uttar Pradesh, Haryana, Maharashtra, Punjab, Kerala, Himachal Pradesh, Nagaland, Andhra Pradesh, Meghalaya and Rajasthan	27
6	March 30-April 3, 2010	Delhi	7
7	July 27-31, 2010	Delhi	7



"That slimy ooze is sewage, those bubbles over there are hazardous wastes, that dark flow is industrial effluents and we are still looking for water."

1.2. Research and Advocacy

CSE submitted the city-level RWH plan to the Union ministry of urban development (MoUD) for Chandigarh. The municipal commissioner of Chandigarh showed interest in implementing the system and invited CSE to make a presentation to the senior officials of Municipal Corporation of Chandigarh (MCC) in November 2010. A team of senior engineers from MCC and Chandigarh administration visited Delhi in December 2010 to see similar model projects designed by CSE and understand the operation & maintenance involved in RWH systems.

The detailed report submitted, 'Capturing Rainwater- A way to augment Chandigarh's water resources', is available on the website (<http://www.cseindia.org/content/capturing-rainwater>) for reference and for outreach and dissemination of results. This report has received appreciation from eminent planners and

engineers including the Punjab Science and Technology (PST). The PST has requested CSE to provide support and guidance in designing RWH systems for eight Indian Technical Institutes (ITI) across Punjab.

Among technical consultancies undertaken by CSE on rainwater harvesting design proposals are the following buildings, with implementation underway for most of them.

- Anil Agarwal Green College, New Delhi
- Sikkim Science Centre, Marchak, Sikkim
- Chandigarh Golf Club
- Sudhinalaya Rescue and Rehabilitation Centre, New Delhi
- Bipin Chandra Tripathi, Kumaon Engineering College, Dwarahat, Uttarakhand
- A residence at Jorbagh, New Delhi

Apart from this, CSE has given technical guidance to Kerala School, Punjab National

Bank office building complex and residential buildings at New Friends Colony and Saket in Delhi.

1.3. Interviews by media

The urban water team was interviewed by the following print and electronic media over the year.

1.4. Lectures/seminars attended by team members

- Awareness campaign on rainwater harvesting in Saharanpur, Uttar Pradesh in August, 2010. The meeting was covered by Hindi national dailies – *Dainik Jagaran* and *Amar Ujala*.
- Lecture on RWH for various schools in Agra in September 2010. Eight schools are ready to implement the RWH system with CSE's guidance.
- Network meeting for the hosts of CSE's model projects organised in December 2010. About 10 participants were present. People interested to implement the project also attended the meeting. Gargi College in New Delhi agreed to implement the system with CSE's help.
- Human Settlement Management Institute (HSMI), the research and training wing of Housing and Urban Development

Corporation (HUDCO) conducted an 8-week training programme for overseas professionals on 'Managing Cities in Developing Countries – Environment & Infrastructure Framework'. An expert from CSE's water team was invited to deliver a lecture on rainwater harvesting. Eighteen participants (architects, civil engineers, architects, town planners) from different parts of the world attended the programme.

- CSE provided inputs to the report of the sub-committee on 'Developing parameters for urban storm water management' which is part of National Mission for Sustainable Habitat, under the MoUD.

2. GREEN BUILDING WATER MANAGEMENT

2.1. Background paper on efficiency rating systems for water using fixtures

The team prepared a background paper on efficiency rating systems for water using fixtures. The paper has been appreciated by the MoUD. The ministry is keen to initiate a rating system for water efficient fixtures in India. Over 100 people from various fields and organisations have accessed the report from the CSE website. The contents of the

Name	TV channels/ radio/newspaper	Month	Topic
Ohm	Radio	April, 2010	Water scarcity in Delhi
DD Urdu	TV	April, 2010	Yamuna pollution
DD National	TV	April, 2010	Water scarcity
DD National	TV	May, 2010	Water scarcity
<i>Pioneer</i>	Newspaper	May, 2010	Yamuna pollution and Commonwealth Games
<i>Hindustan</i>	Newspaper	May, 2010	Rainwater harvesting
<i>The Times of India</i>	Newspaper	May, 2010	Rainwater harvesting and water scarcity
<i>The Times of India</i>	Newspaper	June, 2010	Rainwater harvesting
<i>The Tribune</i>	Newspaper	June, 2010	Rainwater harvesting
<i>Sahara Samay</i>	TV	June, 2010	Water today
Star News	TV	June, 2010	Rainwater harvesting
IBN 7	TV	July, 2010	Rainwater harvesting
Bloomberg UTV	TV	August, 2010	Rainwater harvesting
P7	TV	September, 2010	Yamuna flooding
News 24	TV	January, 2011	Yamuna pollution

report were also discussed at the round table meeting and the report has been able to generate awareness on the need to initiate rating reform amongst the manufacturers, ministry etc. in a time bound manner.

A document on the road-map to initiate rating system for water efficient fixtures is under preparation and will be submitted to the MoUD. The document would include the present legal and institutional framework with reference to water, existing in India today. Suggestions with regards to the policies, institutions and legal options to implement and mainstream the rating system have been included in the document. In addition, a detailed rating system for the fixtures will also be included as recommendations in the document for MoUD.

2.2. Water audit for the CSE building

CSE conducted a water audit for its office building, essentially aiming at further improving water efficiency and conserving every drop of water wherever possible.

A paper on measures and techniques for water conservation and efficiency improvements in buildings was prepared to feed into the green building manual. The paper discussed in details processes like water audit, metering, leakage control, efficient amenities, water conservation in landscape and outdoor activities, along with a draft structure of the Green Building Water Manual (GBWM) manual and training.

A strategy paper on linkages between building and water is under preparation, which would highlight its current status, challenges and issues that are facing the building sector in India. This paper would also contribute towards the green building manual and would be useful in advocacy for moving towards greener buildings with improved water management.

A research paper is also under preparation on the Environment Impact Assessment (EIA) process for building and construction projects. The paper would feed into the EIA manual for water and wastewater based on current building clearances, best practice and technologies.

The team provided inputs for the report

of the sub-committee on developing 'Parameters for urban storm water management'. This includes suggestions on the guiding principles, critical issues, new techniques and case studies that could help develop preventive, curative and reactive parameters for urban storm water management in urban areas.

2.3. Networking and Dissemination

Two stakeholder's discussions were organised by CSE for evolving a roadmap to initiate rating of water efficient fixtures in India. In the first meeting the issues, status and way forward with regards to rating system for water efficient fixtures was discussed. The meeting was organised at CSE's India Habitat Centre premises with 25 participants on September 28, 2010. The second meeting held on December 22, 2010 discussed in detail the draft rating system and the road-map for implementation of the rating system in India.

To measure impact – both meetings had participation from a wide range of stakeholders from sanitaryware manufacturers, the Bureau of India Standards (BIS), Central Public Health & Environmental Engineering Organisation (CPHEEO), MoUD, green building councils, plumbing association, academics etc. The first meeting was attended by Joint Secretary (Urban Development) Government of India.

The background paper on 'Rating system for water efficient fixtures in India – A Way to Sustainable Water Management in India' was uploaded on the CSE website in August 2010 and print copies were submitted to the MoUD soon after. The brief on this initiative along with the meeting proceedings have been included in a press note, which was widely reported in the media. The brief of the second meeting has also been uploaded on the website. A new web page on the GBWM was created under the Water Management Unit head (<http://www.cseindia.org/category/topics/green-building-water-management>).

2.4. Dissemination through Down To Earth and website

A two page special report titled *Watertight* was published in the October 15, 2010 issue

of *Down To Earth*. The report also carried the interview of the head of a leading sanitaryware manufacturer in India. It is expected that this article would be able to generate widespread discussion and awareness on the need for ratings.

Material on water audit, water efficiency and conservation in buildings has also been uploaded on the web page. In addition, all *Down To Earth* articles, news on the environment portal related to green buildings and water are linked to this web page. A new page for Centre of Excellence (CoE) has also been created with details of activities, documents prepared for CoE and details of trainings organised, amongst others (<http://www.cseindia.org/taxonomy/term/20377/menu>).

3. DECENTRALISED WASTEWATER TREATMENT (DWWT)

The activities during the year focussed on capacity building, research and advocacy, networking and dissemination.

3.1. Capacity building programmes

Five trainings were conducted for engineers of municipalities from different states.

- May 11-14, 2010 (25 participants from Delhi, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Orissa and Uttar Pradesh)
- July 6-9, 2010 (19 participants from Delhi, Haryana, Rajasthan, and Uttar Pradesh)
- September 7-9, 2010 (15 participants from Noida, Uttar Pradesh joined the training)
- Nov 9-12, 2010 (17 participants from Haryana, West Bengal, Gujarat, Uttar Pradesh, Tamil Nadu, Delhi, Madhya Pradesh, Maharashtra and Andhra Pradesh)
- March 3-4, 2011

These municipal officials were trained on the concept, policy and application of decentralised wastewater treatment and reuse. Engineers from Himachal Pradesh have asked CSE to initiate pilot projects based upon modified septic tank design for septage



management. The trainings helped in enhancement of knowledge and skills of the participants to address their problems in field.

August 24-28, 2010: This training programme was for the general public in which 19 participants attended. The participants acknowledged that they learnt substantially on the subject in the course of the programme. A few participants are also in touch with CSE regarding designing of project and implementation. Mr Samal of Earth Foundation, Orissa has actually started consultancy for implementation of DEWATS (Decentralised Wastewater Treatment Systems) after attending the programme.

Various resource persons/ external faculties/ expert have contributed to the training workshops – M Dhindhayalan, Deputy Advisor (CPHEEO), Paritosh Tyagi, former Chairman (CPCB), Dr Ajit Seshadri, Head – Environment (Vigyan Vijay Foundation, New Delhi), Manu Bhatnagar Principal Advisor Natural Heritage Division (INTACH), New Delhi), Prof. Padma Vasudevan (IIT Delhi), Prof V M Chariyar (IIT Delhi), Prof Vinod Tare (IIT Delhi), Dr R C Trivedi, former Additional Director, (CPCB) shared their experience with participants.

3.2. Research and advocacy

CSE's water team was invited by the Government of Himachal Pradesh to make a detailed presentation on 'Decentralised Wastewater Treatment – A way to manage septage in Shimla city' in April 2010. The meeting discussed the plan for implementation of pilot projects identified in Shimla city to showcase good practices in septage management that hold a promising solution to existing sanitation problems in hill towns/cities. As a result, principal secretary, urban development & environment, Government of Himachal Pradesh directed senior officials of Shimla Municipal Corporation and HP Urban Development Authority to initiate implementation of pilot projects in Shimla as well as Baddi-Parwann respectively.

The team prepared a policy paper on septage management (abstract submitted to MoUD, Government of India) and the inputs

of this paper will be used for policy advocacy to revise the by-laws as well as guidelines to town/cities in handling and treating of septage.

Inputs provided in the report of the sub-committee to develop 'Parameters for Urban Storm Water Management'. The report is part of various activities undertaken by the MoUD for implementation of the National Mission for Sustainable Habitat

3.2.1. Technical consultancies

The team regularly conducted the fortnightly technical consultancy meeting (free of cost) with stakeholders to design and implement decentralised wastewater treatment systems. CSE has been approached by various NGOs and institutions to provide technical guidance for designing and implementation of decentralised wastewater treatment system in their premises. This has helped in creating wide awareness and strengthening citizen actions on water and waste management. CSE addressed queries from practitioners, NGOs, and architects to promote DWWT. Seven such meetings have been organised to address queries regarding DWWT implementation.

As a part of consultancy, a preliminary survey was conducted at Sadhu Vaswani School in New Delhi by CSE team. During the visit, details about the DWWT implementation, cost estimation of the system were discussed. In another case, technical guidance along with the design plan of the DWWT has been given to Tara Nirman Kendra for the implementation of the system at SOS Youth House in Chennai.

The team initiated the aerobic microbial composting process for solid waste management at the CSE campus in Tughlaquabad Institutional Area. This has showcased good practices in solid waste management at building level for visitors/trainees.

3.3 Networking and knowledge dissemination activities

As part of scaling up activities, the water team strengthened its networking with stakeholders and also maintained a regular follow up with participants of the training.

A new web page on 'Decentralised wastewater treatment and updated data resource centre on best practices and emerging technologies in wastewater management' was created. This will help dissemination and outreach of good practices across India and internationally to promote sustainable and affordable decentralised wastewater treatment and reuse.

The focus has always been knowledge sharing with practitioners, experts and NGOs working towards sustainable approaches. Regular visits by NGOs/practitioners/corporate at CSE to showcase sustainable water/wastewater management practices. Twenty participants attending 'ACCESSanitation' workshop organised by ICLEI South Asia visited CSE to see the decentralised wastewater treatment system and reuse.

The team maintained regular media interaction and reporting in leading dailies for sustainable water/wastewater management towards widespread awareness generation among masses.

4. RURAL WATER MANAGEMENT

During the year, the rural water management team successfully organised a number of training programmes, undertook research and disseminated information on sustainable drinking water. Trainings were conducted in different parts of Madhya Pradesh and in Uttar Pradesh in collaboration with the local NGOs. The objective of the training was to brief and create an understanding of the need to prepare Village Water Security Plans.

The training programme was divided into two parts – one for the PHED engineers and another for panchayats and communities. The main focus of the programme for PHED was to demystify some of the aspects of the new guidelines, which aim for universal coverage by March 2012. The guidelines cover great many issues in their broad sweep but the workshops were designed to focus on the key issues of community involvement and rainwater harvesting for source sustainability. A total of 15 training programmes on 'Drinking

water for the last person' were organised in which 533 people were trained.

The trainings for the PHED were held in Bhopal, Indore and Sagar districts of Madhya Pradesh. Bhopal covered 23 districts, Indore covered 15 districts and Sagar covered 6 districts. The programme was attended by 130 engineers from across the state.

Under the trainings for panchayat, CSE organised 12 workshops - at 4 villages each of Dhar and Jhabua districts of Madhya Pradesh and in 4 villages of Meerut District of Uttar Pradesh. The objective was to create an understanding of the need to prepare Village Water Security Plans through water budgeting. This was done by linking up with local NGOs, like Vasudha in MP and Janhit in UP. The villages were selected based on physio-graphy, hydro-geology, population profile and the willingness of participants to attend the programme.

Capacity building programmes

3.1. Training programme on 'Drinking water for the last person' for Madhya Pradesh Public Health Engineering Department held from August – October 2010

The training programmes were designed to focus on the key issues of community involvement and rainwater harvesting for source sustainability. It was organised as per the following details:

1. Bhopal, August 26-28, 2010 – Covered 23 districts of Bhopal and Jabalpur division
2. Indore, September 15-17, 2010 - Covered 15 districts of Indore division
3. Sagar, October 6-8, 2010 – Covered 6 districts of Sagar division.

There was a total participation of 130 engineers (Superintendent Engineers (SEs); executive Engineers (EEs); Junior Engineers (JEs); and, Sub Engineers (SEs)) from across the state.

Training modules: The three day agenda was designed in a way to present various aspects of water management including the policy framework; explaining the provisions of the new guidelines; traditional methods of water harvesting and watershed management. The lectures therefore revolved around case studies of community involvement and

rainwater harvesting which were supplemented by technical lectures on the science of hydrogeology and recharging. Key modules covered the following subjects:

- management of water supply schemes in villages through VWSCs;
- community contribution for operation and maintenance;
- mitigation of water quality through dilution and rainwater harvesting;
- sub-basin level planning for water security;
- rainwater harvesting for sustaining sources at household, village and watershed level; and
- watershed management.

The participants were familiarised with these concepts through lectures and discussions with the resource persons. In addition to these, there was detailed session on the science of hydrogeology. It was realised that the engineers would need to understand the concepts of hydrogeology for recharge, quite opposed to the current paradigm of using geology for exploitation purposes only

Field visits: To demonstrate on-ground initiatives of some of the concepts outlined in the sessions, field visits were organised to villages in all the three programmes. The villages were identified to demonstrate successful initiatives through NGO efforts, PHED case study on community management of piped water supply schemes and convergence with other government programmes. It was meant to showcase community led initiatives becoming successful owing to the nurturing of social capital by mobilising people to come together for meeting their own needs. The point of this initiative was to wean the village off state dependence and inculcate a sense of ownership towards their common resources and systems. In one of the training programme, the participants were taken to a problem village, which was facing severe water problems for the past few years and no scheme for water supply has proved to be successful here. The participants undertook a water budgeting exercise of the village with the help of a simple format and calculated

the amount of water that would be available through rainwater harvesting. The group also explored the possibilities for solving the water crisis in the village. This was based on the learning gained through the lectures from the experts.

Resource persons: The speakers were selected to present diverse initiatives in field of rural drinking water supply like source sustainability, water quality monitoring and mitigation, recharge and community involvement for developing water security plans. The idea was to present insights into the main components of the new drinking water supply programme guidelines through case studies where people have carried out similar initiatives in the country with special focus on the state of MP. The programme also included a field visit to a village where communities are managing their piped water supply programme through efforts of recharge and water conservation.

3.2. Training programme on 'Drinking water for the last person' in Dhar district, Madhya Pradesh from December 23 – 30, 2010

CSE collaborated with the local NGO Vasudha Vikas Sansthan, to undertake the training programmes in the following four villages of Dhar district.

- Khamalia (Sardarpur block)
- Pipalya Mota (Umarban block)
- Multhan (Badnawar block)
- Sala (Dharampuri block)

Training modules: The trainings in Dhar villages consisted of the following broad elements:

- Trend analysis to get an understanding of causes for water availability decline/increase in demand;
- Prioritising problems according to urgency in finding solutions;
- Mapping of water resources;
- Assessing water demand and availability;
- Identifying actions to ensure water sustainability.

3.3. Training programme on 'Drinking water for the last person' in Jhabua district, Madhya Pradesh from March 08-11, 2011

The training programmes were undertaken in the following four villages of the district in collaboration with the NGO Vasudha Vikas Sansthan:

- Karadavat, Petlavad Block
- Mohankot, Petlavad Block
- Ramgarh, Petlawad Block
- Rampuria, Petlawad Block

Training modules: The training programmes consisted of the following broad elements:

- Trend analysis of the past 30-40 years to observe changes in village resources and their causes
- Mapping of water resources and village to spatially contextualise the issues
- Water budgeting to assess water demand and availability
- Identifying actions to ensure water sustainability

3.4. Training programme on 'Drinking water for the last person' in Meerut, Uttar Pradesh from March 27 – 30, 2011

The training programmes were undertaken in the following four villages in collaboration with the local NGO, Janhit Foundation:

- Atrara village (Kharkhada block)
- Jalaluddinpur Masoodpur Gawri, Rajpura block
- Khatki, Parikshatgarh block
- Khwajampur Majra, Rohata block

Training modules: The training programmes consisted of the following broad elements:

- Trend analysis to get an understanding of causes for water availability decline/increase in demand;
- Prioritising problems according to urgency in finding solutions;
- Mapping of water resources;
- Assessing water demand and availability;
- Identifying actions to ensure water sustainability.

III. SUSTAINABLE INDUSTRIALISATION

1. RATING PROGRAMME

The Industry & Environment team worked on the green rating of iron and steel sectors

during the year. A paper comprising of an introduction to the sector, technology, environmental concerns, etc., has been prepared. In all, 23 units have been identified for participation and 11 have already agreed to participate. Six companies are participating voluntarily. They are the Rashtriya Ispat Nigam Ltd, Vizag; Ispat Industries, JSW Steel, Bellary; Jai Balaji, Durgapur; Godawari Power and Visa Steel.

A Technical Advisory Panel (TAP) has been identified and formed. The following members are part of the advisory panel:

1. Dr R C Gupta FIIM, FIE
Former Professor in Metallurgy & Head, Dept of Met Engg, IT-BHU
Member, Expert Committee, Union ministry of environment & forest, New Delhi
Expert Member, Orissa Government Pollution Control Board, Bhubaneswar
2. Mr R P Sharma
Director General Carbon Advisory Services (P) Ltd
Former Chief of Environmental Management, Tata Steel
3. Dr B Sengupta
Former Member Secretary, Central Pollution Control Board
4. Mr A K Ghosh
Principal Adviser
National Accreditation Board for Education & Training Quality Council of India

A questionnaire has been prepared in consultation with TAP members and has been sent to the plants. The team is now gathering extensive secondary information on the plants from the Central Pollution Control Board (CPCB), the state pollution control boards (SPCBs), the media and local communities on environmental data and impact for the last three years – irrespective of whether a plant participates or not. Data entry of the received questionnaires has already started. Team members have visited Tata Steel to acquaint themselves with the working of a steel plant.

2. REGULATORS PROGRAMME

In September 2010, CSE signed a tripartite agreement with the Ministry of environment and forests (MoEF) and SPCBs to train young and middle level officers. These training programmes focus on critically polluted areas, new approaches in wastewater management as well as on a variety of issues related to improvement of compliance and enforcement of environmental laws in India. During the first six months of the project, CSE trained 65 officers including senior officers of SPCBs from across the country.

It is the first time that the government has authorised anyone outside to train the regulators. The incumbent minister for environment and forests, Jairam Ramesh accepted our request and joined the regulators for a face-to-face interaction with the officers undergoing training. CSE's role as an organisation will be enhanced since this training programme provides an opportunity to work with the enforcers, thus creating a dedicated cadre in the government sector well trained in regulatory issues.

A week-long training programme on 'Action plan for critically polluted areas' was held from December 14-18, 2010. Twenty three participants from various SPCBs and the CPCB attended the programme.

A week-long training on 'Compliance, monitoring and enforcement of centralised of wastewater treatment plants' was held in January 2011.

3. COMMUNITY SERVICE CENTRE

Several grassroots organisations from across India requested the Industry and Environment team for technical evaluation of Environment Impact Assessment (EIA) reports. The team helped the communities and evaluated reports. Some of these are as follows:

1. CSE's review of the EIA of the POSCO (port and steel plant) and LAVASA (lake city) requested by National Centre for Advocacy Studies (NCAS), an NGO based in Maharashtra, brought out the shortcomings of the EIA as well as the projects. The results were used by NCAS to file a PIL.



CSE Director General Sunita Narain with officers of the State and Central Pollution Control Board at the regulators' training programme.

2. CSE provided the technical feedback to the rejoinder application in the matter of *Sibaram Naik vs Union of India* at the National Environment Appellate Authority (NEAA). Utkal Alumina International Ltd is the project proponent of a Bauxite Mining Project in Baphlimali Hill in Rayagada District of Orissa. The case was filed challenging the environmental clearance granted to the Baphlimali Bauxite Mining Project. In response to the appeal filed in NEAA, Respondent no 3, the company has filed a detailed counter affidavit. The technical inputs in preparing the rejoinder to the counter affidavit of the company were given by CSE.
3. The public hearing of an asbestos fibre sheet factory at Chainpur in Bihar was to be held at a distance of about 27 km from the project site. CSE facilitated the change of location to a closer place (about 6 km) by providing the EIA notification copy to the local villagers, writing to MoEF and the district magistrate of the area. A CSE researcher visited the location prior to the public hearing and found that illegal constructions had already started at the site without even having obtained a clearance. The same was reported in *Down To Earth (Asbestos unit disturbs Chainpur's peace – June 16, 2010)*. A CSE researcher was present at the village for the public hearing on June 28, 2010 and apprised people about the impact of the project.
4. A detailed analysis of the rapid industrialisation in Chhattisgarh was carried out. The analysis was published as a cover story in *Down To Earth (Chhattisgarh's industrial jungle – September 1, 2010)*. This analysis was also released in November at a grassroots NGO meeting in Raipur in November 2010. An NGO called Ekta Parishad has used this analysis to present the matter to the Prime Minister by submitting a written plea to his office.
5. Technical assistance was provided by analysing an EIA of a 2,500 MW capacity thermal power plant of the Hindustan

Electricity Generation Company proposed to come up in Maharashtra. The same was carried out based on a request from a lawyer who used the analysis to file a case on behalf of the local people against the company.

6. A detailed analysis was carried out for a cement plant of Nirma Limited in Bhavnagar district of Gujarat. The same was done on a request from the local people in the area. This was published in *Down To Earth (Nirma whitewash – January 28, 2011)*.
7. A joint study on illegal coal mining in Meghalaya in collaboration with an NGO called *Samrakshan Trust* is now complete and reviewed the report.

The Chhattisgarh analysis looked at the 'resource vs development' debate in depth for the proposed industrialisation in the state. The results were startling: for instance, water is being allotted from the river Mahanadi way beyond its dependable flow. Land and minerals will also be greatly exploited resulting in violent protests as already prevalent in some parts of the state. It also recognised the importance of a cumulative impact assessment for this pace and scale of industrialisation.

3.1. Research on sponge iron industry

The Industry and Environment team prepared a report on the state of sponge iron industry in the country. The report includes detailed analyses of four states with sponge iron dominance – Chhattisgarh, Jharkhand, Orissa and West Bengal. The Right to Information (RTI) has been exercised in these states to obtain information from the SPCBs on sponge iron units.

In order to collect information on industry, CSE researchers visited the states of Karnataka, West Bengal and Chhattisgarh and interviewed officials of the respective state pollution control boards, local doctors, villagers, government officials etc., thereby better being able to assess the government's stand and people's opinion on the sponge iron industry.

The report looking at the regulatory status of the sponge iron industry in India

has been published in *Down To Earth* (*Sponge iron's dirty growth*, January 2011). The report was released in Odisha (January 2011) and Kolkata (February 2011). The release was attended by different stakeholder groups – NGOs, affected population, government officials, industry representatives, etc., and covered by the local media.

3.2. Capacity building on Environmental Impact Assessment

A number of training programmes were organised on environmental clearance process during the year. Representatives from industry, NGOs, regulators, etc. attended the trainings.

Meetings/conferences attended by Industry and Environment team members:

- Sujit Kumar Singh was invited as a resource person for a workshop on EIA-mining organised by the Madhya Pradesh Pollution Control Board (MPPCB) in June 2010. The event was attended by 25 participants including regional and sub-regional officers of MPPCB.
- N. Muruganandam, Director, MoEF invited the team to attend and extend their views on National Environment Protection Authority (NEPA) in May

S. No.	Place & date	No. of participants
1	Madhya Pradesh June 8-9, 2010	25
2	Jharkhand June 23-26, 2010	30
3	New Delhi August 9 - 13, 2010	23
4	New Delhi October 25 -29, 2010	27
5	New Delhi 7-10, 2010	22
6	Kerala December 20-22 2010	32
7	New Delhi January 17-21, 2011	24

2010.

- Uma Shankar attended the workshop on action plan for innovations in environmental regulation organised by MoEF and CPCB in Delhi in July 2010.
- A preliminary meeting on the draft Mines and Minerals Development and Regulation (MMDR), 2010 was organised in Rourkela, Odisha in January 2011 to discuss the new provisions with different stakeholders.



Participants of the EIA training programme

- Sujit Kumar Singh was invited for a workshop on mining and industrial projects organised by Synodical Board of Social Services, Church of North India at Jharkhand in June 2010. The workshop had about 30 participants, most of them grassroots activists, from different districts of Jharkhand.
- Sugandh Juneja attended the 'National consultation on the proposed land acquisition (amendment) bill and R&R bill (draft)' organised by the Delhi Forum in New Delhi in September 2010.
- Sujit Kumar Singh attended the working group meeting for the development of the airport sector supplement of Global Reporting Initiative (GRI) in June 2010. The meeting organised in Mexico was attended by various stakeholders across from the globe.
- The team was invited by Confederation of Indian Industry (CII) to attend and brainstorm on corporate social responsibilities, governance practices and sustainable development.
- Nivit Kumar Yadav attended the working group meeting for the construction and real estate sector in July 2010. Held in Amsterdam, the main objective of the meeting was to finalise indicators useful for GRI reporting.
- Sanjeev Kumar Kanchan attended a conference on blast furnace technology in Kolkata organised by Steel Tech in September 2010.
- Uma Shankar attended a climate strategies workshop, 'Perform Achieve and Trade' scheme for steel sector on October 29, 2010 at IIT-Delhi. A critique of the scheme was published in *Down To Earth* (An unsteady first step – December 15, 2010).

Reportage in *Down To Earth*:

Issue	Article
February 28, 2010	Algae with a taste for carbon dioxide: NTPC considering pilot project in Visakhapatnam
April 30, 2010	Resource war INDIA after 2020
May 31, 2010	IIM-Lucknow analyses pollution board: Manpower shortage, lack of coordination are main problems
June 15, 2010	Garo hills spared of uranium exploration: Atomic energy department wanted to drill inside national park
June 15, 2010	Konkan thumbs down nuclear plant: Public hearing for 9,900 MW Jaitapur power project held under protest
June 30, 2010	Asbestos unit disturbs Chainpur's peace: Work started without environmental clearance
June 30, 2010	Green Mission: raise forests, sink CO ₂ : Protect biodiversity too, say experts
July 15, 2010	Centre proposes control over wetlands: Regulations not enough to conserve marshes and lakes, say experts
July 31, 2010	Jindal pays for flouting law: Constructs Chhattisgarh plant without clearance
July 31, 2010	GMR jumps the gun: Begins constructing power plant in Chhattisgarh, illegally
September 15, 2010	Chhattisgarh's industrial jungle
November 15, 2010	POSCO review body divided: Members differ on steel giant's compliance with regulations
November 30, 2010	Near ready for take off: Environment ministry panel clears Navi Mumbai airport; hotel and golf course put on hold
December 14, 2010	Ratnagiri protests clearance to Jaitapur power park: Expert panel gives conditional approval, but environmentalists tout it as a façade
December 31, 2010	POSCO's port halt: South Korean company's steel plant and port may impact coast, says expert panel
January 31, 2011	Sponge iron's dirty growth
February 28, 2011	POSCO gets green signal: Environment ministry goes soft on South Korean steel giant POSCO
February 28, 2011	Nirma Whitewash: Detergent company Nirma gave false information to obtain clearance for its cement plant in coastal Saurashtra.

IV. FOOD SAFETY AND TOXINS

The focus of the campaign during the year was to bring about changes in the regulatory and enforcement framework using laboratory research to generate empirical data and undertake policy advocacy on issues of food safety and toxins

1. STUDY ON ANTIBIOTICS IN HONEY

The Pollution Monitoring Laboratory (PML) team conducted a study on honey. The laboratory results showed high levels of antibiotics in honey, from banned chloramphenicol to broad spectrum ciprofloxacin. The testing was done after news of rejection of Indian samples in the international market began trickling in.

PML tested 12 branded honey samples for six antibiotics, and found antibiotics in 11 samples. The tested samples were bought randomly from various markets in Delhi in July 2009. Of the 12, ten were Indian brands and two were imported brands.

The six antibiotics that PML looked for were oxytetracycline, chloramphenicol, ampicillin, erythromycin, enrofloxacin and ciprofloxacin. Among the domestic brands tested were Dabur Honey of Dabur India Ltd, which holds over 75 per cent of the market share in the branded segment; Himalaya Forest Honey of Himalaya Drug Company, one of India's oldest Ayurveda drug companies; Patanjali Pure Honey of Patanjali Ayurved Ltd, Haridwar; and Baidyanath Wild Flower Honey of Shree Baidyanath Ayurved Bhavan Pvt Ltd, Kolkata, which has about 10 per cent share in the branded honey market.

The two imported brands were Capilano Pure & Natural Honey of Capilano Honey Ltd, the market leader in Australia, exporting honey to over 40 countries; and Nectaflo Natural Blossom Honey of Narimpex AG with its production site in Biel, Switzerland.

Oxytetracycline or OTC was found in 50 per cent of the samples in the range of 27 to 250 microgram per kg (g/kg). This is almost 3 to 25 times higher than the 10 g/kg standard fixed by the Indian government's Export Inspection Council (EIC) for exported

honey. The highest level was detected in Khadi Honey of Khadi Gram Udyog Sewa Samiti, Madhyapura, Bihar.

Chloramphenicol, banned by the EU was found in 25 per cent of the samples, with its levels 9 to 15 times higher than the 0.3 g/kg standard fixed by the EIC. The highest level was detected in Gold Honey of Vardhman Food & Pharmaceuticals.

Ampicillin was found in 67 per cent of the samples at a concentration of 10 to 614 g/kg. The highest level was detected in Nectaflo Natural Blossom Honey of Switzerland. There is no standard for ampicillin in honey in any country because it is not supposed to be used in beekeeping. It is, therefore, an unauthorised or illegal substance in honey. Similarly, enrofloxacin, ciprofloxacin and erythromycin, which do not have any standards either, are being illegally used.

Dabur Honey had 91.3 g/kg of OTC, which is nine times the EIC standard. It also had 26.6 g/kg of ampicillin and 88.7 g/kg of enrofloxacin. Essentially, the sample was found to be non-compliant with the EIC standards and would be rejected if placed for exports to the EU or the US.

Of the six antibiotics tested, the highest number – five – were detected in the Swiss Nectaflo Natural Blossom Honey sample. It had 112 g/kg of OTC, 11 times the EIC standard. Chloramphenicol was found at a level of 3.6 g/kg, which is 12 times over the EIC standard. It also had highest levels of ampicillin and erythromycin. The sample was found to be non-compliant with the EIC as well as EU regulations.

The Capilano Pure & Natural Honey sample was found to contain three antibiotics and was non-compliant with the EIC export standards as well as some standards imposed in Australia itself.

The fact that more than one antibiotic was found in the samples indicates that the prevalent practice is to collect honey from different sources and then blend them before packing and distributing for sale. This brings into question the issue of traceability of honey. But what was shocking was the fact that though the Indian government was still careful in what it was exporting, there were

no regulations for what was being sold to the Indian consumers and this was evident in the samples of Australian and Swiss honey which turned out positive for antibiotics.

A cover story was published in the *Down To Earth* magazine (*What's in your honey* – September 30, 2010) on the findings of the laboratory on antibiotics in honey. A press conference was held to apprise the press and the public about the lab findings. The report was widely covered in the print and electronic media.

The Indian government took cognisance of our study and the Food Safety and

Standards Authority of India (FSSAI) issued an advisory that no honey should contain antibiotics. A committee under the Bureau of Indian Standards (BIS) is studying our report and are holding consultations to draw standards for antibiotics in honey.

The team is tracking the developments in the BIS which has formed a committee and a panel to examine the CSE study. Follow up stories are being written by the team for the *Down To Earth* magazine.

2. STUDY ON PHTHALATES IN TOYS

As a result of the study on toys conducted by CSE in January 2010 that found high levels of toxic phthalates – a chemical used to soften toys – stringent regulations for toys are expected. CSE is tracking the developments in the Department of Industrial Policy and Promotion (DIPP).

3. NETWORKING WITH CIVIL SOCIETY

The Food Safety & Toxins team visited Kasaragod district in Kerala and Dakshin Kanada district in Karnataka to assess the condition of people's health and the environmental impact ten years after aerial spraying of endosulfan in the cashew plantations was stopped.

Aerial spraying in the districts used to take place between 1980 and 2000. The impact is still visible and children born after 2000 are still bearing the brunt of the endosulfan spray in the plantations. The team also travelled to Palakkad and Idukki

districts where health impacts similar to that of Kasaragod have been seen in the last few years. Though there was no aerial spraying in these districts, the extensive use of pesticide is wreaking havoc both on people and the ecology.

Special reports on the impact of endosulfan in Kasaragod, Palakkad, Idukki, Dakshin Kanada and the latest political developments in Kerala on the issue of endosulfan have been reported in five issues of *Down To Earth*. After Kerala, Karnataka became the second state to ban endosulfan. Karnataka has also written to the centre for a nationwide ban. The Indian Council for Medical Research has set up a committee to study the health impact of endosulfan in the state.

CSE is tracking the developments within the Kerala government. CSE is working closely with civil society groups working in Kerala to ensure that the victims of endosulfan in the affected areas get justice.

V. CLIMATE CHANGE CAMPAIGN

In keeping with the national and global focus on the issue of climate change, CSE undertook programmes focussing on climate change. CSE actively engaged with policymakers and negotiators to contribute to national policymaking and to advocate for negotiations rooted in principles of equity and justice at international meetings.

We engaged with the national and South Asian media in a big way through briefing workshops and fellowships to catalyse interest and increase reportage on the issue in the region and also to incorporate southern perspectives in the reportage. As in 2009, we sponsored the participation of journalists from the national media in the Cancun climate change summit in 2010 and this resulted in extensive and high quality reportage of the summit.

CSE also engaged with scientists working on climate change issues to facilitate a dialogue between the scientific community and policymakers and also to catalyse and speed up the process of setting frameworks for better research and data collection.



1. DOCUMENTATION AND DISSEMINATION

1.1. Climate change sub-portal

The climate sub-portal ranked amongst the top 10 'most viewed' sections of the India Environment Portal (IEP) according to Google Analytics. During the year it provided latest news, reports, analysis, articles, statistics, events, etc with focus on developments on climate issues in India and other South Asian countries. The database on the latest reports and studies published by leading national and international climate experts and institutions are also updated during the period.

The IEP is visited by more than 6000 surfers everyday. The portal has been recognised nationally and internationally and the portal team was invited by Institute for Development Studies, Brighton, Sussex University for a presentation at its meeting of the I-K-Mediary (a global network of organisations that play a knowledge and information intermediary role in development) members. This was attended by NGOs from Switzerland, Kenya, South Africa, Belize, Egypt, Tanzania, Philippines, France, Malawi, Bangladesh, Cambodia and UK. Invitations were also received by IEP as a 'supporting media partner' for national

and international events.

The portal ranks first and is the top-most site on Google for searches on information tagged round 'India plus environment'. The IEP content is being followed and shared through popular social networking/microblogging sites such as Twitter and Facebook. Visitors too have realised the potential of the IEP and have started contributing studies, reports and articles.

1.2. Climate Change Conference in Bonn, June 2010

CSE staff participated at the United Nations Framework Convention on Climate Change (UNFCCC) held in Bonn from May 31-June 11, 2010. At the end of the conference, the officials of the UNFCCC claimed that the two weeks of talks made important progress towards concluding what was left incomplete at the UN Climate Change Conference in Copenhagen (CoP 15) in 2009. It was decided that the outcome would be presented at the UN Climate Change Conference in Cancún (CoP 16) summit in November-December 2010.

CSE disseminated the development and different phases of the conference live on Equity Watch section of the website as the talks progressed in Bonn (see



<http://www.cseindia.org/equitywatch.asp>).

1.3. Climate Change Conference held in Cancun, Mexico

The 16th Conference of Parties of the UNFCCC had kicked off in Cancun, Mexico, in the last week of November. CSE staff travelled to Cancun with some senior Indian journalists to witness and cover the conference. Besides contributing to several blogs from there, CSE also coordinated and facilitated the generation of articles, reports, and commentaries every day from Cancun.

In 2009, CSE had re-started its initiative of supporting some Indian journalists for a trip to the venue of the CoP. The aim was, on one hand, to supplement CSE's observations on the negotiating process with impartial, unbiased, first-hand reportage from writers who are widely read or heard through their respective newspapers and television stations. On the other hand, it was also an exercise to provide more space to climate change reporting, and more opportunity to climate change reporters.

We planned our Cancun coverage in a similar manner. Before the CSE team left for Cancun, we had put in place a framework for dissemination of information on and from Cancun – the CSE websites and the IEP

devoted prominent place to news, views and commentaries from the CoP. Daily news feeds, specific blogs on negotiations, general blogs on the atmosphere of the talks, links to news reports emerging from the talks, photo features... all these were included as parts of the Cancun information package which came up on the websites. The senior journalists who came along to cover the meet lived up to the expectations by continuously providing a stream of reportage on the conference and its various sidelights.

The reportage from Cancun was decidedly well informed. In fact, reports from the journalists who were supported by CSE turned out some of the most in-depth coverage of the negotiations, and were also notable in correctly reporting and analysing the pronouncements by the Indian environment minister Jairam Ramesh and all that followed.

The following journalists were part of the CSE media delegation to Cancun:

- Jayanta Basu – *The Telegraph*, Kolkata
- Nitin Sethi – *The Times of India*, New Delhi
- Chetan Chauhan – *Hindustan Times*, New Delhi
- Dinesh Sharma – *Mail Today*, New Delhi

- Siddharth Pandey – NDTV, New Delhi
- Sudhir Mishra – *Dainik Bhaskar*, Rajasthan
- Raju Nayak – *Lokmat*, Goa
- Urmi Goswami – *The Economic Times*, New Delhi
- Bahar Dutt – Times Now, New Delhi

1.4. *Equity Watch*, daily news feeds, and specific blogs on negotiations on climate change from Cancun

CSE produced press releases, blogs, photo features and provided editorial inputs for all the material generated from Cancun. Daily news feeds, blogs by other experts, analytical pieces on major developments etc. were some of the key activities undertaken at Cancun. CSE also facilitated interviews with subject experts and interacted with a wide number of other journalists visiting the conference. Most of the output can be seen on CSE's website (see www.cseindia.org; www.cseindia.org/equitywatch.asp).

Some of the blogs are:

- *The Cancun Camouflage*
- *The Last Hurrah, soaked in 'spirit of compromise'*
- *The climate endgame in Cancun and*

how I suspect it will play out in the next 48-hours

- *India stuns all at Cancun by opening up to binding emission commitments*
- *Indian ICA proposal finds partial support in new drafts on mitigation actions*
- *Lectures given by CSE director at various forums*
- *Tech-transfer finds consensus on all but IPR issue*
- *A week of non-results*
- *India rejigs MRV, proposes middle path on 'transparency'*
- *New European Union report on funding commitments fails to meet developing countries' expectations*
- *Japan says 'no' to Kyoto Protocol second commitment period*

1.5. Beginners guide and the climate change package

CSE prepared a detailed background information on the past negotiations related to the Conference of Parties on climate change negotiations on the website. This acts as a ready-reckoner to understand the developments that have taken place around



the various international debates on climate change.

1.6. Dissemination through *Down To Earth*
CSE published several reports and research articles during the year that aimed to promote public awareness through *Down To Earth* magazine, website and through the climate sub-portal on the IEP on issues of sustainable development including climate change. A brief account of the published reports is as given below:

The polluters say they will not pay – January 15, 2010: This story analysed the end result of the climate change summit held in Copenhagen in December 2009. After two years of intense negotiations and heightened concerns related to the growing impacts of climate change, the world was supposed to be ready to sign a deal to save the planet, but unfortunately, that never happened.

Copenhagen according to USA – January 15, 2010: This story recorded an account of how climate change negotiations unfolded, broke down, and were saved in Copenhagen.

India desertified – January 15, 2010: This story records the spreading desertification large swathes of India – in the Eastern Ghats, the Western Ghats and Western Himalayas. The Indian Space Research Organisation has developed a 'degradation status map', the first of its kind in India that hints at the extent of degradation.

Biofuel dreams for wastelands – January 31, 2010: This article speaks of the National Biofuel Policy developed by the ministry of new and renewable energy (MNRE) which aims to reduce India's dependence on fossil fuels. The policy has set a 2017 deadline to achieve blending 20 per cent home grown biofuel with petrol and diesel, 70 per cent of which is imported at present.

Sedimental attraction – January 31, 2010: This story published in the science and technology section tells us that a drowning delta can be rescued by changing the nature of its sediments, according to a new theory. Deltas around the world are either eroding or have stopped progressing. Climate change, sea level rise, flood management measures take the blame.



The US and us – February 15, 2010: This editorial analyses that the US as a country has very little political will to cut greenhouse gas emissions. Policymakers and media professionals talk about the climate change crisis. But any opinion on cutting emissions, based on historical or even current responsibility, is just dismissed.

eDriven – February 15, 2010: This cover story is about e-vehicles. Electric and hybrid vehicles are gaining a foothold because they are cheap and clean. Major automakers have finally looked beyond conventional technologies and are going the e-way. E-vehicles emit nothing on road. But emissions from power generation cannot be left unaccounted. Renewable energy can make these vehicles near zero emitters.

Himalayas on the move – February 15, 2010: This story tells us that the Indian continental plate is heavy and steadily sinking under Eurasia. Moving at a speed of a little above 18 cm per year, this plate rammed into the Eurasian trench 50 million years ago.

Basic distinct – February 28, 2010: This report shares with us that there is confusion still about the future of the Copenhagen Accord, the deal reached in Copenhagen in December 2009. While industrialised countries want the accord to be in the basis of future negotiations, developing countries, including India and China, are distancing themselves from the accord.

A dangerous balance – February 28, 2010: The contribution of peatlands to fluctuation in atmospheric content of carbon

and methane has long been a matter of debate. Human activity is degrading the peatlands. They hold billions of tonnes of methane gas. The hold is gripping.

High and dry – February 28, 2010: Climate scientists have tagged the Himalayan glaciers to disappear by the end of this century. The Tibetan glaciers are in a bigger hurry to disappear, apparently. Soot or black carbon that is increasing the sunlight absorption capacity of the snow is the reason for this phenomenon.

Green buildings: how to redesign – April 1-15, 2010: This editorial deals with green buildings. Building green is about optimising on the local ecology, using local material as far as possible and most importantly, building to cut the power, water and material requirements.

Resource war, India after 2020 – April 16-30, 2010: This cover story reveals that if the developing world today is the locus of climate change mitigation, including reduction in emissions, then there surely must exist a picture of how Indian industry performs. Analysis of the six most energy and emissions intensive sectors of Indian industry find that after 2020, efficiency will plateau. Growth also poses formidable challenges to sourcing minerals, water and land.

All is not well: climate negotiations in a new avatar – May 5, 2010: This editorial shares the concern over the climate change negotiations taking place in different stages. After the Copenhagen talks, the negotiators met in Bonn in April on the possible agreement that could be signed at the meet scheduled in December 2010 in Mexico.

No cheap change is possible – May 31, 2010: It is another editorial on the need of transition to low carbon economy. CSE's report, *Challenge of the New Balance* released in May 2010 finds answers which should force careful re-thinking, not just in India but globally, on how emissions will be cut in real time in the real world.

Delhi's wake up call – June 15, 2010: The story talks of the plans of the Central Pollution Control Board and the Delhi Pollution Committee to set up an additional

six real time air quality monitoring stations, including two mobile stations, in areas with high vehicular traffic during the Commonwealth Games. It was also the first time in the country that a major initiative to predict air quality two days in advance would be set in place during the Games.

What monsoon means – July 31, 2010: This editorial is an analysis of the monsoon in India and advocates relearning the art of living with water that falls every year, in effect projects the efficacy of rainwater harvesting.

US bank uses carbon smokescreen – July 31, 2010: Reliance Power's 4000 MW ultra mega power project in Madhya Pradesh came close to becoming the first coal-fired power plant in India to be denied financing by a developed country on the pretext of reducing carbon emissions.

In ocean's way – July 16-31, 2010: People watch helplessly as the sea nibbles the Konkan coast, swallowing groves and beaches, and creeks. The sea level along Maharashtra coast has gone up by 5-6 cm in the past 20 years.

Warning from Leh – September 15, 2010: A cloudburst over the arid Himalayan town of Leh in Ladakh on August 6 was unusual, say scientists, probably indicative of the effects of global warming.

Water in a sieve – October 15, 2010: Regulating access to genetic resources and equitable sharing of commercial benefits of biodiversity are among the most contentious issues under the Convention on Biological Diversity (CBD). A shift in focus from the ecological value of biodiversity to commercial is a snag in the CBD.

Growth might dry up – October 31, 2010: The cold wave in 2009 that led to the shutting down of Eurorail and flight delays in Europe and the US indicates an inverse relationship between technological advancement and vulnerability of natural elements.

The endgame at Cancun – December 16-31, 2010: This editorial analyses the probable outcome of the negotiations at the 16th Conference of Parties to the climate change convention in Cancun.

VI. SOUTH ASIA PROGRAMME

1. WORK AT THE SOUTH ASIAN REGION

CSE's capacity building trainings, policy workshops, fellowships and media briefings have attracted 427 persons from south Asian countries across all programme areas. Formal partnership agreements were signed with governments, NGOs and universities in Sri Lanka, Nepal and Sri Lanka, in addition to existing ones in Bangladesh. In many cases, these led to notable progress in shaping sustainable environmental management policies and practices and have catalysed the impacts of our regional work. We found that environmental challenges in one country have regional resonance: from common problems of poor environmental governance and weak regulatory capacity to shared concerns over water, waste, climate change, pollution management and urban air quality.

Over the year, various CSE programme teams traveled extensively to hold meetings and strengthen collaborative work with groups and institutions in Bangladesh, Nepal and Sri Lanka. CSE's country media briefings in Bangladesh and Sri Lanka and experience sharing workshops on air pollution and mobility were well received with wide participation from government and civil society groups and were extensively covered in local news media. Likewise, our efforts to reach out to regional media got a major fillip with the enthusiastic participation of South Asian working journalists in various media briefing workshops and fellowships.

The Industry and Environment team: The team worked with the Department of Environment to strengthen environment clearance mechanisms, including compliance, enforcement and monitoring by drafting the country's Environmental Impact Assessment (EIA) rules and sector-specific guidelines across key economic sectors, including coal, textiles, cement, and pharmaceuticals. The EIA reports were followed by five training programmes to familiarize key stakeholders around these new rules and guidelines.

These trainings proved popular with regulators, whose abilities to assess the environmental project were strengthened; with consultants who prepare EIA reports; and with industry representatives, to help them implement reliable environmental mitigation plans. About 140 stakeholders from the region attended these trainings in Bangladesh and in India. It is evident from participants' feedback that there is an overwhelming need for additional trainings on EIA in other sectors in Bangladesh and elsewhere in the region. Our work with the Bangladesh government demonstrates to other South Asian governments our ability to influence sound environmental decision-making.

Urban Air Quality team: The team initiated an experience-sharing dialogue to facilitate inter-regional exchange of ideas and key strategies to minimize the environmental and public health impacts of motorisation in the South Asia.

The first meeting in January 2011 with officials of the Department of Environment, Bangladesh focused on the shared concerns over improving the quality and performance of the natural gas vehicle programme in Dhaka, using Delhi's experiences in implementing its CNG programme. The intense discussions focused on key policy issues to help Dhaka realise the full potential of such a programme. The forum proposed initiatives to strengthen gas exploration and imports to secure supply, gas utilisation measures to rationalise priority areas, together with gas pricing, supply infrastructure, emissions and safety



Experience sharing dialogue on "Improving quality and performance of natural gas vehicle programme in South Asia" held in Dhaka, Bangladesh

inspection of natural gas vehicles.

The dialogue brought together a wide spectrum of stakeholders. Officials and representatives from the Department of Environment, Atomic Energy Centre, Bangladesh Road Transport Authority, Bangladesh Petroleum Corporation, Rupantarita Prakritik Gas Company Limited (RPGCL), civil society groups, and Bangladesh University of Engineering and Technology (BUET), among others participated in the dialogue. A media workshop organized the next day on urban air quality and mobility and generated much discussion and was covered extensively in local media. A briefing paper on 'Clean Air and Mobility' has been prepared for the second 'City Dialogue on Urban Air Quality and Mobility Management' that will be held in Colombo, Sri Lanka in April 2011.

Urban Water team: The team work with WaterAid, Bangladesh (WAB), to provide technical specifications for five rainwater harvesting (RWH) model project sites, including the PWD headquarters, Village Education Resource Centre, the office of Education Engineering Department, Bangladesh University of Engineering and Technology, and the Institute of Engineers of Bangladesh. The team visited Chittagong to

identify two potential model project sites for decentralized wastewater treatment (DWWT), and two additional sites in Dhaka (Phulbaria).

A series of training workshops on RWH and DWWT were conducted in Bangladesh. About 62 participants selected by WAB, including municipal engineers, planners, architects and consultants attended the trainings. A large meeting was subsequently convened by WAB in which the minister of water and the minister of urban development participated. The ministers pledged to make RWH mandatory in Dhaka's building bylaws. Similarly, using CSE data and research outputs, WAB also conducted a workshop on sludge management and wastewater treatment in Khulna city. City authorities were in turn convinced to construct pilot projects on DWWT in Khulna.

Media Resource Centre team: In 2010 the Media Unit reached out to close to 110 working journalists, including those who attended our briefing workshops in India and outside and those awarded CSE's prestigious Media Fellowships.

The 'South Asian Media Briefing on Climate Change for Journalists in South Asia' was a major event that drew in 102 participants, including senior editors and



Participants at a presentation at the training workshop on Rainwater harvesting held in Dhaka in October 2010



South Asia Media Briefing

journalists from leading newspapers, magazines and TV, of which 26 journalists were from Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. Regional journalists had occasion to closely interact with senior officials from the Ministry of Environment and Forests, eminent scientists from climate change research institutes; members of the Prime Minister's council on climate change; academicians; key climate change experts and NGOs, among others. The event was organized to allow journalists to better understand and influence national responses of governments in the region. Journalists were briefed on the science, policies and politics of climate change, including national and regional responses, international negotiations and adaptation and mitigation strategies.

Similarly, CSE's 'South Asian Media Fellowship on Coastal Concerns' invited regional journalists to travel, investigate and report on the pressures, conflicts, impacts and actions being played out along the region's 12000-km-long coastline. Of the 50 applications received from working

journalists in Bangladesh, Maldives, Pakistan and Sri Lanka, an eminent jury comprising senior south Asian media professionals awarded nine journalists this prestigious fellowship. The coverage this generated in the regional press was impressive. The dozens of published articles ranged from exploring the impacts on coasts from climate change and tourism, livelihood challenges of coping with natural disasters to displacement of coastal communities and biodiversity impacts on degrading coastal eco systems.

CSE's Media Fellows deepen our relationships with regional media. Five Fellows subsequently participated in a two-day 'Regional Media Briefing Workshop on Coasts' in Goa in August. The workshop included leading activists, eminent environmentalists including Dr. MS Swaminathan who chaired the drafting committee of an important CRZ report, along with Aleixo Sequeira, Minister of Environment and Power, Goa, and Digambar Kamat, Goa's chief minister; in addition to scientists from leading research institutions in India



First Country Media Briefing on “challenge of urban air quality and mobility management” in Dhaka, Bangladesh

CSE launched a series of Country Media Briefings this year to familiarize and build capacities of regional news media to report on critical environmental challenges.

Seventy working journalists from print, electronic and digital news media attended the first country media briefing on ‘Challenge of Urban Air Quality and Mobility Management’ in Dhaka in January. The event was well covered in the national news media.

Anil Agarwal Green College: During the year, 427 south Asians participated in training programmes, fellowships or policy dialogues conducted by CSE in India and outside, of which close to 100 South Asians were awarded the South Asia Fellowship to participate in CSE trainings or events in India (see appendix 1). The South Asia Fellowships subsidize the participation of key stakeholders in the region in each of our training programmes in India.

South Asia Fellows from diverse backgrounds, including regulators, bureaucrats, NGO representatives,

journalists and policy makers, attended workshops, trainings and policy briefings on air quality and mobility, EIA, information management, rainwater harvesting, decentralized wastewater management, and CSE’s certificate course for students and young professionals. The Fellowships serve as a platform to build long-term relationships at the institutional level and have helped take forward our collaborative work in Bangladesh, Sri Lanka and Nepal.

CSE’s interdisciplinary month-long Certificate courses proved popular across the region. About 12 youth, including university students and young development professionals from Nepal and Sri Lanka attended the course in August and December in New Delhi. Feedback from the course showed the course offered unforgettable experiences, perspectives and opportunities to participants. Course alumni remain in touch with CSE through Facebook and Google groups.

Environment dissemination: The South Asia sub-portal was launched in beta mode with

start-up information services, including news bulletins, research reports, directories, announcements, etc. Now nested in the India Environment Portal, the sub portal comprises 7,500 research reports, news features, and government reports, among others. In 2011 efforts will be made to build a community of users around the content through various information services, such as news bulletins, blogs, directory of leading environmental people and institutions, publicizing events, and conference announcements. We plan to deploy social media to reach out to a broader audience in the region.

The portal team conducted two targeted training programmes on digital information management for regional information managers to build their capacities to actively contribute information and research on the portal. These trainings attracted 28 participants from Nepal, Sri Lanka, Bangladesh and Maldives. These trainings helped build capacities of potential portal collaborators for wider dissemination of environmental research and information. Portal team members participated in a meeting organised by D:Net in Bangladesh.

Environmental reportage: The cover story on a community-led consumer movement that demanded the right to energy in Nepal

found resonance with the region's energy crisis. Likewise, another cover story on the *Hilsa* tracked the declining stocks of this popular fish to trans-boundary water conflicts between India and Bangladesh. There were stories that exemplified models worth emulating in India and the region, such as a special report that traced the rapid spread of decentralised solar home systems in Bangladesh. DTE also carried in-depth interviews of eminent regional environmentalists such as Syeda Rizwana Hasan, a leading environmental lawyer in Bangladesh, who spoke on the approaches and challenges of environmental advocacy.

Other published stories include a special report on the alarming rate of shrinking wetlands in Dhaka due to rapid, unplanned urbanization, and an in-depth news tracing the context in which the country has recently declared a state of 'energy emergency'. In April, another special report will be published on the high fertilizer use in Sri Lanka, in the context of high inflation and food insecurity in the country. In addition, several articles, centre spreads and photo-features were published on CSE and DTE websites and in Gobar Times. In 2011, reportage will be followed by meetings with wider participation to debate the substantive issues raised in the coverage.

II. AWARENESS CREATION

I. COMMUNICATION ON ENVIRONMENTAL SUSTAINABILITY

1. SCIENCE AND ENVIRONMENTAL REPORTAGE

1.1. Dissemination through *Down To Earth*

CSE continued disseminating information on issues relating to science, environment, health and sustainable development through the year in the environment and science fortnightly, *Down To Earth*.

Carriage of convenience, a cover story on the Delhi Metro published in *Down To Earth* in April 15, 2010 analyses that though the metro railway decongests the city's traffic, the lack of integrated planning has reduced the benefits of this modern and less polluting mass transport system.

Resource war India after 2020, published in the magazine on April 30, 2010 is the outcome of a study to see where large energy consuming industrial sectors stand with respect to energy efficiencies against global best practices and what it would cost the country to make them more efficient. The study finds that Indian industries are already near the global best practices benchmark and after 2020 there would be little scope for improving efficiencies unless large financial and technology inputs are provided.

When villages plug in, published in the same magazine on May 15, 2010 talks about how people of villages in Nepal consider electricity as their national good and is demanding their right to it. This consumer movement is fast reshaping the ways in which electricity is distributed and managed across rural Nepal. *IT's underbelly*, published on 31 May 2010 reveals that growing number of electronic waste in India is becoming a great challenge. India is a lead importer of all kinds of waste including hazardous and most of them recycled or scrapped by the unorganised sector using the most rudimentary methods that pollute.

New gold rush – 15 June 2010: This article informs us about India's mission to drastically ramp up its solar power

production to 22,000 MW by 2022. All stakeholders see the Jawaharlal Nehru National Solar Mission as their chance to strike gold, but this can happen only by promoting research various components including new technology and competition. *High cost of fodder led milk price hike* published June 30, 2010 tells us that the common household is compelled to give up on its easy sources of protein. It is found that rise in fodder prices, not rise in demand, is pushing up the cost of milk.

Beyond Bhopal: Incentive for unsafe industries – 15 July, 2010: This article is a revisit to the worst gas tragedy of Bhopal in the context of the judgement by a Bhopal court and uncover why liability has not yet been fixed, where the courts and authorities went wrong and what it will take to remove the toxic waste at the site. The judgement has however galvanised the media and the government into action. A group of ministers has recommended relief measures, clean-up of the factory site and asked the government to go after Bhopal's prime culprit, Warren Anderson.

Andhra's groundwater crisis & a trail of suicides – 31 July, 2010: This article narrates the story of farmers in Andhra Pradesh who take loans to drill borewells and fail to find ground water. Farmers repay the loans in two to five crop seasons, but when groundwater fails, it makes their life difficult and is forced to take extreme steps such as suicide. Choking access to drugs is about how the increasing cost of essential medicines becomes a major barrier to health care in India. The story assesses the impact of some recent initiatives to promote generic drugs in the public health system.

Unlock the grid – 31 August 2010: This story is an attempt to find out where India stands when cities all over the world are checking car population to free their road space. Chhattisgarh's industrial jungle points out that forests, agricultural land and tribal population of the State will suffer due to the growing industrialisation as Chhattisgarh is

set to become the largest producer of thermal power, cement and sponge iron.

What's in your honey – 30 September, 2010: This is a report based on the study on the findings of the Pollution Monitoring Laboratory of CSE on antibiotics in honey. It says that high levels of antibiotics were found in major brands of honey sold in the market. Unravelling the food mess analyses the different facets of managing the food economy and find that the public distribution system could become highly efficient if innovation and technology are harnessed to political will, as in the case of Chhattisgarh and Tamil Nadu. These states offer valuable lessons in resolving the problems of procurement, storage and allocation of basic food items.

A fish moves in the west – 31 October 2010: This story reports on the hilsa's shifting home base. *How government is subverting forests right act* published November 15, 2010 looks into the Forests Right Act and its implementation by travelling through six states of India – Chhattisgarh, Jharkhand, Madhya Pradesh, Andhra Pradesh, Orissa and Maharashtra and unravelled the conspiracy to deprive forest people of their rights.

Profit from the poor – 30 November, 2010: This article finds out the growth trajectory of the microfinance institutions in India, and how a number of farmers fell victims to its high interest rates in Andhra Pradesh. These institutions claim they followed the fabled Grameen Bank model of Bangladesh and in reality; they went against its principles.

The goat gamble – 15 December 2010: This informs us that forced by declining returns from farming in ecologically fragile areas, small farmers have been taking to goat rearing and ensure income to five million households in India. With shrinking land availability and over grazed forests, the goats might turn from an asset to a liability. *Saving rice* – 31 December 2010: This is an analysis of the debate as India prepares to launch the second Green Revolution in the eastern states. Policymakers and scientists have drawn up ambitious plans to increase the productivity of this cereal which feeds

two-thirds of Indians and the focus is on developing hybrid rice.

Cancun clinches deal for polluters published 15 January 2011 is a report on the outcome of climate change Summit held in Cancun, Mexico. The new deal erases the difference between developed and developing nations. Developed countries no more have to commit legally to cut emissions and developing countries will now have to take on binding commitments as sharing cleaning up without any financial or technological support from the developed countries. *Sponge iron's dirty growth* published 31 January, 2011 talks about the status of the sponge iron industry and its challenges as this industrial sector is poorly regulated and underscores the need for an action plan to reduce their environmental impact.

Kind to cash published 15 February, 2011 finds out how cash transfer plans of the government works and how ready is India for the shift in the delivery of welfare schemes. *Two technologies that shape our future* published 28 February 2011 is about the evolution of battery and meters, two widely used technologies and analyses what future holds for them.

Battle for the internet published 15 March 2010 reminds us how internet has become the public square and the marketplace of our world and also increasingly becoming a contested terrain. The story also looks at events in the US following the WikiLeaks exposé of its diplomatic cables, and in the hot spots of political turmoil across the world to understand the significance of the Internet in today's interconnected world and the threats it faces and also explains the technology used to block access to the Net. *Paan loses flavour*, 31 March 2011 reports that the *paan*, once referred as green gold and considered ideal cash crop for small farmers has lost its demand with the contagious spread of chewing tobacco, especially *gutkha*.

1.2. Impacts of *Down To Earth* reportage

As climate change was the most discussed issue last year, there were several reports covering the impact of climate change, in

addition to reports on climate change negotiations. The Japanese Nuclear melt down, genetically modified crops, disposal of e-waste, food safety, forest right and right over forest products were other topical issues that were covered.

Down To Earth collaborated with the Food Safety & Toxins team and the Pollution Monitoring Laboratory of CSE to bring out a report on antibiotics in honey. The report was widely covered by the media. The Food Safety and Standards Authority of India issued an advisory stating that antibiotics in honey were banned. Major honey brands including Dabur and Himalaya recalled their honey from supermarket shelves after the expose.

The magazine also carried a major story on e-waste which received wide publicity. The story delved into how India was slowly becoming a dump yard for used electronic waste imported from developed countries. The story also highlighted the apathy of the government to include the unorganised sector in policy formulation on e-waste disposal. The story also caught the country's biggest e-waste recycler Attero selling off old computers and peripherals instead of recycling them. After the story came out the license of Attero was not renewed by the Central Pollution Control Board and an inquiry was initiated into their conduct. Many of the recommendations given in the article are now a part of the draft rules on handling and disposal of e-waste.

In March, the Ministry of environment and forests withdrew its guidelines for creating inviolate space for wildlife in the national parks and sanctuaries. *Down To Earth* had reported (*Misguided rules* – March 15, 2011) that the guidelines issued in February did not follow the criteria and procedure for declaring Critical Wildlife Habitats provided in the Forest Rights Act (FRA) of 2006 and threatened the interests of forest dwellers.

The UP government dropped its plan to set up a waste disposal plant at the Dashehri village near Lucknow, the birth place of the Dashehri mango. The project aimed to dispose off and recycle 1,300 tonnes of Lucknow's municipal waste daily near the

Mal-Malihabad mango belt which had the oldest Dashehri mango tree. *Down To Earth* reported how the waste plant can harm the mango orchards and how the farmers were protesting against the plant (*Mango Resistance* – August 15, 2010).

Our cover story (*How government is subverting forest rights act* – November 15, 2010) on the Forest Rights Act (FRA) and the settlement of community rights over minor forest produce (MFP) has triggered a wide debate. It was a very comprehensive analysis of how government was subverting the rights to MFP. Earlier legislations were unclear about the definition of MFP: the FRA actually is the first act that clearly defines what constitutes MFP. The cover story found that despite this clarity, the debate over MFP continued to rage because of opposition from various quarters such as the foresters community.

A round-table based on the reportage was attended by senior government officials from the ministries of panchayati raj, environment and forest, home affairs, besides members of the National Advisory Council (NAC) and civil society. The round-table was used by CSE to push for a MoEF clarification to the state governments on accepting the definition of bamboo as a MFP. Finally the clarification, rather a historic one, was issued by the MoEF.

After the story on stevia (a zero calorie natural sweetener), *No to natural sweetener* in the October 15, 2010 issue, the Food Safety and Standards Authority of India sent a fax saying that they are considering to recognise stevia as a sugar substitute. The story was also discussed at a recent FICCI meet on stevia.

Down To Earth along with the Climate Change team of CSE was present at Cancun to cover negotiations on climate change called COP 16. Even as the world celebrated the outcome at Cancun called the 'Cancun Agreement', *Down To Earth* was perhaps the first publication to point out the deficiencies of the agreement through a cover story. The concerns pointed out by this cover story are now slowly emanating at the just concluded climate change meeting in Bangkok.

Lalitpur Baby formula, a story published

in 15 February, 2011, on declining breastfeeding among women and market politics of infant formula makers also got wide attention. It again started the discussion on the importance of breastfeeding. Baby Food Network of India (BPNI), Gorakhpur Medical College and UNICEF are talking to other state governments to upscale the Lalitpur project in other parts of the country.

Another story, *Victims of vaccination*, 28 February, 2011 which talked about the unethical clinical trials, and the lack of standards of preservatives and adjuvants in vaccines got wide publicity in Madhya Pradesh. Recently a case was also registered in the Madhya Pradesh Lokayukta against the companies and doctors conducting unethical clinical trials in the state. *Victims of vaccination* was one of the few stories which were behind the change.

After an interview on the traditional varieties of rice with Natbar Sarangi, an Odisha farmer, numerous queries were received from different organisations wanting to help farmers switch to traditional rice varieties. All have sought rice from Natbar Sarangi.

Following two special reports and a column on the abdication of their role by

scientists in the Inter-Academy report on GM crops there has been a concerted attempt (at least half a dozen significant seminars) to push the dominant view of the GM lobby. At the same time, these scientists have shown a keenness to reach out to *Down To Earth*. DuPont also invited a senior editor of *Down To Earth* as a discussant at their BBC panel on food security in India.

Thanks to our consistent focus on agriculture and related issues in the past year, farmers' organisations, bureaucrats and seed companies have shown a new willingness to engage with *Down To Earth*.

An article on Rajasthan government collaborating with private companies on agriculture research, led to a public interest litigation in the Rajasthan High Court against the state government. The Government in response stated that it would form a committee to look into the matter. The authors of the article have been requested to be part of the committee.

Another agriculture story on Rajasthan about distribution of poor quality seeds led to the parliamentary committee on agriculture take up the matter. A fall out of this story has been that now all seed procurement by Rajasthan government would be done through tender.

III. KNOWLEDGE PORTAL

1. STATUS OF PORTAL ACTIVITIES

The India Environment Portal or IEP at <http://www.indiaenvironmentportal.org.in/> continues to rank first and is the top-most site on Google when searching for information on 'India and the environment'. The IEP content is being followed and shared through popular social networking/microblogging sites like Twitter and Facebook. For the period April 2010 to March 2011, the total number of visits to the portal was around 15 lakh and the page views were 30 lakh. Some of the leading national and international libraries of educational institutions such as Delhi University, Guru Gobind Singh Indraprastha University, New Delhi, Lahti University of Applied Sciences, University of Minnesota, USA, the USEPA National Library Network, Periyar University and National Institute of Plant Genome Research, New Delhi have listed the portal as one of the 'important electronic free resources on environment'.

The blogs page on the IEP has contributed to building of a virtual community of leading experts on environment and development. Several eminent environmentalists and experts on environmental issues are members of this community and have agreed to post their blogs and share their views/ perspectives with the masses through IEP. The portal has been recognised globally amongst one of the largest installations of the powerful open source Apache Solr search for free text searching and tag-based (environmental subjects, geographical subjects, author and source as well) filtering of information. Visitors and organisations have been contributing their reports/studies regularly for the portal for wider outreach.

The team has been successful in identifying and building regional partners to expand the portal as a "people's portal" as conceptualised. Some of the regular partners (individuals and organisations) who have contributed reports/studies regularly are:

- Parisar (Pune)
- Equations (Bangalore)
- KRAPAVIS (Alwar)
- Dr Pramod Patil, GIB Foundation (Pune) committed to conservation of Great Indian Bustard. The reports contributed by him for the portal have got very good responses, the recommendations made in his reports are now being followed and he has been getting good results.

People have started using the IEP to report on their regional environmental problems. They have also been using this to comment and share their concerns on government's reports and policies. All are posted on the message board at <http://indiaenvironmentportal.org.in/section/iepcontactus>. Educational institutions also have realised the potential of the portal as source for environmental information and several requests have been received for working in collaboration with the portal.

CSE was invited to participate as I-K-Mediary Network member in the networking meeting of the international members organised by Institute of Development Studies, Sussex University & D.Net at Savar, Bangladesh. This was attended by civil society organisations from across the world.

2. PORTAL USAGE

During the year, the IEP was upgraded to Drupal-6 and several changes were effected on the server (upgradation, server location, etc.). For example, the portal server was changed three times by Srijan, the company hired by us for server hosting and maintenance. The portal server is located in Delhi since December 2010 and a further drop-down in visits has been noticed subsequently. It was also seen that traffic from other countries – US and UK, has reduced by almost 40 per cent. This is being looked into. Keeping in view of the copyright rules and regulations, all 'news content', features and even reports and documents

were linked to the respective publisher's websites. Hence, the traffic was being redirected by the portal to the original publishers directly. Since *Down To Earth* website and the archive have now been revamped successfully, the references to *Down To Earth* content are directed towards the fortnightly's website.

3. REGULAR UPDATION OF INFORMATION AND DOCUMENTATION

Regular online documentation is done to sustain the information and an effort was also made to bring together information from government institutions, academic institutions, civil society, etc. Approximately, 250-300 records have been regularly uploaded on the IEP and it has over 400,000 records till date. This includes news clippings, journal articles, reports & documents and a selection of important book and the archives of *Down To Earth*. Each of these records has been indexed using the CSE Thesaurus, a unique relational database that consists of over 8000 tags. This has made possible the retrieval and browsing on key environmental and developmental issues, people, organisations and geographical locations through the portal.

4. DAILY NEWS BULLETIN, GREEN FILES AND AUDIO-VISUALS

National and international visitors to the portal found the RSS feeds for 'Daily News Bulletin' very useful. The visitors to the IEP spent maximum time on the blogs page. The News Clippings Team under the portal continued to produce three monthly green files – the India Green File, the South Asia Green File and the Corporate Environment Inc. and it continues to reach out to more than 1200 subscribers across the country. These are referred to by researchers as a "packaged reference tool" for an immediate glance on the state of India's environment. The utility of these files is further amplified as these have been subscribed to by many libraries and institutions. CSE's environment photo-library on the web now has 3000 selected photographs on environment and

development. About 246 visitors from India and abroad used the audio visual and reference resources for reference and research during the year. The audio-visual unit was approached by several national and international media organisations for photographs and films.

5. DEVELOPING IN-DEPTH PORTALS

The IEP has 8 in-depth sections – Mining, Wildlife, Transport and Food Safety, Bhopal Gas Disaster, Industry and EIAs, Poverty & Environment & Water Pollution.

6. CAPACITY BUILDING ACTIVITIES

A total of 22 information and web-professionals benefited from the training programme. Besides latest tools/trends in information management, the training also focused on strategic communications using a variety of social networking tools. Many participants felt that this was extremely useful and beneficial in implementing at individual and institutional level. The response from participants has been very positive and participants felt that the course is practical and can be applied in their institutions with ease.

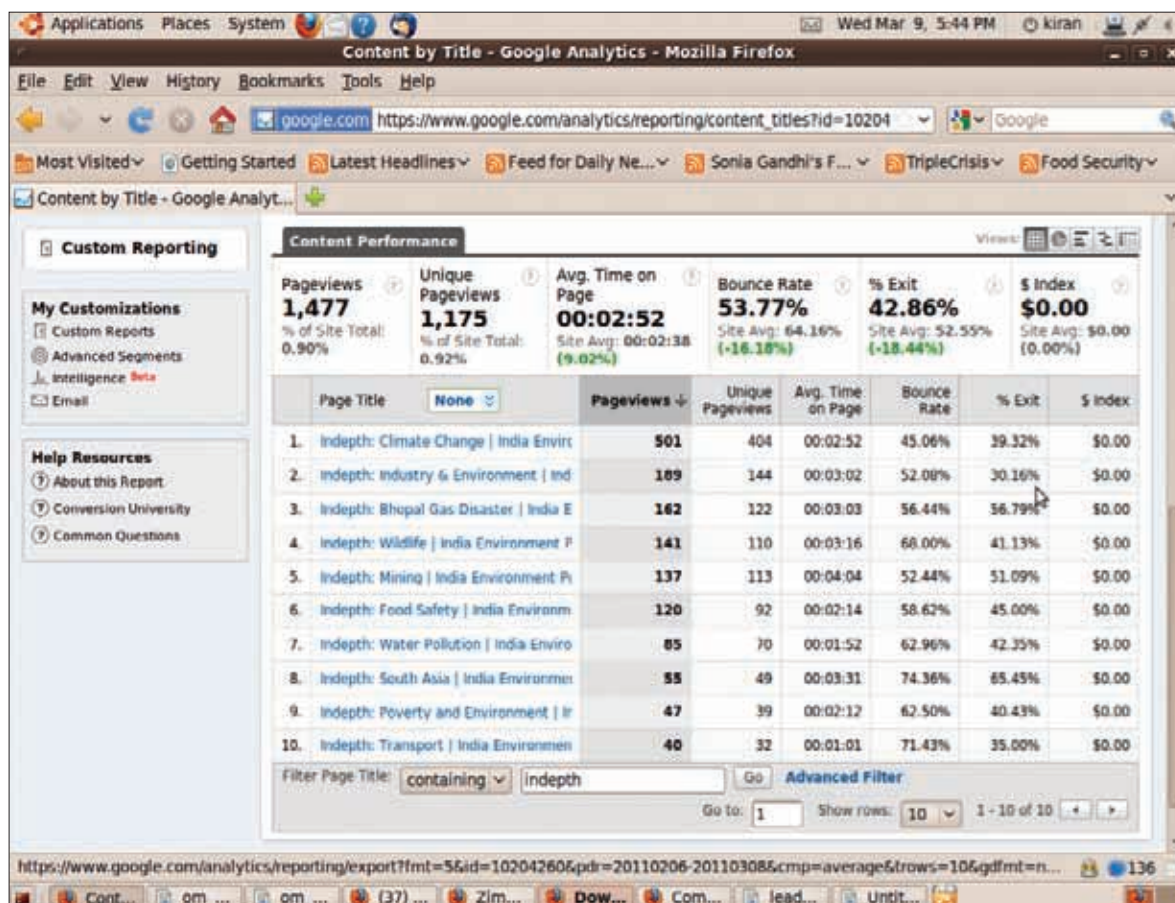
Most of the participants realised the relevance of networking and social communication, and were inspired to implement social media techniques for information sharing and dissemination. Participants had plans of using tools for making website more interactive. They decided to further research into blogs and forums to see how to the information learnt on "social online communities" can be used for benefit of their institutions.

The participant of the training programme started new initiatives in their organisations based on what they learnt from the training course.

National Institute of Health and Family Welfare launched an online National Child Health Resource Centre that has been built using Drupal, the open source content management system after attending this programme that exposed the participants to a variety of open source tools/systems for

offline and online information management. NGOs and other organisations have shown interest in employing information

management professionals trained by the Centre.



IV. EDUCATION AND TRAINING

I. ANIL AGARWAL GREEN COLLEGE (AAGC)

1. AGENDA FOR SURVIVAL: A ONE MONTH COURSE FOR STUDENTS AND YOUNG PROFESSIONALS

This year, 'Agenda for Survival', a month-long course for students and young professionals was conducted from June 1-30, 2010 in New Delhi by the Anil Agarwal Green College (AAGC). Out of 100 applications, 29 students were selected.

Students came from across the country – Ujjain, Pune, Tuticorin, Thanjavur, Chennai, Dhanbad, Allahabad, Katra (Jammu and Kashmir), Goa, Alwar, Ahmedabad, Jamshedpur and Patna. Students ranged from undergraduate to those doing their doctorates to some who were working. There were 19 girls and ten boys who attended the course. Students came from diverse backgrounds academically and professionally – engineering, economics, law, architecture, environmental studies, sociology, rural studies, history, design and others.

Aim: The overall aim of the course is to impart to the young an understanding of the way that developmental pathways impact the



Students of Agenda for Survival at a field trip

natural resource base of the country and how this, in turn, impacts the poor.

The course achieves this objective by focusing on the following:

- to provide opportunities to undertake research, report and then to present the information in an interesting and appealing format (skill development)
- to enrich the minds by exposing them to thoughts and viewpoints of thinkers and experts in environment and development (imparting perspectives).
- To add to their knowledge of developmental issues by enabling access to information (knowledge addition).

Outcome: How can we gauge what change has been wrought in terms of mind-set change. We could only do this through the feedback session at the end of the course where students expressed their views, feelings about the course. The feedback was extraordinarily positive and students admitted to the fact that they had had very little exposure or understanding of the linkages between developmental issues and the impact on environmental base. Some students were very touched by their interactions with slum dwellers or forest-based communities.

Given below is a selection of their opinion of the course and what they had learned from the course:

- Gave me a new dimension to the way to look at environment. I now look through a different lens. My best experience so far. I conditioned my thinking.
- Liked the structure – starting from what is development and ending with Global Climate Negotiations and Climate Change
- Connect between environment and sociology was never there in my education. But it was established here.

- If I get into civil services I would like to go back to Tolma and help people there. Also do something to clean the Yamuna
- What I learnt in a month I couldn't have been done anywhere else, so would definitely recommend it.

Output: The main assignment is the magazine that the students produced at the end of the course. For this course, the issue was titled *Eighty/Twenty* (24 pages) and magazine included real-life reporting, analysis and opinion pieces. The feedback received showed that students found this assignment rewarding; it taught them not just the journalistic skills of research, reporting and writing, but it allowed them to work as a cohesive group – writing shared stories, editing and even designing the magazine. They have also produced an e-magazine and put up pictures on the popular photo-sharing website Picasa.

How the course was structured: The month-long course comprised of seven modules. It started with the overview – the environment-development debate; natural resource management: water; natural resource management: bio-mass economy; environmental conflicts; accountable growth; urban water, waste & pollution; climate change.

The course went beyond class-based lectures, and included readings, case study presentations and weekly tutorials. Participants were provided with extensive reading material, including reports, essays by eminent environmentalists across the globe, together with relevant *Down To Earth* magazine stories. Films and documentaries were followed by in-depth discussions.

As part of the course, participants were taken on a weeklong field visit to the hills of Garhwal Himalaya. They interacted with academia at the G B Pant Institute of Himalayan Environment & Development. Dr R K Maikhuri the director of the institute spoke to the students on Garhwal mountain ecology and human-animal conflicts in the Nanda Devi Biosphere Reserve. The students also saw the work done by Alternate

Technologies India (ATI), an organisation that has been using local knowledge of the environmental sciences and simple technologies to better life of rural India. The participants stayed in their campus and experienced some of the livelihood initiatives that the organisation has initiated. These include beekeeping, spinning, weaving etc. They also visited Makku village which is the biggest Van Panchayat of Uttarakhand. They interacted with the villagers both young and old.

The next day the students visited Reni village the birthplace of modern India's environment movement. Here they interacted with the women and men who led the movement. After this the student participants proceeded to the Nanda Devi Biosphere Reserve. In the core zone they lived in homes of villagers who talked to the participants about the human wildlife conflict. They lived and interacted with the community. They also saw the eco-restoration work initiated by them, and reported on it.

Students were also taken on several daylong field trips in Delhi, including a walk to the Nizamuddin area to see traditional rainwater harvesting structures. To better understand Delhi's waste management, they were taken on a walk along the banks of the Yamuna River to understand how the city deals with the enormous amounts of wastewater generated each day. They also walked the Bus Rapid Transport (BRT) stretch in south Delhi and also experience the chaotic non-BRT sections to understand the pros and cons of the debate around the BRT.

Course faculty: The course faculty was drawn from CSE research and programme teams. In addition, eminent academics, activists and policymakers were invited to speak and interact with the course participants. Eminent external faculty included academics, social activists, journalists, senior government officials. To name some, Himanshu Thakkar (Centre for Water Policy) spoke about the havoc that all the dams in Himalayas are causing, Souparna Lahiri (activist and filmmaker)

spoke on why people are resisting takeover of their land and the consequences it will have on food security of this country, Shoma Chaudhury (Managing Editor, *Tehelka*) discussed the Maoist movement, Saurabh Yadav (Energy Specialist, South Asia Sustainable Development Unit, The World Bank) delved upon the energy situation in this country and spoke on green buildings and why it is important for India to invest in such systems. Dr Rajeshwari Raina (Centre for Policy Research) spoke about why India, despite producing such a large amount of foodgrains is still lagging in nutritional security of its people. Sandeep Gandhi (TRIPP) said that buses, and not cars were what the country needs. Dr Rohan DSouza (Centre for Studies in Science Policy, School of Social Sciences, Jawaharlal Nehru University) discussed the ecological history of this region, while Kanchi Kohli (Kalpavriksh) and Monali Zeya Hazra (USAID) spoke on sustainable industrialisation.

Overall impact: The overall course feedback gives us reason to make 'Agenda for Survival' an annual event. The students showed a high degree of commitment and interest while doing the course. Many of the issues and the angle through which the issues were presented were completely new to the students.

While some felt the field trip was the course highlight, others found the magazine assignment built their confidence as writers. Most felt that the course allowed them to explore new perspectives and build new skills, gave them clarity on the issues dealt. Some thought it would help them in their academic pursuits. And others felt the certificate course was a golden star in their *curriculum vitae*. The tutorial presentations and the discussions later were beneficial for internalising the learnings. For most, this was their first exposure to rural life. And most felt it changed their perception about rural India – about migration, displacement and other issues.

AAGC has been doing this course consecutively for three years and it has been a huge success. Throughout the years we get queries about this course. The past students

of Agenda for Survival have worked with us as reporters for *Down To Earth* and *Gobar Times*, researchers with various units, and as film editor with the film making unit of CSE. They write to us seeking academic advice. Students have all kept in touch with us through Facebook groups.

2. TRAINING PROGRAMME 'CHALLENGE OF THE BALANCE' FOR ENGINEERS WITHOUT BORDERS

The AAGC organised a month-long residential orientation programme, 'Challenge of the Balance' for students and young professionals from the world over from July 12 to August 12, 2010.

The aim of the programme is to give international participants a first-hand experience of Southern perspectives concerning the environment-development debate. The interdisciplinary coursework allows participants to understand and critically evaluate issues that lie at the interface of environment and development; poverty; democracy, equity and justice; and culture.

The programme was in collaboration with Engineers Without Borders (EWB), United Kingdom and South Asia. The participants were from diverse backgrounds who discussed, debated and deliberated on environmental challenges concerning the global South.

There were 19 members of the UK chapter and eight from the South Asia chapters of EWB. We received a large number of applications for the course but chose a diverse mix of social science, pure science and engineering participants. There were students from University of Oxford, Cardiff, Cambridge, and others in UK, and the Indian Institute of Technology system, India.

Course modules:

1. Overview of the environment-development debate
2. Natural resource management: Water and biomass economy
3. Environmental governance
4. Environmental conflicts
5. Accountable growth



6. Urban water, waste & pollution
7. Climate change

The course is divided into three parts:

- The pre-field visit wherein lectures are geared to give them a basic understanding on the environment / development debate of the global South; natural resource management, environment governance.
- The students were then taken on a field visit of eight days and seven nights. They visited the hill cities of Simla, Re Kang Peo, Samdoh, Tabo etc. In Shimla there were a series of lectures on how the hill city is 'managing' its waste and water. Up the mountain they met with communities that are struggling to keep the big dams from being built on the fragile ecosystem. From Samdoh they trekked up to Thangkarma a remote flatland up in the hill where one man's effort has made the cold desert green. They interacted with Mr A D Negi and spent the day looking at the work that he has done to rejuvenate the barren cold desert.

- On returning from the field visit the students heard lectures on accountable growth (urban waste and water challenges). Here too the students went on field visits within Delhi (to the river Yamuna, interact with waste pickers of the city, waste dump yards etc.

Output: At the end of the programme, a series of talks on climate change wrapped up all the issues that they had seen and heard for the last couple of weeks. The participants also produced a magazine, *Be the Change*.

3. CHALLENGE OF THE BALANCE – WINTER CERTIFICATE COURSE ON ENVIRONMENT MANAGEMENT

A three-weeks orientation programme was organised from December 20, 2010 to January 7, 2011. There were 16 participants selected for this programme from different backgrounds including students and young professionals. The aim of the course is to impart knowledge on sustainable development including climate change issues. Field visits are also planned to both

rural and urban areas in Rajasthan. Eminent people on environmental issues will address the participants during the programme.

Participant profile: Participants included one member of the UK chapter of Engineers Without Borders, two from Vietnam. Students from University of Sheffield, Delhi University, Indian Institute of Technology, NIT Warangal, ILS Law College Pune. At the end of the course they have kept in touch with each other and with CSE through facebook group (http://www.facebook.com/home.php#!/home.php?sk=group_183967824946956&ap=1) and web page (http://cseindia.org/challenge_balance/index.htm)

Field visits: Students were given a basic understanding on the environment / development debate of the global South; natural resource management, environment governance before their field visits.

They visited Laporiya, a village in Rajasthan, where they saw pastureland rejuvenation. Here they spoke to villagers, understood the *chauka* system, an unique watershed system developed with local knowledge. They also saw how letting animals (small ruminants, particularly) and birds freely move within the field helps agriculture. From here the group moved to the city of Pali where the local rain-fed river has been polluted by the dye industry. Land has been polluted by the chemical residue of the dye industry. Participants interacted with the villagers whose land has been destroyed by the percolation of the waste into the land.

After interacting with farmers, villagers, CEPT engineers, and local press, the students proceeded to Udaipur, the city of lakes. Here they visited adjacent villages of Barawa and Delwar and saw good community initiatives being undertaken by Seva Mandir, an organisation that has been working in Udaipur and adjacent districts for past many decades.

On returning from the field visit the

students attended lectures on ‘accountable growth’ (urban waste and water challenges). Finally, a series of talks on climate change wrapped up all the issues that they had seen and heard for the last couple of weeks.

Faculty: Some of the eminent speakers we invited were Kanchi Kohli, writer, teacher, activist; Romit Sen, senior assistant director, water agriculture division (FICCI); Ritwick Dutta, environment lawyer; Sucharita Sen, Centre for Study of Regional Development Jawaharlal Nehru University; Bhaskar Goswami, Forum for Biotechnology and Food Security; Tej Razdan, Jheel Sanghrakshan Samiti, Udaipur, Rajasthan; Viren Lobo Society for Promotion of Pastelands Development; Himanshu Thakkar, South Asia Network for dams, rivers and people; Monali Zeya Hazra USAID India (climate team); Shankar Gopalakrishnan, Campaign for Survival and Dignity, New Delhi; Tanushree Bhowmik, Project Manager – Access to Energy – UNDP and others.

Output: During this course they published a magazine called *Beacon*. (http://www.cseindia.org/challenge_balance/beacon_low.pdf). This was inspired by the good grassroots initiative that they encountered during the field visit which we conduct during the course tenure.



Participants of Challenge of the balance-winter certificate course on environment management.

II. ENVIRONMENT EDUCATION

1. GOBAR TIMES

With the aim of popularising environment education across various sections of society while try and become part of the regular education system in India, *Gobar Times* continues to be published regularly. The following issues were produced during the year:

- April 2010 – *Moonrush tracking the lunar lucre*
- May 2010 – *Waiting for water the real picture*
- June 2010 – *Eyjafjallajökull erupts*
- July 2010 – *Urban Planning*
- August 2010 – *What's cooking in the Indian streets*
- September 2010 – *The economy and politics of solid waste in Delhi*
- October 2010 – *The year of monster monsoons*
- November 2010 – *Fish on the menu*
- December 2010 – *Story of the cinderella cereal*
- January 2011 – *India eats*
- February 2011 – *The power of the onion and the story of cold storage in India*
- March 2011 – *The war of the Noodles and other 'Good', 'Better' and 'Fun' foods*

2. GOBAR TIMES GREEN SCHOOLS PROGRAMME

CSE has been conducting the *Gobar Times* Green Schools Programme for the past six years. Under this programme, schools across India have carried out a rigorous self audit on environmental practices within their own premises, following a set of guidelines outlined in CSE's Green Schools Manual. Students from middle and senior levels have rated their schools and given marks on the basis of this audit. The result is a 'report card' of the schools, prepared by their own students. The schools have, very effectively, made use of this manual in their environmental studies programmes and as an activity in the eco-clubs. The aim of the programme is to help more and more schools practice and teach resource efficiency. More

details of the programme is available at: <http://www.cseindia.org/taxonomy/term/20071>

2.1. Translation of Green Schools Programme manual in regional languages

As a part of the team strategy the Green Schools Programme (GSP) manual was translated into Gujarati this year. The GSP manual is now available in English, Hindi, Kannada, Telugu, Gurmukhi, Urdu and Gujarati.

2.2. Launch the National *Gobar Times* Green Schools Awards programme 2010 – 2011

GSP's primary challenge has been to provide the students an opportunity to learn about environment not by memorising yet another text book, but by 'doing'. So during the past years, all those who participated in this programme, came out of the classrooms to do various things – count, weigh, measure, explore, investigate, and analyse. The track record of the GSP shows that most of its participants have opted to repeat the audit process year after year. Clearly, the objective has been not just to win a contest, but to gauge if they have been able to improve their score cards and become better managers of environment. This is a very significant trend. It proves that schools, as a community, can play a tremendously important role in bringing about sweeping changes in the lifestyle and psyche of the people.

In the global arena, environment is now on the center-stage. It is playing a crucial role in shaping economies, influencing policies, and deciding the fate of heads of states. Internally, it is a priority issue in the agenda of every sector – from industry to agriculture. So it is time that we got the most important segment of the population, the students, on board in this discourse. It is now imperative to build up skills, and deepen their knowledge base in these issues. Programmes like the Green Schools Programme provide them the platform to express their views, as well as an opportunity to experiment on the ground.

The various audit indicators set in the GSP manual under the chapters of water,

Air, Land, Energy and Waste have now become the way for many schools to measure How green they are? The green schools audit has enabled the schools to identify what and how much they need to do in order to become green. Most importantly the students have learnt the process of bringing environmental change at the school level. They have learnt that being green is about consuming wisely, saving precious resources like water, energy, air and land. They have also learnt the important lesson that waste is resource. The school community has realised that the Green Schools Awards Programme recognises the efforts they put in to change environmental practices for the better on school campuses.

The National Green Schools Awards Programme was launched in July 2010 in about 6594 schools across the country. The schools that were sent information regarding the Gobar Times Green Schools Awards Programme 2010-2011 were all CBSE (Central Board of Secondary Education), CISCE (Council for the Indian Schools Certificate Examinations) and all other schools directly trained by us in conducting the Green Schools Programme to date. The launch covered all centrally administered schools across the country.

2.3. Launch of the *Gobar Times* Green Schools Programme in eight partner states

We have forged state level green schools awards partnerships with Delhi, Andhra Pradesh, Sikkim, Maharashtra and Himachal Pradesh. City level partnerships were forged in Chandigarh and Jamshedpur. Out of the partnerships forged the states of Delhi, Sikkim and Himachal Pradesh have constituted the Chief Minister's Rolling trophy for the top school identified by the Green Schools Programme. The schools that win the awards at the state level will be nominated by the respective state agencies to compete for the National awards organised by us at Delhi. This way more schools get recognised for their work and hence more schools participate in the programme.

- Delhi – 2000 schools (1000 private and 1000 government)
- Chandigarh – 50 schools (90 per cent government schools)
- Himachal Pradesh – 50 schools (80 per cent rural and semi urban schools)
- Jamshedpur – 50 schools (All urban and semi urban schools)
- Sikkim – 80 schools (90 per cent government, rural and semi urban schools)



The Delhi State awards were given by the honorable Chief Minister of Delhi, Ms. Sheila Dixit

- Andhra Pradesh – 1000 schools (90 per cent government, rural and semi urban schools)
- Maharashtra – 300 schools (90 per cent rural schools)

2.4. Special environmental education programme for Delhi

A special partnership with the Directorate of Education, Delhi government has been forged to rope in about 1000 Delhi Government schools into the Green Schools Awards Programme. The participation of these schools will contribute to the Green Schools Awards Programme being implemented in Delhi state.

2.5. Teacher/student training programmes

A total of nine two-day training programmes for teachers, educators, development workers and people interested in environment education were conducted during the year. Participants are guided through the different modules of the Green Schools Programme (GSP) manual, and trained on how they can implement the programme in their schools with the help of students.

The training schedule also included interactive sessions and film presentations.

Nine training programmes conducted for 329 participants of which 249 participants were teachers and 80 participants were student who would lead the audit programme in their respective school. Green schools teacher training programme in Gangtok was conducted in collaboration with Sikkim ENVIS Centre and Department of Science and Technology Sikkim. Open training programmes were conducted for

participants from across India at CSE's Tughlakabad office. Training programmes in Himachal Pradesh were conducted in collaboration with Department of Science and Technology, Himachal Pradesh. Green schools teacher training programme in Tatanagar was conducted in collaboration with Tata Steel.

2.6. Assessment of Green Schools Reports submitted by schools

A total 10,124 received information by post about the awards programme while the remaining schools of our 15,000 (approximation, would be more) school network got the information from our website. Out of these schools only 778 schools could complete the audit and send a valid green schools report to us as an entry for category of awards announced in the programme. The information given in these reports was verified, compiled and analysed to identify the schools who will awarded the Green Schools trophies and certificates at both the State and National level. The schools being awarded at the state level are short listed by our state partners.

2.7. National and State level Green School Awards

State level awards: The geographical and sectoral spread of the schools we engaged in the Green Schools Programme was better this year. We actually partnered with National Green Corps state nodal agencies (a Ministry of environment and forests programme) and NGO's to conduct state-level Green Schools Awards. The partnership enables us to reach a great number of state education board schools and recognise the

Dates	Venue	Designation	Numbers
29-30 April 2010	CSE	Teachers	36
22-23 July 2010	CSE	Teachers	27
27-28 July, 2010	Gangtok	Teachers	40
12-13 Aug, 2010	Chandigarh	Teachers	40
19-20 August 2010	CSE	Teachers	26
8-9 November 2010	Solan	Teachers/Students	13/26
17-18 November, 2010	Tatanagar	Teachers	50
26-27 November, 2010	Pandoh	Teachers/Students	13/26
29, 30 November, 10	Palampur	Teachers/Students	14/28

State	Categories	Number of awards
Delhi	Top 10	10
Delhi	Best Managers	5
Sikkim	Top 5	5
Himachal Pradesh	Top 5	5
Himachal Pradesh	Best Managers	5
Andhra Pradesh	Top 20	20
Andhra Pradesh	Best Managers	5

efforts made by these schools located in remote corners of India by making the state agencies give them awards and also nominate them for the National Awards conducted by us in Delhi.

The partner state agencies followed the entire process of launching the awards, assessing the reports and identifying the awards winning schools with our help. The state awards process not only increased the number of schools engaged in the programme but it made room for more schools to be recognised for their work. The partner agencies are also developing a sense of programme ownership due to these partnerships.

The state award ceremonies are planned as follows:

National Awards: The awards were given out on July 15, 2011 at the Stein Auditorium, India Habitat Centre, Delhi in three categories. Top 10 new schools that submitted their green school reports for the first time and Top 10 change makers, schools that managed to change their environmental practices to a considerable extent and schools that did not do all the chapters but are best in the chapters they did. Few additional awards like the Biradari (community) award and the Street Play contest awards will also be given out.

Type of awards	Categories	Number of awards
National	Top 10 (New Schools)	10
National	Top 10 (Changemakers)	10
National	Best Managers	5
Other awards	Biradari & Street Plays	2



Winners receiving the award from CSE Director General Sunita Narain

3. PUBLICATIONS

The following publications are in preparation.

3.1. Ecological footprint manual: With environment gaining mileage as a mainstream subject in the national curriculum, there is a huge demand for innovative and interesting activities, programmes and do-it-yourself handbooks among students, teachers and parents. This manual will be structured to plug this gap. It will help the students to understand the impact that the daily lifestyle of a person living in a typical Indian settlement (village, town, city) has on natural resources like water, climate, energy, land and waste. The manual will be based on the Our Ecological Footprint Manual published by CSE in 2000, but with fresh, upgraded information. The audit methodology used in the Green Schools Manual will be incorporated here, to make the manual more easily adaptable in schools. The target group will be students of Classes IX to XII.

It was decided indicators for water, climate, land, energy and waste would be consolidated under three major heads of water, land and energy. The indicators for manual are developed and at present we are working on refashioning the indicators to fit in a web of activities. The draft of the manual is almost ready. The design is being finalised.

3.2. Students' activity book: The activity sheets produced by the team (one every month) will be categorised into five major heads like water, air, climate, land, energy, waste and produced in booklet form with special introduction to each heads. The book will be a four coloured and would be used by students to meet their environment related work requirement at school. The booklet will address the curriculum change recently affected by the boards as per the NCERT directive. Teachers would use this book to engage students in environment related activity and evaluate them as per the norms set by different boards.

The content for the students' activity book has been compiled into two main

sections of climate change and natural resources. The natural resources section is further divided into five sub-sections. The introductions for these sections are being written and the layout of the activity book is in progress simultaneously. The activity book has been printed and the design is in the market.

3.3. Climate change reader: Climate change as an issue is the core of the environment syllabus for every class in both CBSE as well as ICSE boards. The textbooks cover the subject but do not provide a wide, narrative background, or answer the deluge of queries that the teachers face from students who want to know how this phenomenon is linked to their lives. This reader, using accessible, everyday language will explain the basics as well the details. It will be designed in the following pattern:

1. What is Climate Change; Its linkage with human emissions
2. The basic science of Climate Change, Its Impact
3. Which section of the population is most affected?
4. The Politics of Climate Change
5. What can be done to counter the crisis? Mitigation/Adaptation
6. A brief account of the history of the negotiations and the updates.

The climate change reader will be brought out as a reference book.

3.4. Green Schools Programme in other countries

Green schools programme, Abu Dhabi: The GSP manual was customised for the environment awareness sector, environment agency, Government of United Arab Emirates (UAE). A teachers training programme for teachers from 27 pilot schools was conducted in Abu Dhabi. 'Green schools awards programme, Abu Dhabi', the grand finale of work done by these pilot schools took place in Abu Dhabi on May 27, 2010. The environment awareness sector, environment agency, Abu Dhabi, UAE has already asked us to develop a Green Campus Programme for their colleges.



The Reader on Climate Change was released at the function

Green schools programme, Ethiopia: First round of discussions and presentations to customise the Green Schools Manual for the Ethiopian government has been completed in Addis Ababa, Ethiopia. A six member delegation representing Ethiopian government and UNICEF Ethiopia visited India in 2010 to see implementation of Green Schools Programme in India. The report submitted by the delegation was very favourable. We are waiting to hear from the Ethiopian government / UNICEF Ethiopia about customising the green schools programme manual.

III. MEDIA RESOURCE CENTRE

During the year, the Media Resource Centre team scaled up its activities and its level of interaction with media through media fellowships, briefings and press conferences. This interaction helped extend CSE's reach and voice and has provided an immense impetus towards building capacity of journalists.

1. Media fellowships

Under this programme, CSE closed the ninth media fellowships (on coastal issues) earlier in the year, and followed it up by launching two more fellowships over the year – one on

cities and the government's JNNURM programme, and the other on the Forest Rights Act (FRA). Of these, work on the JNNURM fellowship has been completed, while the FRA fellowship is ongoing.

1.1. Media fellowship on JNNURM: Under the JNNURM fellowships, 11 media persons from across India researched and reported on how cities were coping with their transport, water and sewerage management keeping in mind JNNURM and the work done under it. Reports appeared in many leading dailies and weeklies – *Dainik Hindustan*, *The Times of India*, *Hindustan Times*, *Pioneer*, *Deccan Herald*, *Chitraklekha*, *The New Indian Express* and *Nai Dunia*.

The JNNURM was launched by the Government of India in December 2005 to improve the quality of life in Indian cities. The seven-year scheme had a whopping Rs 100,000 crore in its kitty to develop infrastructure and services – water supply, sanitation and sewerage, urban transport and integrated slum development – in 63 cities. The idea was to provide incentives to state governments and city administrations to carry out urban reforms. But has the scheme really benefited cities? What is the current status of implementation of the projects proposed under JNNURM? Have

there really been any long- or short-term reforms in the way India's cities are growing? The Planning Commission's half-term review of the scheme is due this year. What is the review most likely to find?

This fellowship offers journalists to study, investigate and report on JNNURM in our cities – with respect to two key components: transport and water supply, sanitation and sewerage. It is a unique opportunity for the fellows to travel to JNNURM cities to look at the issues and concerns at close range and to write and comment on them. Suggested areas of research proposals must focus on transport or water supply, sanitation and sewerage, or both in JNNURM cities only. Under either head, applicants can opt to investigate a wide range of issues:

- State of infrastructure
- Proposals and projects
- State of implementation
- Economics: the money trail
- Corruption, controversies and conflicts

• Impacts and benefits

We received 45 applications from across the country. A fellowship jury comprising of some eminent journalists and urban experts selected 11 fellows who have now begun their work.

The jury comprised of:

1. Mr S K Lohia, joint secretary, urban transport, Union ministry of urban development
2. Mr Chetan Bhagat, director, National Institute of Urban Affairs
3. Mr Pratap Somvanshi, resident editor, *Hindustan*
4. Mr Ravish Kumar, senior anchor, NDTV
5. Mr Vipul Mudgal, senior journalist and editor
6. Ms Sunita Narain, director general, CSE
7. Ms Anumita Roychowdhury, executive director – research and advocacy, CSE

Selected Fellows:

Name	Subject of study	Designation and media organisation	Place
Anil Kumar Dwivedi 'Ankur'	Sanitation and transport in Lucknow and Kanpur	Principal Correspondent, <i>Hindustan</i> (Hindi)	Lucknow, Uttar Pradesh
Biswajeet Banerjee	JNNURM implementation in Lucknow and Kanpur	Bureau Chief, <i>The Pioneer</i> (English)	Lucknow, Uttar Pradesh
Biswendu Bhattacharjee	JNNURM projects in Agartala	Contributor, <i>Far East Focus</i> (English)	Agartala, Tripura
Jayanta Basu	JNNURM projects in Kolkata Metropolitan Area	Columnist, <i>The Telegraph</i> (English)	Kolkata, West Bengal
Ketan Trivedi	Transport in Ahmedabad and urban housing and sanitation in Surat	Senior Reporter, <i>Chitrallekha</i> (Gujarati)	Ahmedabad, Gujarat
Kumar Manish	Ahmedabad and Surat – transport, urban water etc	Senior Correspondent, <i>The Times of India</i> (English)	Ahmedabad, Gujarat
Radheshyam Jadhav	Progress of JNNURM projects in four cities in the state	Principal Correspondent, <i>The Times of India</i> (English)	Pune, Maharashtra
G T Satish	Water and wastewater and transport management in Bangalore	Senior Reporter, <i>Deccan Herald</i> (English)	Bangalore, Karnataka
Shibu B S	Progress of JNNURM projects in Kochi	Reporter, <i>The New Indian Express</i> (English)	Kochi, Kerala
Veena Sablok Pathak	Water and public transport management in Bhopal	Freelancer, <i>Nai Dunia</i> (Hindi)	Bhopal, Madhya Pradesh
Urvashi Rawal	Water and public transport management in Jaipur	Bureau Chief, <i>The Hindustan Times</i> (English)	Jaipur, Rajasthan

1.2. Media fellowship on Forest Rights Act

The FRA fellowships were initiated in late 2010, and have been awarded to 12 journalists. This select group, which combines experience with youthful enthusiasm, will be studying, investigating and reporting on the implementation, violation and drawbacks of the act and its fallout on the forest dwelling communities. This select group, which combines experience with youthful enthusiasm, will be studying, investigating and reporting on the implementation, violation and drawbacks of the act and its fallout on the forest dwelling communities.

A jury comprising of legal experts and senior media professionals was constituted to select the fellows. The parameters for assessing the candidates included originality of ideas; grasp of issues covered; relevance of the issues covered; range of the issues covered; analytical skills; writing skills; and

initiative. The jury was requested to finalise the selection of journalists for the fellowship, enrich proposed story ideas with fresh perspectives and suggest ways to make future fellowships more challenging and meaningful.

The jury members were:

- Mr Sanjay Upadhyay: managing partner, Enviro Legal Defense Firm, NOIDA
- Mr Manoj Mitta: senior editor-legal, *The Times of India*, Delhi
- Mr Pankaj Pachauri: senior desk editor (Hindi) – NDTV, Delhi
- Ms Sunita Narain: director general, CSE
- Ms Lata Jishnu, senior editor, *Down To Earth*
- Mr Richard Mahapatra, senior editor, *Down To Earth*

The selected fellows were:

S No	Name	Designation and media organisation	Place
1	Abhijeet Anand	Deputy Chief Reporter, <i>The Statesman</i>	New Delhi
2	Aloka	Freelance Journalist <i>Nai Dunia</i>	Ranchi, Jharkhand
3	Anil S	Senior Reporter <i>The New Indian Express</i>	Kochi, Kerala
4	Atul Kumar Singh	Sr Sub Editor <i>Hindustan</i>	New Delhi
5	Baba Mayaram	Freelance Reporter <i>Daily Chattisgarh</i>	Madhya Pradesh
6	G Srinivas	Freelance Journalist <i>Dhimsa</i>	Visakhapatnam, Andhra Pradesh
7	Jupinderjit Singh	Bureau Chief <i>The Tribune</i>	Jammu, Jammu & Kashmir
8	Rajnish Gambhir	Freelance Journalist <i>Chauthi Duniya</i>	Uttar Pradesh
9	Rajkumar Robindro	Production Assistant Doordarshan Kendra	Imphal Manipur
10	Reshma S Jathar	Freelance Reporter <i>Lokprabha</i>	Mumbai, Maharashtra
11	Shalini Singh	Senior Reporter <i>The Hindustan Times</i>	New Delhi
12	Soma Basu	Staff Reporter <i>The Statesman</i>	Kolkata, West Bengal

2. MEDIA BRIEFING WORKSHOPS

2.1. Fellowship briefing workshop in Goa

In August 2010, the media unit organised a two-day media workshop on 'Coasts, Coastal Populations and their Concerns' in Panaji. The workshop was organised to bring into focus the various threats facing the Indian coasts. Not only are the coastal communities reeling under the pressure of developmental projects such as ports, harbours, SEZ etc, but nature also lashes out its fury on the unprotected and vulnerable. Journalists mainly from the seven coastal states and from Delhi attended, along with activists who are actively involved in working along the coasts.

Held in Goa University, the meet was attended by 55 journalists from the print and the electronic media, including five South Asian media fellows of CSE (those who were doing the coastal concerns fellowship). Resource persons included M S Swaminathan, Aleixo Sequira, Goa's minister of environment and Digambar Kamat, chief minister of Goa, besides scientists from the National Institute of Oceanography and others. The team also

organised a field trip for the participating journalists to enable them to understand the CRZ violations happening along Goa's coastline.

The workshop got extensive media coverage in Goan newspapers, as also in other regional newspapers in the coastal states. It also provided a platform for activists and resource persons to come together and exchange ideas.

2.2. Briefings for Delhi journalists

The media team at CSE kept the NCR-based national media updated by regularly organising short briefings and press conferences and issuing press releases on issues of contemporary interest.

For example, an over hour-long press conference followed the release of CSE's laboratory study on honey. Media interest in the subject was huge, and it forced the general public and regulatory agencies to sit up and take notice. In association with Down To Earth, the team also organised a Round Table and media briefing on the subject of minor forest produce (MFP) and the rights to MFP granted by the various acts and laws in the country.



Media briefing workshop for journalists held in Goa in August 2010

2.3. Regional media briefing workshops

Two regional media briefings were organised in Hyderabad and Kolkata on the issue of urban mobility, as part of the air pollution control team's larger 'City Dialogue' programme. A number of local journalists from the respective cities participated in both the workshops, and reported on them. MRC organised a third very important meet – in Bhubaneswar on the subject of FRA. This was billed as another Fellowship Media Briefing, as we concentrated on getting together all our FRA fellows along with other journalists writing on the subject. About 60 journalists – 35 of whom were from Odisha

and the rest from other parts of the country – came together to be addressed by some of the leading experts and activists working on forests and forest rights. The team also organised a field trip for these journalists to Koska village in Nayagarh district; the village has been managing its own forests for several years now, and the coming of the FRA has confronted it with new challenges

Feature service: The media team continued sending out its regular Feature Service in English and Hindi to a subscriber base of about 350 journalists and editors across South Asia. The team also updated the CSE website and managed the CSE fortnightly newsletter.

V. INSTITUTIONAL DEVELOPMENT

I. HUMAN RESOURCES DEVELOPMENT

1. DESIGNATION CHANGE AND ORGANISATIONAL STRUCTURE

This year, CSE's organogram underwent a change, with change in nomenclature of senior designations. In CSE, a unit head so far was termed as a 'Coordinator', which in most other organisations means only a facilitator, as against the seniority and their role in CSE. It has been observed that people outside have been misinterpreting the position and role of CSE Coordinators, to the extent that it was getting difficult to get an appointment for meeting officials, especially in government offices. Having realised this, we conducted a survey on how to change the nomenclature of senior designations so that it spoke about the position and role one plays in the organisation. The *CSE organogram and programme charts are attached as Annexure A & B for reference.*

The *Director* will now be termed as *Director General* and we have introduced a new position, *Deputy Director General*, who can oversee and represent CSE in the absence of the Director General and has multiple and several emerging programmes under him. *Coordinator* has been given a new nomenclature – *Programme Director* – staff who will handle a complete programme or area of work independently. *Executive Directors* are staff who will handle more than one area of work.

2. CAPACITY BUILDING

In terms of capacity building, CSE has taken care to build the second rung of leaders in every programme, who can lead independent projects with a team with least supervision. This will allow the Executive Directors and Programme Directors the

scope to expand and explore new areas such as liaising with other organisations, government and non-government bodies to explore facts and figures, push for change and implement necessary policies that CSE has strived for and is known for.

3. CONTRIBUTIONS BY VOLUNTEER/INTERN

The year 2010-11 a total of 91 candidates joined us of which 22 were volunteers and 59 interns from various Institutions and Universities from India and Abroad. Their contribution in terms of human days has paralleled contribution made by CSE researchers. There were 12 candidates from foreign universities. The key Indian and foreign universities from where the students came have been listed below.

From India we have had students from Delhi College of Engineering, Delhi, Centre for Media Studies Academy of Communication and Convergence Studies, Delhi, TERI University, Delhi, Indira Gandhi Institute of Technology, Delhi, Delhi University, Ambedkar University, Delhi, Srishti School of Art, Design and Technology, Bangalore, School Of Law, Christ University, Bangalore, Tata Institute of Social Sciences, Mumbai, Government Law College, Mumbai, B.D. Somani International School, Mumbai, Symbiosis Law School, Pune, Centre for Environment Planning and Technology, Ahmedabad, School of Planning and Architecture, Ahmedabad, National Law University, Orissa, National Law University, Gujarat, Dr. Ram Manohar Lohia National Law Institute University, Lucknow, Shri Ram School, Gurgaon, Sri Jayachamrajendra College of Engineering, Mysore.

Volunteers have also come from numerous foreign universities in the plan year 2010-11. Here is a list:

Name of Intern/Volunteer	Name of university/ college	Place
Tanu Singh	University of Leeds	UK
Jesper Svensson	University of Gothenburg	Sweden
Max Friedrich	University of Tuebingen	Germany
Anh Hoang	Mount Holyoke College	USA
Camilla Andreasson	University of Oslo	Norway
Shanu	University of Sydney	Australia
Jonas Hamberg	University of Uppsala	Sweden
Stefan Drews	University of Kiel	Germany
Tiphaine Burban	Lille Institute	France
Aditi Mishra	University of Michigan	USA
Smitha Ramakrishna	Harvard University	USA
Setika Singh	University of Warwick	Coventry, UK

Besides providing support to various programmes our interns have contributed in a big way for preparing, layout and uploading Activity Sheets on Environment Education website, organising South Asian Media briefing workshop on Climate Change, prepare indicator analysis for Green Rating Project of Iron and Steel sector, fiscal

incentive papers for pollution control, factsheets, social and political factors enabling implementation of BRT projects and related case studies, designing and planning rainwater harvesting in Kumaon Engineering College and contribution made to the science and environment fortnightly *Down To Earth*.