TOXICS DISPATCH

A newsletter from Toxics Link

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Toxics Link
for a toxics-free world

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Right to Power and Knowledge

Information empowers citizens by enhancing their knowledge base, which results in creative thought and expression leading to development. The cover story tracks the impact of the RTI Act, our experiences with it and an interview with the Chief Information Commissioner, Wajahat Habibullah.

The healthcare institutes generating bio-medical waste need to install an ap propriate facility in the premises or connect up to a Common Bio-medical Waste Treatment Facility (CBWTF) to ensure requisite treatment of waste. KS Sudhakar of Toxics Link filed an RTI application on February 7, 2006 seeking details regarding the CBWTFs in Tamil Nadu from the Tamil Nadu Pollution Control Board (TNPCB) to solve the contradiction raised by various information circulated by different government institutions. In response, TNPCB gave details of the Common Treatment Facilities of Tamil Nadu including their status, coverage and quantity of waste handled adding that request has been sent to Indian Medical Association to provide training to the private hospitals. The comprehensive information received through RTI helped in identifying the direction of Toxics Link's campaign on biomedical waste management.

To know how our Government and public institutions function is a fundamental right of every Indian citizen and expression of informed opinion on it has been protected under Article 19 of Indian Constitution. Democracy revolves round the basic idea of citizens being at the centre of governance

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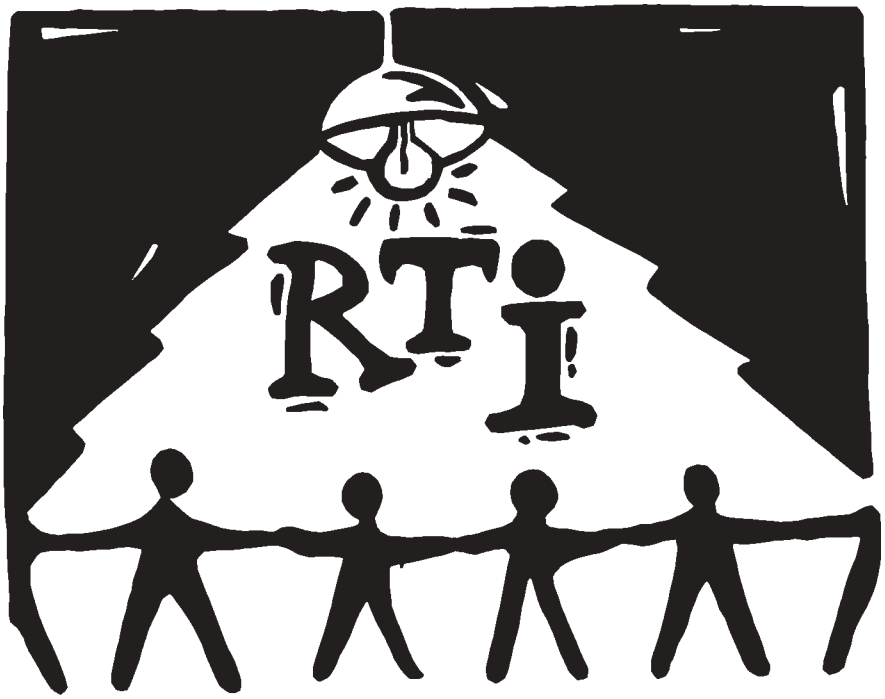

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EDITORIAL

Information as environment regulator

ENVIRONMENTAL RISKS have always been difficult to apprehend – be it natural uncertainties or manifested 'unknowns' manufactured by administrative confidentiality. Sadly, most existing systems of governance favour secrecy, thereby monopolising environmental information in the hands of governmental authorities or private stakeholders.

Except in the Scandinavian countries, most European nations have severely guarded government held information till the European Commission and Parliament enacted *Freedom of Access to Information on the Environment* in 1990. This directive became the *Magna Carta* of ecological democracy but several Member States were reluctant to follow it. The condition has improved since the 1992 Rio conference.

Following the chemical disaster of Bhopal, United States signed the 'Emergency Planning and Community Right-to-Know Act (EPCRA)'. Under this, anybody can download Toxics Release Inventory (TRI) prepared by US Environmental Protection Agency (EPA).

The Right to Information Act came into being in India only in 2005. Within a short span of time, RTI has become a strong weapon in India's democratic structure. No other country has witnessed such a people's movement geared around the demand for protection of fundamental right to information.

Yet, information on toxic industrial effluents or environmental impacts of large government projects is still hard to obtain. The private sector, which is not under the purview of the Act, keeps away the performance records of environmental parameters from the public. Obtaining information from government authorities is a tedious process. The situation will worsen if the proposed amendment on the exemption of high profile public authorities like Delhi Metro whose activities have long-term environmental effects, comes into force.

Information is the key to better protection, improved guidelines and a healthier environment, as international experience has shown. The media too, which has revitalised itself with the RTI Act, helps bring in transparency by diminishing the monopoly of the officialdom on environmental information. It is critical that we too think of the RTI Act as a fundamental mechanism, and not just as a mere tool, to ensure proper environmental governance at local and other levels.

Ravi Agarwal

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and survival of democracy depends on the informed citizen. Right to Information Act ensures the flow of information to the people and strengthens the second largest democracy in the world.

RTI and Development

In the last decade, the non-governmental organisations have become important partners for the development. Right to Information has become a strong weapon for the NGOs to ensure the availability of right information and use them effectively for progress of society. Many NGOs have made it a mission to spread the awareness on RTI Act to empower the masses. They are working at the grassroots level teaching the people how to file RTI for fighting corruption and ensure advancement.

Jagrut Mahila Sangathan, an NGO based in Barat district of Rajasthan helped the local women to file RTI against the Block Development Officer in protest of suspension of BPL survey in the villages. The survey resumed soon after and the list was available within a month.

Similar case happened in Moradabad district of Uttar Pradesh where the NGO Ilm ensured availability of medicines specially rabies injection in the local hospital through RTI. They also guided the villagers to file RTI against the owner of local ration shop who is incidentally also the MLA of the area. This helped the villagers to get the allotted food grains and kerosene and also a new ration shop came up in the locality.

RTI in other countries

Though RTI started to function in India only in October 2005, the developed countries have guaranteed flow of information much earlier. The United Kingdom framed Freedom of Information Act in 2000 to give access to information held by public authorities. In fact, United States framed Freedom of Information Act (FOIA) as early as in 1966 becoming one of the first countries in the world to do so. In Australia, the Freedom of Information Act was passed in 1982, applying to all 'ministers, departments and public au-

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Using the RTI Act effectively

- ▲ You need to be precise and should ask pointed questions for eliciting the right information.
- ▲ Not all departments receive fee payments favouring PIO. You should verify the same before sending the request.
- ▲ Any delay in providing information should be immediately brought to the notice of the Appellate Authority or the Information Commission.
- ▲ Information has to be transferred by the department receiving the request to the department holding the information. This is a mandate under the Act.

"Without information, even an intellectual cannot progress" – Wajahat Habibullah

CHIEF INFORMATION COMMISSIONER, Mr. Wajahat Habibullah, explains the importance of Right to Information Act, the role of NGOs and the future plans regarding the RTI Act.

▲ Can you briefly explain to our readers the importance of Right to Information?

Mr Habibullah: Information is the basic element for a democracy. The great thinker, Abraham Lincoln, rightly said that democracy is for the people, of the people and by the people. People's participation in the democratic government system is important. For this the people should be sensitised. Right to Information Act ensures this right of the citizen. Without adequate information, even an intellectual cannot progress far.

▲ How much transparency and accountability has India been able to bring through the RTI Act?

Mr Habibullah: The Act is still new in India and it's too early to comment. We are in the stage where we have to teach people the importance of information and how to utilise it. Because ultimately, people have to exercise the right and reap its benefit. Organisations like Toxics Link can help us spread awareness about the Act and have people use it effectively.

▲ How can the problem of delays be addressed?

Mr Habibullah: The pending cases are little over 50 per cent. The rate of dispersal has gone up from 200 to 400 in the last month. As I have said earlier, we are still in the early phase in setting up of the offices and establishments. At the moment we are working from a small office. We have hired a place in August Kranti Bhawan in Bhikaji Cama Place for three years.

There is a need for things to pick up. I have already started video-conferencing with other State Commissions from my office. We are also planning to incorporate e-governance practices to speed up the processes.

▲ Should private bodies be brought under the purview of the Act?

Mr Habibullah: I have mentioned it earlier and would like to repeat it. The private bodies that receive substantial government funds should be brought under the purview of the Act and one should be able to seek information in any form, including records, memos, log books or in electronic formats.

▲ The public response to the RTI Act has been overwhelming. Can you share some of the cases where RTI has been the catalyst of change?

Mr Habibullah: Enthusiasm of the citizen is high. Till September 2006 we have received 3,059 RTI applications.

There are, in fact, not one but many such inspiring stories. One that I would like to mention is that of Pushpa Devi – an old lady living in a slum of Delhi. She had applied for ration card with Department of Food Supply failing which she filed a RTI application. When she did not get a response she contacted me. I called her to my office and handed her the card. Thus RTI has been successful in giving power to the poor uneducated woman to question a government official and acquiring the dignity of the poor.

▲ Which States have been more successful in implementing the Act?

Mr Habibullah: Delhi has been more successful than the others in utilising the Act. States like Maharashtra and Karnataka are also doing well. Many states have just set up the required infrastructure – like Mizoram and Bihar have their Information Commissioners now.

▲ What is the role of the NGOs/CBOs to make the Act more powerful?

Mr Habibullah: This Act has brought a great freedom and responsibility together in our own hands. I feel the NGOs should not have conflict of interests. If they come into confrontation mode, the success of this noble enterprise will be undermined. I request them to join us in spreading the messages and help people be more knowledgeable.

▲ How do you plan to sustain the enthusiasm of the people that this Act has been able to generate?

Mr Habibullah: I would like to see it being used extensively at the grassroots level. Because of my own experience as Secretary, Panchayati Raj, I would like the Act to be implemented up to the Panchayat level. The NGOs can play strong role in this. Let's join each other in marching towards a more informed India.

By ***Sejuti Sarkar De***

Toxics Link uses the RTI ACT to bridge the information gap

AFTER MORE than three months of waiting, the Highways Department furnished Toxics Link with information relating to the proposed expansion of the existing Adayar bridge and the details of the Environment Impact Assessment (EIA) for the same, under the Right to Information (RTI) Act 2005. At the same time, a precedent was set by the Information Commission which fined the Public Information Officer (PIO), Public Works Department Rs. 25,000.

After due enquiry, the State Information Commissioner in his order dated July 20, 2006 observed that, *"The Commission notes with great distress the fact that the direction given to the Secretary PWD with copies to the Secretary Highways, to have information supplied within 10 days issued on 12.4.2006 has not been complied with. The Commission therefore directs the Chief Secretary to Government to recover Rs.25,000/- as fine from the concerned for having breached the order and also call for his explanation why disciplinary action should not be taken."* The message for State agencies is loud and clear – information has to be provided and violations will not be tolerated.

Toxics Link has also had other successes with obtaining information under this Act. For instance, a request filed with the Health Department on conduction of State Advisory Committee on bio-medical waste yielded the minutes of the committee meetings after a delay of 40 days and after a caution by the Commission. The State Committee, which had not met for the last three years, is proposing a meeting shortly.

Similarly, requests filed with the State Pollution Control Board and the Corporation of Chennai have yielded information on critical environmental issues concerning the State.

By ***Rajesh Rangarajan***

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thorities' of the Commonwealth. Canada enacted the Access to Information Act in 1983 providing the right of access to information under the control of government or government institutions.

Developing countries are coming up with laws that define legal processes by which the public has access to government information. The Central American country of Belize enacted a Freedom of Information Act in 2000. Ecuador guaranteed information by the State through Transparency and Access to Information Law, 2004. In Hungary, the Act on the Protection of Personal Data and Public Access to Data of Public Interest allows access to all data of public interest. Some countries like Ghana are in the process of drafting the act.

Future of RTI in India

India now needs to spread the importance of the Act up to the village level. Translating the text of the Act into local languages would be helpful in spreading awareness about the Act. NGOs all over the country must continue facilitating the filing of RTI applications.

The government and the Information Commissions must also ensure smooth functioning of the Act. Additionally, care should be taken to ensure that the Act is used for the welfare of society and not for settling personal grievances.

By ***Sejuti Sarkar De***

Additional resources

- www.freedom_of_Information_Act
- www.humanrightsinitiative.org
- www.righttoinformation.info/index.htm

Getting the Act together

To discuss issues and generate public opinion on the RTI amendments, Toxics Link had organised a panel discussion on August 25, 2006. The panelists were Wajahat Habibullah, Chief Information Commissioner and Prashant Bhushan, eminent lawyer. The discussion was chaired by Prof. Shekhar Singh of National Campaign for People's Right to Information (NCPRI).

Mr. Habibullah opined that the Act represented the full flowering of the democratic process and stressed that the Commission was concentrating on effective implementation of the Act by various public authorities. Referring to Section 4 of the Act which demands *suo-moto* disclosure by government, he said that all records should be maintained, catalogued or indexed in a manner that facilitates the RTI.

Mr. Bhushan stated that the RTI Act is one of the most powerful in the world. He felt that the government was attempting to dilute the Act through amendments. Being the largest democracy, we should be more and more transparent, he felt. The discussion concluded with all participants agreeing to the fact that the Act has been enacted after a great deal of struggle and it should be strengthened, rather than watered down.

E-waste: Challenges and opportunities in India

Most developing countries are witnessing rapid globalisation, resulting in changed patterns of production and consumption. The gains by this rapid growth are often out weighed by the concerns on depletion of natural resources and worsening environmental conditions. In India also, the rapid urbanisation and commercialisation has lead to degraded environmental situations.

The last decade has witnessed a steep rise in the production and consumption patterns of electrical and electronic equipments. These equipments have infiltrated into every aspect of our daily lives - providing more comforts, health and security, with easy information acquisition and exchange. Rapid technological innovations, coupled with growing consumerism, have accelerated the replacement frequency of these products and increase the generation of electronic waste. Electronic waste or e-waste, as it is commonly called, broadly covers waste from all electronic and electrical appliances and comprise of household items such as computers, mobile phones, iPods, refrigerators, washing machines, televisions - all by products of fast moving urban lifestyle.

Information technology and telecom are two of the fastest growing industries in India. By 2008 India is expected to achieve a PC penetration rate of 65 per 1,000 persons as against the existing rate of 14 per 1,000 persons (MAIT 2004).

At present, India has 15 million computers, which is likely to go up to 75 million by the year 2010, an almost five-fold growth over just four years. The telephone industry has also witnessed a phenomenal growth in the recent past and the sector today has 75 million cell phone users, which is likely to grow to 200 million by the year 2007. This rapidly accelerating rate of the industry is also responsible for generation of huge quantities of waste. Some of the recent studies on e-waste generation clearly reflect that this trend is likely to grow and penetrate to smaller towns and cities.

The problems

The production of these electrical and electronic equipment requires a complex mixture of components, among which are many precious metals whose extraction and use are sources of pollution. This leads not only to the depletion of virgin material but their manufacturing also impacts the environment negatively in terms of energy and raw materials used.

Another major source of e-waste is the illegal imports of electrical and electronic materials for recycling and thus, adding to the volume being generated indigenously. The reason for this illegal waste trade is primarily economical.

E-waste is highly toxic bringing in a deadly cocktail of cadmium, chromium, mercury, Brominated Flame Retardents (BFRs), lead, barium, beryllium and so on. Unlike the other categories of waste this has a very long shelf life without altering its character and requires a series of complex treatments for disposal. Computers singularly account for the largest share in this new waste, on account of high obsolescence rate – most computers have a life span of just five to seven years and then find their way into the waste stream.

Most of this waste in India is being handled in the informal sector, which follows no norm and is being processed in rudimentary fashion – mostly in backyards of low-income group colonies. It is important to understand that most recyclers are aware of only the monetary value of these elements. They have no knowledge, whatsoever, of the toxicity levels of the elements and as such do not adopt any precaution to prevent impacts on human and environmental health. The sheer volume of e-waste being handled unsafely for recycling in the unorganised sector poses a serious threat to environment.

The opportunities

In India, there is no law, which specifically deals with the issue of e-waste and lays down the process for safe collection and its disposal. A strong e-waste legislation is the need of the hour.

Any solution to this issue needs to be seen in the broader context of sustainable development. Sustainable consumption is about consuming differently and efficiently. Some of the basic principles of environmental justice such as 'Precautionary Principle' and 'Polluter Pays' should be the overriding considerations while designing solutions for e-waste hazards.

Extended Producers Responsibility (EPR) is perceived to be the most appropriate framework that attempts to amalgamate all the enshrined principles of environmental justice. It not only looks at downstream solutions but also at upstream technology. Finding measures, which can help in development of sustainable production and consumption is necessary.

Efforts should be made for setting industry targets for recycling and waste reduction, promoting and supporting green procurement and other environmental options through legislation, tax breaks, developing an understanding of producer responsibility and ultimately communicating green messages to the public at large.

*By **Satish Sinha***

Playing a toxic game

Toys are an integral part of a child's developmental process. Besides providing entertainment to children, toys also serve as educational material for them. Safe toys must therefore be well-designed, appropriate to the age of the child, durable and non-toxic. Some toys are inherently hazardous and appropriate only for use by older children and under adult supervision.

Sometimes toys inflict injuries produced by sharp edges or points, or choking due to swallowing or aspiration of small parts, or other mechanical injuries such as electrical injury, hearing loss from excessive noise, penetrating wounds from projectiles, strangulation, or burns from flammable materials. All these injuries may be called accidents. However, exposure from toxic chemicals present in toys due to swallowing, chewing or sucking by children may not be discernible immediately but may have long-term adverse health impacts.

PVC toys and toxicity

Polyvinyl Chloride is a polymer made up of repeating units of Vinyl Chloride (a monomer), commonly referred to as Vinyl or PVC. Lead or cadmium is added into PVC as stabilisers to prevent the free chlorine radicals from reacting with hydrogen radicals.

Lead compounds are the most common stabilisers in PVC. Some of them are basic lead carbonate, lead stearate, basic lead stearate, tribasic lead stearate, basic (dibasic) lead stearate and basic lead phthalate. Lead and cadmium are also added as colouring agents in the form of organo-metallic compounds. Phthalate esters are added to PVC to make it soft and pliable. Phthalate are also known to cause liver damage.

Health impacts of lead and cadmium

Lead (Pb)and cadmium (Cd) are known poisons, being neurotoxins (agents that can cause toxic effects on the nervous system) and nephrotoxins (agents that can cause toxic effects on the kidney) respectively. Physicians and scientists agree that no amount of lead in blood is safe or normal. Progressive elevation of lead levels in the blood can cause a potential genius to drop to an average achiever and an average child to become learning disabled.

The disturbing fact is that exposure to extremely small amounts can have long-term and measurable effects on children. Another problem of lead is that it accumulates in the body. After lead is absorbed into blood, some of it is filtered out and excreted, but the rest is distributed to the liver, brain, kidneys and bones.

Bones store lead for decades. When the bone breaks down as part of a regular metabolic process or due to some specific physiological condition like osteoporosis, the body is exposed to lead again.

Cadmium is first transported to the liver through the bloodstream. There, it bonds with proteins to form complexes that are transported to the kidneys. It accumulates in kidneys, where it damages filtering mechanisms. Cadmium dust (cadmium oxide, CdO) is another source for cancer in human beings. Cadmium when released as fine airborne particles then reacts almost immediately with oxygen to form respirable cadmium oxide, a carcinogen.

Lead and cadmium in PVC toys at dangerous levels

IN A RECENT STUDY by Toxics Link, a total of 111 toy samples were purchased from three metro cities in India, viz., Delhi, Mumbai and Chennai. These toys were unbranded and in the price range of Rs. 10-100. The toys mostly catered to the needs of middle class and urban poor families. All samples were brought at one place in Delhi and then laboratory tested in Delhi Test House, a Delhi based NABL accredited laboratory. Out of 111 toy samples tested for chlorine, 77 were found to be made up of PVC material while the remaining 34 toy samples were made of non-PVC plastic materials. A total of 88 samples (77 PVC and 11 non-PVC) were analysed for lead and cadmium, which were found to be present in all the tested samples in varying concentrations. The overall average concentrations of lead and cadmium are 112.51 ppm and 15.71 ppm respectively. The range for lead concentration in tested samples was 2,104 ppm to 0.65 ppm. For cadmium, the range was from 0.016 to 188 ppm. Eight samples, brought from Mumbai, showed concentrations higher than 200 ppm. Five samples (close to 20 percent of Mumbai samples analysed) showed very high lead concentration (from 878.6 ppm to 2,104 ppm) even exceeding the US EPA limit of 600 ppm in painted toys.

Exposure pathways

The chewing and swallowing behaviour of children is a common source of lead and cadmium exposure. Routes of ingestion include licking, sucking, mouthing, inhalation and hand-to-mouth behaviour. Another source of exposure to lead and cadmium can be the toxic dust released during the degradation of vinyl products.

Uncertainties related to standards

Defining standards is a first step in any regulatory mechanism and prevention, perhaps, is the key to safe environmental health. Unfortunately, India does not have an enforceable standard for the content of lead, cadmium and other toxic metals in toys. Indian standards are with respect to migratory elements from toy materials, which have been adopted from European Union safety requirements (BS EN 71-3:1995) and International standards (International Organisation for Standardisation, ISO 8124-3:1997 Migration of Certain Elements). This too is only voluntary in nature. In fact, safety requirements for toys related to physical and mechanical properties and flammability are also voluntary in nature. Manufacturers have to comply with this standard only when they export their toys to European or other countries.

Prevention is the key

India, must provide a safe environment to its children so that they are not exposed to toxic chemicals through toys. This can only be achieved by putting in place a robust regulatory mechanism. Unrestricted presence of heavy metals in toys pose a threat to the environment as well since the heavy metals ultimately end up in soil and air.

Since no level of lead and cadmium can be considered safe in toys, all attempts must be made to replace materials having toxic potential by safer materials.

*By **Abhay Kumar***

This feature has been published in the November 2006 issue of Consumer Voice.

IPEP: Global efforts for global impact

IN MANY developing countries, there has often been very limited and incomplete public awareness and understanding about the severe health and environmental harm caused by Persistent Organic Pollutants (POPs) and other chemical pollutants.

To tackle these urgent needs, the International POPs Elimination Network (IPEN, *www.ipen.org*) began a global NGO project called the International POPs Elimination Project (IPEP) in partnership with the United Nations Industrial Development Organisation (UNIDO) and the United Nations Environment Programme (UNEP).

The key objectives of the project are to:

- Encourage and enable NGOs to engage in activities that provide concrete and immediate contributions to country efforts in preparing for the implementation of the Stockholm Convention;
- Enhance the skills and knowledge of NGOs to help build their capacity as effective stakeholders in the Convention implementation process;
- Help establish regional and national coordination and capacity in all regions of the world in support of NGO contributions to effective Stockholm Convention implementation as well as long-term efforts to achieve chemical safety.

IPEP met these objectives successfully. It encouraged and enabled more than 350 NGOs in 65 developing countries to engage in more than 290 activities within their countries. IPEP also established a system of regional NGO co-ordination hubs that have evolved into a sustainable co-ordinating mechanism.

*By **Upasana Choudhury***

Kyoto Protocol: Promoting carbon colonialism?

The Kyoto Protocol is an international treaty to reduce greenhouse gas (GHG) emissions under the United Nations Framework Convention on Climate Change (UNFCCC). The objective of the treaty is the 'stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system'. The goal is to lower the overall emissions of six greenhouse gases – carbon dioxide, methane, nitrous oxide, sulfuhexafloride, hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

The treaty was negotiated in Kyoto, Japan in December 1997 and came into force on February 16, 2005. Under the treaty, the industrialised countries are required to reduce their collective emissions of greenhouse gases by 5.2 per cent compared to the year 1990 over the five-year period of 2008-12. The Kyoto Protocol now covers more than 163 countries globally and 65 per cent of global GHG emissions.

Though most of the countries have signed and ratified the Kyoto Protocol, unfortunately the biggest emitters of greenhouse gases – USA and Australia – remain the stumbling blocks. While the USA has signed the protocol it has still not ratified the treaty. Australia refused to sign the treaty and argued that the protocol would cost Australians jobs. However, the USA and Australia have agreed to sign the Asia Pacific Partnership on Clean Development and Climate.

India signed and ratified the Kyoto Protocol in August 2002. Since India is exempted from the framework of the treaty, it is expected to gain from the Protocol in terms of the transfer of the technology and related foreign investments.

Carbon trading

The GHG emission targets for 39 developed countries are in the form of an 'assigned amount' – the number of metric tonnes of greenhouse gases (counted as carbon dioxide equivalent) that may be emitted by sources within the country during the

Trading the responsibility

By purchasing carbon credits countries can circumvent their responsibilities in many ways:

- The binding countries do not use their whole allowance and can either save the remaining credits for the next time period (bank them), or sell the credits to another binding country in the open market;
- The binding countries use up their entire allowance in the allotted time period, but still pollute more. In order to remain in compliance, spare credits must be bought from another binding country that has not used up its entire allowance;
- The binding countries can invest in pollution reduction schemes in other countries or regions and in the way 'earn' carbon credits that can be sold, or banked, or used to make up shortfalls in its original allowance.

five-year commitment period.

Thus the agreement offers a great deal of flexibility in meeting targets. Countries may partially compensate for their emissions by increasing 'sinks' – forests, which remove carbon dioxide from the atmosphere or they may pay for foreign mechanisms set up for this purpose such as emission trading, the Clean Development Mechanism (CDM) or Joint Implementation (JI).

The binding country achieves a measurable carbon-dioxide reduction by investing in energy saving projects in a developing country. Such investment is of interest to the developing countries because they contribute to sustainable economic growth. This has created openings for investment in renewable energy, energy efficiency, fuel switch and waste management.

Carbon colonialism

Though the concept of carbon trading appears attractive, there is a skeptic view to this new dimension of science for sale.

One of the more tragic ironies of the Kyoto Protocol is that 'carbon sinks' (forests, oceans, etc) can only qualify for emission credits if they are managed by those with official status. This means that an old rainforest inhabited for thousands of years by indigenous people does not qualify under Kyoto rules as 'managed', and cannot get credits. However, a monoculture plantation run by the state or a registered private company does qualify. This aspect raises the question of vested interests served by emissions trading policy, as the official process does not recognise ordinary people.

By its nature, an emission credit entitles its owner to dump a certain amount of greenhouse gases into the atmosphere. Control of such credits effectively leads to control of the atmosphere, perhaps the last global commons. This has not only created a property rights regime for the atmosphere, but has also awarded a controlling stake to some of the world's worst polluters, by allocating credits based on historical emissions.

Another fundamental problem of emission trading is its tendency to perpetuate and aggravate environmental injustice. All six greenhouse gases that are due to be traded have toxic co-pollutant side effects. This aggravates the social injustice as most of the polluting industries are located in low-income areas and the Protocol allows the country to trade for carbon with other countries instead of improving the environment of communities with least power to resist.

It is also important to understand the corporate dynamics behind this global trading. Many corporate lobby groups, in particular, want unrestricted free trade with greenhouse gas credits rather than government regulation and taxation to achieve emission reductions.

There are serious concerns regarding the effectiveness and wisdom of the monitoring and verification practices of the Kyoto Protocol. A reliable surveillance system is essential to prevent the targets from being undermined by fraudulent projects.

*By **Piyush Mohapatra***

Resources

1. *Bacharam H. (2004): Climate Fraud and Carbon Colonialism: The new trend in Green House Gases: Capitalism Nature Socialism, Vol: 15(4).*
2. *Calvin Sandborn, William J. Andrews and Brand Wylynko (1991): Preventing Toxic Pollution: Towards a British Columbia Strategy, A Report to the B.C. Hazardous Waste Management Corporation (West Coast Environmental Law Research Foundation Vancouver, Canada).*
3. *Greenhouse Market Mania: UN climate talks corrupted by corporate pseudo-solution, November 2000.*

COMMUNITIES AND WASTE

Bawana residents join hands on SWM issue

The Government of India-UNDP project 'National Strategy for Urban Poor' aims at sustainable socio-economic growth and development in the selected urban poor locations through a community owned and participatory process. The project targets specifically the most marginalised people within the population.

Under this project, the six urban poor locations of Delhi namely Jahangirpuri, Bawana, Madipur, Dakshinpuri, Nandnagri and Kalayanpuri were selected as the project areas. The project covers the five thematic areas of livelihood and micro credit, health and disability, women and child, solid waste management and urban up-gradation.

Out of the six locations, Toxics Link initiated the solid waste management programme at the resettlement colony of Bawana in November 2005.

Toxics Link is emphasising on community-based solid waste management, which includes door-to-door waste collection, segregation of waste and composting under the ownership of the community. The goal of this project is to develop a demonstrable model for empowering low-income communities to utilise their own solid waste in a sustainable manner through capacity building and awareness raising of all stakeholders. The target of the project is to cover approximately 2,000 households of block B and D of the colony, which can be replicated in other blocks as well.

After continuous efforts, the door-to-door waste collection system has been initiated with approximately 1,100 households. Currently, four workers are involved in the programme who take care of door-to-door collection of waste, its secondary segregation and transportation from household to community collection point i.e. *dhalao*. Then the garbage is transported to the landfill by the municipal sanitation staff. Cleaning of drains is a major problem because of the unplanned drain construction at the time of resettlement.

Presently, door-to-door collection is happening four days a week and remaining two days of the week are spent for cleaning of street drains. This has greatly helped in avoiding the unhygienic and unsanitary condition in the area and increased community participation in the programme as well. Every household is charged rupees 10 per month as a user fee. The monthly revenue generation through this contributes to the monthly salary of the workers sustaining livelihood of the four local families. The protective gears like boots, aprons and gloves and tri-cycles have been provided to the workers.

A community meeting in progress.

Being a Lower Income Group (LIG) community, the generation of solid waste in Bawana is not much as compared to the middle and higher income group communities. Findings of the baseline survey conducted by the oganisation reveal that average generation of household waste is approximately 300-400 g/household/day.

Toxics Link has also been organising door-to-door awareness campaigns, cluster meetings, community meetings, mass awareness programmes, rallies, school programmes, etc, to bring together all the stakeholders like Self Help groups (SHGs), youths, residents, school children, key persons of the community and waste collectors at a common platform. Toxics Link is also strengthening the community's linkage with the MCD sanitation staff, so that cleaning of *dhalaos* and drains could take place on regular basis.

Information, Education and Communication (IEC) workshop on environmental issues amongst the school children, capacity building workshop for the SHGs, street plays and thematic camps are regularly organised in the area. IEC materials like posters, leaflets and flyers have also been distributed. The Calendars of the year 2006 emphasising on importance of source segregation and specifying elements that fall under the category of recyclable and organic waste have been circulated among the residents of colony.

The programme is a valuable learning experience for Toxics Link, local community and the waste collectors. The initiative has shown a significant impact on the cleanliness and the aesthetics of the community.

*By **Mohammad Tariq***

Children preparing posters on waste management.

Project to identify gaps in community-based SWM

The issue of urban solid waste in India is becoming a critical one in the view of growing urbanisation. Though solid waste existed earlier as well, it has now assumed crisis proportions and its management is posing serious challenges.

Toxics Link has developed decentralised waste management models based on community participation. To identify the major breaches in the programme in India, Toxics Link has initiated a project, 'Addressing Gaps in Community Engagements for Solid Waste Management (SWM) in India for Upscaling People's Participation'.

Toxics Link has helped in identifying the following gaps on this issue:

- Low awareness about SWM among various stakeholders;
- Inadequate understanding of appropriate technology for handling and disposal of solid waste;
- Lack of knowledge, motivation and training amongst the municipal staff;
- Non-participatory approach of municipality in encouraging community participation and building partnership;
- No concept of extended producer responsibility (EPR) or of making recycling sustainable for reducing waste for landfills;
- Inadequate local accountability of the municipalities;
- Lack of materials to address the issue of other stakeholders;
- Lack of pool of expertise.

The theme of the project is to address the above-mentioned gaps and to:

- Help identify and support the Alliance of Waste Management (AWM) network for common outputs which will help the various members across the country;
- Identify and support key innovative initiatives on the ground, which help and garner new experiences and linkages in this area;
- Create a pool of expertise in the community groups which can help in taking the solutions to a sustainable level.

Toxics Link has tied up with six partners from different parts of the country to accomplish the project.

*By **Piyush Mohapatra***

TOXICS FREE HEALTHCARE

Creating models in bio-medical waste management in Chennai

In the past few years, gradual but successful strides have taken place in the area of bio-medical waste management in the city of Chennai. In this context, Toxics Link has been collaborating with the healthcare industry to improve situations on the ground.

With a series of regular engagements on this issue, it was realised that medical waste management in the city is still facing hitches in terms of sustenance and stability of waste management practices. With time, the waste management process gets diluted and the hospitals are forever dependant on external agencies for training and implementation.

Chennai is increasingly becoming a hub for medical tourism. The situation definitely tends to worsen if the healthcare institutions (HCI) do not gear up to handle its medical waste proactively.

The 'Models' concept

With past experience of working with the government and private hospitals at an individual level, Toxics Link realised the need to develop model institutions for bio-medical waste management within the State. The idea was to create institution, which would not only be 'champions' of waste management but also be examples of sustainable waste management practices. This would facilitate the other HCI's within the State to follow the practice.

Ford Foundation supported Toxics Link in venturing into this initiative which required engagement with five different healthcare institutions, on an individual basis, and dealing with every single aspect of waste management at a micro-level.

The spadework

Identifying the HCI's who could be potential partners of Toxics Link, was the challenge in initiating this work. Eventually, five committed HCIs did come up to take the challenge and be examples for the rest.

Following the identification process, the activities were tuned towards implementation and every single step towards it was taken up in a chronological and systematic manner. The five HCIs have emerged out as live examples of best waste management practices.

The factors that make these institutions different from the other HCIs are:

- A strong Core Committee that will look into future trainings and sustainability of waste management in their hospitals;
- Excellent waste management practices;
- Initiating newer interventions such as management of mercury in hospitals.

One important learning from this entire study is that it is the lack of information and motivation rather than financial or technical difficulty, which is responsible for the lacuna in the waste management system in any healthcare institutions. These common reasons for the existing lacunae were addressed through this project.

Way forward

Toxics Link - Chennai arranged a half-day round table meeting with representatives from the Tamil Nadu Pollution Control Board (TNPCB) and the Indian Medical Association (IMA), Chennai chapter. In the meeting, the practices of the five HCI's were showcased by their representatives and strategic replication of the five models and its practices through out the State was discussed.

With medical tourism picking up in the city of Chennai, the burden of medical waste is bound to increase. The five model institutions developed have set example for ideal bio-medical waste management practices for other HCIs through out the State.

*By **Chirantana Kar***

Community health survey in peri-urban areas of Varanasi

The University of Sussex, in collaboration with Toxics Link, University of Delhi and Banaras Hindu University has undertaken a research project to improve the understanding of the effects of contaminated irrigation water on food safety and health.

The project titled *'Contaminated irrigation water and food safety for the urban and peri-urban poor: Appropriate measures for monitoring and control from field research in India and Zambia'* is simultaneously investigating levels of heavy metal contamination in irrigation water and agricultural lands in three sites each in Zambia and at peri-urban villages of Dinapur, Shivpur and Lohta in Varanasi, India.

In order to gain a better understanding of the health status of the residents, it was proposed to conduct a community health survey with the following objectives:

- Collect information on health status of the residents;
- Investigate the perception of residents about their health and the causes thereof, threats to health and its change over time (over two decades);
- Investigate health impact due to heavy metal contamination of food by way of finding some health indicators;
- Understand health seeking behaviour;
- Map the existing health infrastructure, both formal and informal, and user perception regarding quality and access.

Orientation workshop

In this context, a five-day orientation and field testing of the study tools for field researchers was jointly organised by New Concept Information Systems Private Ltd., Fellows for Reconstruction, Initiative, Education, Nourishment, & Development of the Society (FRIENDS) and Toxics Link at Varanasi on August 6-10, 2006. The objectives of the workshop were as follows:

- Orientation of the field research team;
- Pre-testing of tools;
- Modification in tools following pilot test.

Field testing of various questionnaires developed for the field study was conducted for two days to assess its relevance and efficacy followed by a three-day orientation. The idea of the survey was to approach each section of society – women (pregnant and lactating mothers), farmers (household), young persons (adolescents) and health workers (key informants).

Sampling design and survey

In order to capture reactions, experiences and information levels and changes that may have occurred within different stakeholder groups, it was agreed that a stratified random sampling would be adopted.

In each of the villages, first a quick enumeration was carried out based on secondary sources. Then 10 per cent of the households of each of the villages were selected and further broken down into sub-samples across age groups. The household interviews encompassed both quantitative and qualitative responses. A similar survey was conducted in a 'control' village away from the affected site.

Participatory exercises focusing on health were done in each of the six villages of the study area prior to the survey. The field survey has been completed as per schedule and data analysis is set to commence soon.

*By **Abhay Kumar***

IFCS: The sun shines on

The fifth session of the Intergovernmental Forum on Chemical Safety (IFCS-V) was held in Budapest, Hungary, from September 25-29, 2006. The event drew 415 participants from governments, UN bodies and agencies, intergovernmental organisations (IGOs) and non-governmental organisations (NGOs), convening under the theme 'Chemical Safety for Sustainable Development'.

During a week of summery weather in beautiful Budapest, participants discussed the future of sound management of chemicals. Delegates had a wide range of expectations from the meeting – some hoping to continue IFCS as an open and transparent forum and others preferring to shift towards discussing chemical issues in the more formal setting of the International Conference on Chemical Management (ICCM) and UNEP Governing Council (GC).

The battle over the future role and institutional arrangements of the Forum, however, did not prevent meaningful progress on substantive issues. Particularly, the initiation of actions to address health and environmental impacts of mercury, lead and cadmium, and the identification of tools to apply precaution for effective chemical management were discussed comprehensively.

The Budapest Statement on mercury, lead and cadmium, declared at the Forum, combines the possibility of strengthening the use of voluntary instruments for combating the three heavy metals and the opportunity to consider a legally-binding instrument for mercury to address its health risks.

Some of the future topics for the Forum include nanoparticles, electronic waste and substitution of dangerous chemicals.

In conclusion, the participants ensured that the Forum continues to exist – neither to rise nor to set – for now. But in the coming years, IFCS must prove that it plays an important role in the management of hazardous chemicals. This will be the key to IFCS' future success and its continued existence.

*(Analysis by **Upasana Choudhury** who participated in the IFCS-V)*

E-waste assessment study in Kolkata and Mumbai

The electronics industry is the world's largest and fastest growing manufacturing industry. As a consequence of this tremendous growth, combined with rapid product obsolescence, discarded electronics or the 'e-waste' is now the most rapidly growing waste problem in the world.

The mixing of e-waste in the traditional waste streams has made the problem of managing municipal solid waste management very complicated. Besides, India is also subject to large scale dumping of e-waste in various guises from countries around the globe - from USA, Europe, Gulf countries in west to Malaysia, Hong Kong, Singapore in east.

The crisis is not only of quantity of waste but also from the toxic ingredients such as lead, mercury and cadmium, to name a few, that possess both occupational and environmental health threats. Still e-waste recycling is now a lucrative business because these electronics consist of valuable metals including gold and copper.

To estimate the quantity and status of e-waste in the country, Toxics Link conducted e-waste assessment studies in two metros – Kolkata and Mumbai.

Kolkata study

With increasing consumerism and growth in industry, Kolkata is also suspected to be falling prey to e-waste menace. But there is hardly any information available on this at present.

Toxics Link, in partnership with the Centre for Quality Management System, Jadavpur University, Kolkata, is conducting a survey and assessment of electronic waste in the city. The study will assess the amount of e-waste generated in Kolkata, with main focus on computers and mobile phones. The study will also document the recycling industry of the city.

The initial survey suggests that government offices, banks and multinationals are the main culprit. Most of the big companies (public and private) are disposing off their waste through official tenders (published in newspapers) or auctions. The smaller companies and householders get rid off their waste through local '*Kabadiwalas*'. Electronic waste from other parts of the country also comes to the city for recycling and extraction of valuable materials.

The processing of this waste is largely carried out in the informal sector and such recycling units are mushrooming in places like Phoolbagan, Rajabazar and Howrah. These units do not have any safeguard against occupational health and environmental hazards related to e-waste recycling. Chandani Chowk, in the heart of the city, is also one of hotspots where manual dismantling is done along the roadside with no precautions taken against the possible hazards.

A joint report, based on this study, will focus on these aspects in detail and will try to initiate awareness and action regarding the growing concern of e-waste among various stakeholders at the national level.

Mumbai study

As we all know that the metropolitan area of Mumbai is the economic hub of nation and have been a big generator of e-waste. A comprehensive case study is being undertaken in Mumbai by Toxics Link to investigate and assess the management, handling practices, trade and imports of e-waste, using computer as the indicator. The finding of the study would help us to understand the framework of Mumbai e-waste recycling system.

The studies are focused on assessing e-waste in India in the broad framework of Extended Producer Responsibility (EPR) and the policies to be made for addressing the issue.

*By **Priti Mahesh** and **Kishore Wankhade***

TOXICS LINK launched an e-waste awareness campaign targetted at school-going and college students. Titled 'Don't trash it, Rehash it' the campaign urges students to recycle, reuse and reduce electronic waste by thinking up imaginative ways of dealing with it. A flyer titled 'E-waste is scaree waste' introduces students to the hazards of electronic waste and the possible methods of countering the problem. *Write in to us for more information.*

NEWS

NATIONAL NEWS

Mumbai only metro sans BMW waste treatment plant

The plan was to have three, but Mumbai does not have a single bio-medical waste treatment plant.

One unit is expected to commence at Deonar, but the Maharashtra Pollution Control Board (MPCB) and the Brihanmumbai Municipal Corporation (BMC) are busy passing the buck. It has been 16 months since the MPCB had asked the BMC to commission a bio-medical waste treatment plant on an urgent basis. One year later, nothing has moved. In between, the BMC has reduced the number of plants from three to one showing non-availability of land.

Source: Hindustan Times

Bottled water companies to face strict restrictions

To provide safeguards against hazards of over exploitation, the Central Government is planning a clear-cut policy on the ownership of groundwater and its pricing.

As of now, no Act or law exists to govern the use or misuse of the groundwater in the country, but some state governments have separate laws. The soft drink industry, which is known to extract huge quantities of groundwater, in many cases does not even bother to recharge as promised before setting up the plants.

Source: The Tribune

Tamil farmers up in arms against genetic rice trials

FARMERS IN TAMIL NADU have launched a campaign against the field trials of genetically engineered (GE) crops, including rice, stating that these crops are full of toxins and pose a threat to humans and livestock, besides preventing bio-diversity and compromising India's food security.

Following reports of field trials being conducted with the permission of the Department of Bio-technology in select locations of the State, farmers and activists working under 'Tamil Nadu Velaan Kappu Kuzhu' (Tamil Nadu Agriculture Protection Committee) raided a farmland at Alandurai and uprooted GE rice crops. However, the government has justified the GE crop trial. "Bt rice is not a threat to bio-diversity, and Bt genes can be introduced in any variety or hybrid that is popularly cultivated," said the officials.

Source: The Pioneer

INTERNATIONAL NEWS

Ten most polluted places on the planet

A Russian city where chemical weapons were once manufactured and a town in Zambia's copper mining belt are among the 10 most polluted places on earth. The list was compiled by the Blacksmith Institute, which said the world's pollution is sickening up to one billion people.

Environmental toxins in these towns put residents at risk of being poisoned, developing cancers and lung infections and having mentally retarded children. In Dzerzhinsk, Russia, a former Cold War-era centre for making chemical weapons, including sarin and mustard gas, the average life expectancy is 42 for men and 47 for women.

Blacksmith Director Richard Fuller said environmental problems cause up to 20 percent of deaths in developing countries. The group researched 300 sites to come up with its list. The sites were not ranked because health records in some developing countries were not available.

Source: www.planetark.com

Leading brands flunk toxic test

Apple, Lenovo and Motorola have all flunked a new Greenpeace scorecard that compares the amount of toxic waste contained in phones and computers sold by manufacturers.

"Only Dell and Nokia scraped a barely respectable score while Apple, Motorola and Lenovo flunked the test to finish bottom of the class," said Greenpeace. The growing appetite for the latest electronic gadgets means that the volume of toxic e-waste – made up of dangerous metals and plastics – is on the rise, which are mostly being dumped in developing countries.

Source: www.theage.com.au

World hits sustainable resource 'overshoot'

The world went into the ecological red on October 9, 2006 – meaning that for the rest of the year mankind will be living beyond its environmental means. Ecological Debt Day or Overshoot Day, measures the point at which the consumption of resources exceeds the ability of the planet to replace them and it is getting earlier every year.

Calculating the rate of resource consumption, the New Economics Foundation (NEF) said humanity first went into ecological debt on December 19, 1987.

Source: www.enn.com

EVENTS

Regional workshop at Jaipur

Toxics Link, in collaboration with Centre for Development Communications (CDC), organised a workshop on bio-medical and municipal waste management in Jaipur on September 13-14, 2006. The workshop covered the three states of Rajasthan, Punjab and Haryana and witnessed a participation of 50 individuals representing government, NGOs, professionals and practitioners.

Day 1: Bio-medical waste management

The keynote address was delivered by Dr Lalit Mehra, Chairman of Rajasthan Pollution Control Board. Dr Mehra stressed on the public-private partnership for effective management citing instances from his recent visit to Thailand. He added that the Government of Rajasthan plans to have as many as 11 common facilities for disposal of bio-medical waste and three of them are already operational in Jaipur, Ajmer and Udaipur.

Pollution Control Boards of Rajasthan, Haryana and Punjab made presentations on the current status of bio-medical waste management in their states. The theme that emerged from several presentations was of segregation. All the participants stressed that segragation should be made mandatory and the service providers should not pick the waste if it is not segregated.

Vivek Agarwal, Director, Centre for Development Communication, said that though legislations for handling bio-medical and municipal solid waste management exist, the progress on the ground has been slow. Dr. D B Acharya, in his presentation on the use of plastic in healthcare, pointed out that in most cases plastics are burnt behind the hospital premises due to the lack of facilities to manage them.

Day 2: Municipal solid waste management

The second day was dedicated to municipal solid waste management. The key note address of the day was delivered by Shri Bhaskar Sawant, CEO, Jaipur Municipality Corporation. He informed the audience that 230 containers of 2.5 tonnes were placed in the city and collection is done using partially covered trucks and tractors. He also stressed on collection of food waste separately owing to its faster decay process.

The keynote was followed by two technical sessions and group discussions. The discussion concluded with the suggestion that more proactive role of Pollution Control Board is necessary for the better management of waste. The NGOs can facilitate the process depending on the availability of land and other resources. The two-day workshop concluded with the film show by CDC on their work in the city of Nagpur in partnership with municipality.

Ravi Agarwal addressing the delegates at the conference in Jaipur.

Students for Right to Information Act

As part of the Traveling Public Lecture Series on Environment and Health conducted by Toxics Link, a lecture was held in association with Indian Institute of Mass Communication titled 'The Right to Information Act - A still-born?' on September 15, 2006.

The eminent panelists were Magsasay Award Winner for Public Service, Arvind Kejriwal and eminent activist and rights based law practitioner, Prashant Bhushan. Students from journalism and advertising and public relations attended the lecture. To start the session the students made an animated presentation on Right to Information Act and how it has made a positive change to citizens' lives.

Shri Kejriwal encouraged students to file as many RTI queries as possible to strengthen the movement.

*By **Pragya Majumder***

SAICM Africa meeting held

Following the call in the Overarching Policy Strategy of the Strategic Approach to International Chemicals Management (SAICM) and resolution of the International Conference on Chemicals Management (ICCM), that implementation efforts on SAICM should be undertaken through regional meetings, the SAICM Secretariat, in collaboration with the Egyptian Environmental Affairs Authority, organised an African Regional Meeting on the SAICM in Cairo, Egypt, from September 11-14, 2006.

The regional meeting provided a forum for representatives of African governments, regional and international NGOs, intergovernmental organisations, observers and other regional stakeholders to discuss strategic priorities, share technical experience and exchange information crucial to the region's efforts to implement SAICM.

The meeting was attended by over 120 participants bringing together representatives from 38 African governments, four SAICM regional focal points, five intergovernmental organisations, 18 non-governmental organisations and a large number of observers and stakeholders.

*By **Upasana Chaudhury***

PROFILE

Vimarsh, Uttaranchal

Vimarsh was founded by a group of committed social workers in 1999. Vimarsh literally means 'discussion'. It values the tenet of experiential learning and attempts to enable people to identify and understand the various processes and structures that decisively affect their daily lives through discussion and sharing of ideas and prepare them for collective struggle.

The organisation has been working to encourage decision-making, leadership development, participation and capacity building of the community so that it may intervene meaningfully in the local governance. This would help to strengthen the existing system that perpetuates exploitation and discrimination. The vision of the organisation is to create a world where every exploited and deprived individual may find social, economic, political and cultural security.

With the support from Environmental Equity and Justice Partnership (EEJP), Vimarsh, in April 2006, initiated an activity titled 'Community-based Management of Water Resources: Perspective and Operational Strategies for the future'. This is being currently implemented in 10 villages of Bhimtal block, district Nainital, Uttaranchal.

The activity aims at mobilising the local community in renovating and restoring their traditional water harvesting structures along with their catchments and defining rules for use of such structures and the catchments with active involvement of the Gram Panchayats.

The effort will also help to mobilise public opinion at district level to oppose State Government's move to privatise water with an intention to put water out of the ambit of social goods. Vimarsh aims to forge alliances with like-minded groups at the state and national level to influence the government to formulate a pro-people water policy.

The project includes both, bottom-up and top-down approach. It tends to connect the various scattered aspects of water management at policy and institutional levels in a wider spectrum by exploration of the micro-macro linkages.

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RESOURCES

PUBLICATIONS

IMMERSION.EMERGENCE

Author: Ravi Agarwal
Publisher: Ravi Agarwal
Publishing Date: 2006

Immersion.Emergence is a photo-book on the Yamuna based on a personalised account of Ravi Agarwal's engagement with the river between 2004-2006, through colour photographs and prose.

It poetically captures the immense transformation of the 'timeless' river and those who live around it, as the city of Delhi seeks to join a new globalised modernity. Notable is the attempt by the author to capture how the banks of the river tell a story of the people who have had to and perhaps will continue to pay the price of Delhi's urban cannibalism.

SUSTAINABLE SOLID WASTE MANAGEMENT

Author: Urvashi Dhamija
Publisher: Academic Foundation
Publishing Date: 2006

A comprehensive study into Delhi's tryst with the issue of solid waste management in a historical and administrative perspective. Through well-grounded research, the book stresses on the need for improving the solid waste management scenario in Delhi, while focusing on policy, institutional and governance reforms. It also highlights difficulties involved, including the co-ordination of the municipality and central government authorities, thus offering possible solutions by making the process more participatory and technically sound. Innovations, have also been cited for out-of-box models that work in real-life situations. Urvashi Dhamija, is a professor of Political Science at the University of Delhi.

FILMS

1000 DAYS AND A DREAM

Duration: 75 minutes
Language: English
Director: P Baburaj and C Saratchandran

The film 1000 Days and a Dream documents the poignant moments in the four and a half years of anti-Coca Cola struggle in Plachimada, Kerala. The film captures the spirit of the struggle, traces its history and discusses several issues raised by the struggle. The film shares the dreams and sorrows of some of the active participants in the struggle for years.

POINT CALIMERE – LITTLE KINGDOM

Duration: 25 minutes
Language: English
Director: Shekar Dattatri

Point Calimere is a unique sanctuary by the sea in Tamil Nadu, famous for its herds of blackbuck and flocks of flamingos. It is also known for its feral ponies, and an 18 square kilometre patch of dry evergreen forest full of medicinal plants. In 2002 the swamps around Point Calimere were declared a

Ramsar Site, a designation given to wetlands of international significance. Over a hundred species of migratory water birds visit these swamps in winter, but over the years their populations have been declining. Point Calimere – Little Kingdom offers a glimpse into this remarkable ecosystem and the problems that confront it.

MOUNTAINS IN THE MIST

Duration: 40 minutes
Language: English
Director: Alec Wohlgroth

Cloud forests are a rare eco-system covering only 20 per cent of the world's tropical forest. These forests are treasure houses of bio-diversity and water resources. But sadly, the cloud forests are also one of the most threatened forest species in the world. The film 'Mountains in the Mist' shows the forest protection works in the cloud forests of Costa Rica for saving this exclusive resource for future generations. The Swiss Grammy Award winner and harp musician Andreas Vollenweider offered his music for a unique soundtrack of the film.

For more information on any resource mentioned here, contact info@toxicslink.org

TOXICS ALERT
An environment news bulletin

Visit http://enews.toxicslink.org, for our monthly e-newsletter on environment related news, policy level interventions and events on toxicity and its management. You can also subscribe to it to receive it updates via e-mail.

etoxics group

Toxics Link coordinates an electronic discussion group for sharing and disseminating information on toxic wastes and its management. If you would like to join the group, please e-mail us at ***info@toxicslink.org***

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