



Silicosis is rampant in India but still least effort is taken to control the disease. Pathetically neither any state governments nor the central government has any data of silicosis victims till recently. After constant interventions from the NGOs, National Human Rights Commission and later the Supreme Court government has started a countrywide survey to identify the Silicosis victims. This issue of TD tries to present an overview of Silicosis scenario in India.

Silicosis in India: A national challenge

It was the unusual events of death drew the attention of Jhabua district authorities to the tribal dominated areas of Alirajpur and Kukshi. The poor tribals knew only one thing that they are dying due to some unknown disease. Further enquiries by the district administration slowly found a link to the deaths with stone crushing units in Gujarat. The villain was surfaced. It was Silicosis, which has been killing the poor tribals on a daily basis. The tribals from this region have been usually hired for a daily wage of Rs 50-60 by the stone crushing and mining factories in Gujarat. Within

7-10 months since the commencement of work they would be contacted with Silicosis and soon dumped back by the employers. There they would succumb to the disease within 2-3 years. In India Silicosis is rampant as silica related occupations come just next to agriculture as a source of income. The number of people employed in such legal and illegal industries may come to millions. Such industries are thriving in Northern and Northwestern states of the country. The poor tribals and dalits who know nothing about the labour rights and

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Silicosis: Getting attention at last?

It gives me great pleasure to send out this issue of Toxics Dispatch which presents a brief account of the dreaded killer disease Silicosis, an occupational disorder affecting most marginalized and vulnerable communities and killing them silently. This is rampant among workers engaged in mining, stone cutting, glass, ceramic, quartz industries wherein the lung functions are severely impacted due to inhalation of silica dust. The symptoms are similar to other lung diseases but the disease is fatal and painful with no known cure being available. Most workers affected with silicosis are known to have a life expectancy of around 40 years. But still no concrete data is available on the same. Despite having legislation on occupational health the country has failed in its implementation leading to deaths of large number of poor workers across the country, yet again highlighting the issue of governance.. It has taken immense effort on part of many NGOs working on the issue of occupation health and safety to campaign on silicosis and seek attention of the National Human Rights Commission in event of failure of other agencies. The approach of several state governments in acknowledging the severity of the diseases and responding to questions raised by the NHRC surprises me no less. The responses are merely bureaucratic devoid of sensitivity and at best with an intention to save their own skin.

The issue of occupational safety of workers has for long been a neglected or low priority issue with very little awareness or information being available on the issue. The issue of technical expertise also being minimal does not help the situation. The lack of government's will to invest and upgrade such skill sets being one of the main factors contributing to the present day scenario. Interestingly the issue of occupational health crosses many boundaries today and new kinds of impacts are being observed among white-collar workers too. It is time we invested more in our people and took concrete steps to eradicate such dangerous diseases from the country.

Satish Sinha

Associate Director

Toxics Link

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health hazards in working such industries are a safe bet for the employers. Even doctors fail to diagnose Silicosis and often mistake it as Tuberculosis, which is common among the malnourished population. "I don't know why doctors fail to diagnose the disease. But often they prescribe medicines for Tuberculosis. Those medicines will never cure them instead create more complications. Because of this even hospitals lack any data of Silicosis victims," says S A Azad of People's Rights and Social Research Centre (Prasar) which works for rehabilitation and compensation for silicosis victims for more than a decade.

What is Silicosis?

Silicosis is an oldest occupational disease and it can be traced back to the prehistoric time. It is a form of Pneumoconiosis, a group of disease caused by exposure to dust. It is rampant in mining, stone cutting, glass, ceramic, iron and steel foundries, railroad and shipping industries. Though it is the most common and extensively studied disease, even today it continues to be the deadliest occupational disease not only in developing countries like India but in industrialised nations too. In developed nations prevention and rehabilitation measures must be in full swing. "But In India, Azad puts in, despite having a proper legislation to deal with occupational health hazards it miserably fails at implementation level. For proper implementation we need fresh guidelines. We are working for that."

There is no known treatment for Silicosis. Exposure to large amount of Silica can be unnoticed as silica is odourless and colourless. Initially it causes no irritation. Gradually the symptoms would start appear. Initial symptom is shortness of breath, which gradually increases sometimes would be accompanied by cough. In the second stage symptoms would be established and the victim may experience weight loss and severe fatigue. The final stage is painful. The victim can't sleep and blood would start appear in sputum. Silicosis victim has to face such slow and painful death.

Silicosis: Indian scenario

Mining and Metallurgy were practiced in India much earlier than that in Europe. Some medical reports from pre- independence India mentions that first case of silicosis was reported among the gold miners at Kolar in Karnataka in 1940's. Exposure to Silica can happen to any industries related with stone cutting and glass cutting. But certain occupations like slate pencil industry and agate-grinding industry, which carries high risk of silicosis, is particular to India. Silicosis is prevalent in almost all the state, but Madhyapradesh is the worst affected. In the last three-year more 400 people died of Silicosis in Jhabua district of the state. Another 1200 are seriously ill. The victims are usually in the age group of 15-30. As these employees are not registered, employers would have no accountability to them. The illiterate tribals can do nothing but to wait for death. Even when these workers are entitled for rehabilitation and compensation under section 85 of Factories Act , nobody is interested to get them these benefits.

Legal battle

The potential health hazard from Silicosis has been known for long time and hence many state governments have legislation to deal with the occurrence of the disease. Unfortunately, neither the state governments nor the central government has any data of Silicosis victims. On the basis of a coal mining report, silicosis was first made noticeable under the Factories Act. Despite having legislation the victims never get any aid neither from the employers nor from the government. Here comes S A Azad and his organisation called PRASAR. Azad's Public Interest Litigation in the Supreme Court on the issue drew a lot of attention. Even National human Rights Commission (NHRC) took interest in the issue. In its PIL PRASAR asked for identification, rehabilitation and treatment of the silicosis victims in the Lalkuan area of Delhi. Soon Azad's PIL turned out to be a wake up call. The NHRC later became a co petitioner with PRASAR and it formed a task force to identify silicosis victims in the country. The task force would check whether we have adequate law to protect people

falling prey to the deadly disease. "We have laws but we fail at the implementation level. The poor people who have to work in mining and crushing units without any safety measures have no idea about silicosis and it is up to the employers to ensure a risk free working atmosphere," Azad points out.

If Section 85 were put into effect then all workers, regardless of how many they are in a mining unit, would be eligible to provident fund (PF) and ESI benefits. So far, the law said only if a company employed more than 20 people, workers would be eligible for ESI and PF. The NHRC also said that India should ratify the ILO convention on occupational health.

In a national workshop organised by various government bodies in Mumbai in December 2007, for the first time a decision was taken to conduct surveys to get a clear data of Silicosis victims and those who are working in mining and quarrying and related sectors. Three different committees were formed to collect the data of workers in the unorganised sector, where they work and how many are working in registered industries. The surveys would be conducted by

the union labour ministry and the department of labour in the states.

Prevention of Silicosis

Silicosis is non-curable but it can be prevented by avoiding inhalation of Silica. The disease is prevalent in unorganised sector hence the prevention measures should have a focus on that sector. Creating awareness about the health risks and possible preventive measures among workers is one of the important things. "If the employers can introduce wet drilling and grinding we can considerably reduce the occurrence of the disease. Using exhausters, masks and gloves can be in the later stage," says Azad.

Some of the state governments have started the awareness programmes. In Madhya Pradesh and Jharkhand local administration with the help of NGOs hold awareness programmes and advise the tribals against going to work in mines and grinding units in Gujarat. Certain mechanism needs to be in place for addressing compensation issues and rehabilitation of affected workers.

Bindu Milton

FEATURES

The incinerator menace

It took several years and many survey documents to bring down the number of incinerators in the capital. The hospital administrators and the government agencies were first convinced that these machines never worked at the desired temperature ranges and thus spewed out not just dangerous acid gases but very lethal carcinogens called dioxins and furans. The next issue was the economic fallout of running them at individual locations. Slowly Delhi switched over to decentralised system of waste management and centralised incineration. Simultaneous to the shut down of incinerators in the capital there were new guidelines promulgated for incinerators, which not only formulated stricter Pollution control norms but also limited on-site incinerators.

But the learning, it seems did not move beyond Delhi. Frequently, there are reports of hospitals relying on incinerators for their



waste management. On site incinerators continue to be installed in the country. The Air Pollution Control Devices requirement in new incinerators make it very expensive to install these machines. But blatant violation

of rules and guidelines continue till date. It is natural for a hospital to invest tens of lakhs in a diagnostic machine rather than an incinerator for handling waste. Thus what are installed on-site in hospitals, are machines, which cannot meet the regulations.

Not all cities have good public awareness, active media and public interest groups. But shouldn't work done in a few states act like a good reference guide for others. Why should the public money and health budgets be used to buy additional burden on the public health?

The last national compilation on the status of Bio-medical waste management in the country done in 2005 by Central Pollution Control Board reveals that the country has around 539 incinerators out of which 229 are without the Air Pollution Control Devices (APCD) and 102 are single chambered incinerators.

A 200 bedded hospital for instance if buys an incinerator of 5kg/hr, a double chambered incinerator could cost it Rs. 10 lakhs and the APCDs and chimneys together would cost another ten lakhs. Daily

diesel requirement would make it very expensive for the hospital to run the machine.

There is a provision of special approval in case an onsite incinerator is a dire necessity, but this clause should not be used too often so as to lose its significance. On-site incinerators should not be encouraged within a specified range of centralised facilities (now around 170 in the entire country).

Its time that we fight together for our right to safe environment and practice our duties towards it. Why should positive changes not percolate down to the grass-roots? Its time that we fight any new incinerator installation in any state in the country and pressurise the regulating authorities to put a moratorium on non-complying machines.

Anu garwal

Thermal Insulation- A Key to Making Buildings Green

Buildings are responsible for more than half of harmful greenhouse gas emissions in most major cities of the world. Large organizations across the globe today are working on programs that bring together banks, energy services companies, cities, and building owners to perform energy efficiency retrofits that guarantee energy and cost-savings.

A Green Building is one that is environmentally responsible, profitable and a healthy place to live and work. It ensures that waste is minimized at every stage during the construction and operation of the building, resulting in low costs. Green Building applies to both existing and new constructions, from a simple building space to large development projects. These buildings cost 3-8 percent more than conventional buildings. However, the higher cost is recovered within two-three years by the handsome savings in maintenance costs, making the concept extremely popular. There is a huge demand for green building materials and equipment like high performance glass, wall and roof insulation, low VOC paints, adhesives, sealants, CRI (Carpet and Rug Institute)-certified carpets, specialized wood, roofing material, fly ash blocks, eco-friendly chemical waterless urinals,



high performance chillers, carbon-dioxide sensors, root zone treatment plants, wind towers, etc.

Today’s modern buildings are no doubt a marvel in terms of architecture and technology, but have also led to an adverse impact on the environment. The new-age buildings account for 12% of water usage, 30% of green house gas (GHG) emissions, 65% of waste output and 70% of electrical consumption. In contrast, ‘Green’ buildings are eco friendly and can contribute towards a cleaner environment by reducing the amount of energy used to light, heat, cool and operate buildings and GHG and other harmful emissions. Recognizing the need for green buildings, several individuals as well as organizations are making efforts towards increasing the awareness of their importance and the challenges that need to be tackled.

Green building brings together a vast array of practices and techniques to reduce and ultimately eliminate the impacts of buildings on the environment and human health. It often emphasizes taking advantage of Renewable resources.

One such technique is **Thermal Insulation** of buildings that has become one of the key practices across the globe to effectively manage heat incidence in the buildings. The term ‘thermal insulation’ is used to indicate the techniques by which transmission of heat through the building is reduced.

Besides enormous savings in electricity cost, an external thermal insulation enhances in a significant way the comfort in a building, provides a healthier environment and helps in minimizing damage to buildings. The effectiveness of thermal insulation is directly proportional to the type of material and its thickness, measured in terms of thermal conductivity.

With the right materials used as thermal barriers in buildings it has helped reduce energy consumptions having a deep impact on the environment as a whole. It is a very essential step towards minimizing the operating costs as well capital costs for environmental control. Moreover it is a non-toxic and environmental friendly solution.

Application of Thermal Insulation

The roofs of buildings receive the thrust of heat during the day. The construction practices adopted in the country mainly involve reinforced cement concrete (RCC) as the roofing element which is noted for its high thermal conductivity. If the roof can be protected from heat incidence, the conditions down below can be controlled to a great extent. When buildings are air-conditioned, the purpose of the system is to maintain a lower temperature than ambient inside the building. If the roof is exposed to solar heat, it will input continuous heat inside the building, which in turn will add to the A.C. machinery load.

Thermal barrier provided in buildings are generally installed in two ways - Over deck and under deck Insulation:

With over-deck thermal insulation, a thermal barrier or insulation is provided over the RCC so that the heat of the sun is not allowed to touch the RCC slab of the roof at all. In this way we can preserve the RCC from getting heated up. Once the RCC is heated up, there is no other way for the heat to escape other than inside the building.

The other method is using thermal insulation under the roof by using methods like false ceiling or extruded polystyrene. However, the effectiveness of under deck insulation is always a question as since the

thermal barrier is provided under the RCC, some heat passes through it and heats up the ambience of the room. This decreases the comfort level of the room and if the building is centrally air-conditioned, increases the AC load. Hence it can safely be concluded that over deck insulation has its own advantages against under deck.

Choosing the right material

The over deck insulation material should have adequate compression resistance, low water absorption, resistance to high ambient temperature and low thermal conductivity which can be measured in terms of U values and R values. In over deck roof insulation Exfoliated Vermiculite remains one of the

most trusted thermal barriers. Vermiculite loose fill masonry insulation is an inert, inorganic, lightweight granular material that can be treated for water repellency. It is non-flammable, non-combustible, economical, and does not emit odors, toxic fumes, or attract vermin. It will not deteriorate or decompose through its lifetime and since it is simply installed it is one of the easiest means of providing a barrier against the transmission of heat, sound, and moisture.

It is thus important that the key persons in the field of real estate and construction industry should adopt such practices and techniques and appreciate the advantages of green buildings and its benefits.

Ragini Kumar Taneja

UPDATES

PUBLIC LECTURE

Enthusiastic participation at School of Environmental Studies

The Health and Environmental Public lecture, an initiative by Toxics Link to spread awareness about issues of environmental concern got a very enthusiastic response from students of School of Environmental Studies (SES) in Delhi University. The lecture on 'Hazardous Waste' organised by Toxics Link in collaboration with School of Environmental Studies, held on 28th January in the campus was attended by students as well teachers of the department apart from TL members.

Dr T K Joshi, Occupational and Environmental Health Expert from Maulana Azad Medical College was the main speaker. Dr Joshi, citing many of his experiences in professional life said that occupation and health is closely related. He stated that waste management is one of the most problematic and challenging environmental issues.

Earlier Priti Mahesh of Toxics Link opened the debate making a presentation on hazardous waste and the challenges India is facing to deal with it. She briefed the students about the current scenario related to Hazardous Waste Management in India. She also focused on e-waste and the laws and regulations that are being set up for the



proper handling and disposal of e-waste. "These regulations remain open ended with lots of loopholes in it, resulting in lack of self-regulation and implementation," she pointed out. She also highlighted the health hazards of the labourers who are engaged in manual handling of hazardous waste.

The students appeared so curious and were with full of questions when Dr Anu Agarwal of Toxics Link opened the debate on Bio-medical waste. Anu talked about the history of Biomedical waste. She explained the students that how biomedical waste was treated in India before 1995, Toxics Link's contribution towards setting up the guidelines on biomedical waste in the country and its subsequent follow ups for sustained interest and its

implementation. Besides, Anu also talked about the health hazards of mercury and why this needs to be eradicated.

Dr. Mihir Deb, Director, SES, DU delivered the inaugural address. He expressed his warm gratitude towards Toxics Link for collaborating with SES in organizing an event like public lecture for the young students.

Concern for the environment was very much visible among the young audience and they were keen to ask questions and get the answers. Everybody including the panelists and teachers seemed to be enjoying the interaction. Dr Joshi even commented that "the company of youth makes him feel young and energetic."

Soma Sen

Consultation Meeting on Sustainable Waste Disposal

Before adopting any waste management policy and technology options, its health, environmental and social impacts must be considered. The technological impacts ranges from pollutants, livelihoods, recycling infrastructure, to the markets, these impacts are both overt and covert.

Variety of technological options are adopted, some are in pipeline and many more will come. But if we look at the options adopted for waste management in both municipal and biomedical waste management, either the technologies are not appropriately used or appropriate technologies are not adopted. Setting up technologies does not automatically lead to waste minimization or bring in sustainable waste behaviour amongst communities or waste generators. Thus technologies inappropriately adopted or used led to failures or mismanagement.

Urban Indians produce an estimated 48 million tonnes of waste per year. It is ever growing urban problem not just because of growing population but also mismanagement owing to both systemic and technical failures. Some people see waste as a problem some perceive as a great resource. It is important to realize that waste is being wasted. Also need to minimize

generation of waste and how to make it less toxic, reducing its health and environmental impact.

For this purpose, Toxics Link organized a consultation meeting on 'Appropriate Technologies for Sustainable waste management' on 17th October 2008 in Delhi. The group discussed the issue of development of waste to energy plants under JNURM projects across the country and also focused on the issues of technologies currently adopted and on ongoing use for the treatment of waste of both types municipal and biomedical. Environmental and health concerns of these technologies, use and misuse of technologies was also a major concern of discussion.

In the first session of the meeting the emphasis was led on the technologies used for the bio medical waste management and the second session was devoted for the disposal technologies for municipal waste. The representatives from the government; World Bank, hospitals, civil societies, private agencies and consultants had a very productive discussion.

Group of people stated that as the waste being generated by the hospitals, the responsibility lies with the Health Ministry and the MoHFW needs to allocate a separate budget for the bio medical waste management especially

for Training, Common Treatment Facility (CTF) and Segregation of waste at hospital level. Emphasizing the role and responsibility the group said the doctors could play a critical role like segregation and they may raise the issue. They focused on the need of enforcement at the ground level.

Some of the major recommendations on biomedical waste management made by the group are such as: need of amendment in guidelines, proper coordination between the Ministry of Environment & Forest and the Ministry of Health, biomedical waste management in school curriculum, better enforcement agencies, separate budget allocation, the small towns also need consideration into the guidelines for improving the bio medical waste management, promoting autoclaves where the immunization waste can be in autoclaved and accreditation of the centralized facility.

Regarding the municipal waste management, the civil society group raised serious concerns on isolation of good community systems developed on waste management. The participants also said that there is a lack of fund to support such initiatives but on the other hand huge amount of money is allocated to Waste to Energy projects, which has a failed experience in the past.

Considering the health and environmental impact, the group of people expressed that in India Incineration, Pyrolysis and RDF are not suitable options and emphasis was led down on bio-methnation and composting. Group of people believed that bio-methnation and composting requires low cost in comparison to Waste to Energy, pyrolysis and RDF plant.

For an effective municipal waste management, the group recommended that there should be mixing of decentralized and centralized system, allocation of separate environmental budget by the municipality, deprived section of the society should be given opportunity to run the plants, review gaps in Municipal Solid Waste (Management & Handling) Rules, subsidy bio methanation and composting projects and incorporation of disposal mechanism in the curriculum of environmental education.

Mohammed Tariq



'3rd Quotes from the Earth' lets out rays of hope

An overview from the recently concluded environment film festival

Environment is now everybody's concern. Be it the government, civil society organisations, educational institutions and media. Unlike in the past, environmental concerns get their due especially in the recent times when issues of global warming started hitting headlines across the globe.

The recently concluded environment film festival the '3rd Quotes from the Earth' by Toxics Link reflected all the burning concerns ranging from survival to climate change and unsustainable urban development to energy efficiency, but this time with some way outs to those daunting problems.

Underlining this Ravi Agarwal, Director, Toxics Link puts in, "this time while choosing the films we noticed an underlying sentiment across selections-that of hope. Seemingly insurmountable problems, potential threats to survival often had a suggestion for 'a way out'".

Inaugurating the festival Nobel Laureate Dr. R.K. Pachauri emphasized the need to engage in large scale awareness programme. Speaking passionately on the occasion he said, "Today we need to practice only one religion and let that be the worship of Mother Earth".

As many as 20 films on five different but relevant topics of the day brought together and enlightened the audience gathered at the main auditorium of India International Centre (IIC) on December 19 and 20.

Rajiv Sharma, a resident of Mayur Vihar, who watched majority of the films screened, appreciated the efforts of Toxic Link in bringing such variety of topics together and added, "Films on pollution and pesticide also should be included."

'Inconvenient truth' by Davis Guggenheim, 'fable on climate change' by Nitin Das and Kamla and her Magic Lantern all convey the same message that it is up to us to save the planet. Films like 'Kamla and her Magic Lantern'; 'In their Elements' and 'The Future Beneath Our Feet' really announce that we need to harness geo thermal energy more efficiently to meet our energy requirements. What we need is a mind for safer and better options as well as State support.

Kamala and her magic Lantern by Naazish Hussaini is something more than that of the story of the first bare foot solar engineer of the country. In fact it is the story of woman empowerment too.

Concern over food security, unsustainable mining in the fragile ecosystems of the mountains for aluminium and the pathetic plight of slate miners in a mountain village east of Katmandu echoed the theme of hunger and survival very well. Despite working hard, millions across the world are struggling to have a meal a day.

The films on Urban Scapes though dealt with comparatively lesser concerns, it disclosed certain facts which majority of us misses in the urban life like the battle in the skies between small birds and big birds for food and habitat. Nutan Manmohan's 'Beyond the Mirage' displays it all. Krishnedu Bose's 'Work in Progress' puts the government and the urban planners on the defensive. The film debates the never ending construction work in



Delhi and its long term as well as short-term environmental impact on the people of this city.

Pure drinking water is now nothing less than a dream for millions across the world. When rivers are sold and water is commercialised, even drinking water is becoming an asset of the privileged. 'Village of Dust and City of water by Sanjay Barnela exactly portrays the ground realities.

The film shows the contrasting images of artificial rains for the rich and the village women who walk kilometers to get potable drinking water. 'The Rising Wave' and 'Marble Mutton With Slurry Water' all portray the plights of rural population who has to sacrifice their right for drinking water either for big projects or for industry without getting anything in return.

While all the films attracted people from various walks of life, Wall-E by Andrew Stanton remained the crowd puller. The robot, cleaning the earth of its junk won accolades from all.

"I have now more topics to discuss with my students. I am so happy to see a variety of issues under the same roof," remarked Indu Sidwani, head of Chemistry department Gargi College, New Delhi.

The screenings were followed by panel discussions. Alexander Von Hildebrande, Environmental Health, WHO and Madeline Knox, Second Secretary, Climate Change, British High Commission, Pankaj H Gupta, director of "Apna Aloo Bazaar Becha" and Paranjay Guha Thakurata, journalist turned film maker and director of 'Hot as Hell' were in the panel discussion for the second day.

Bindu Milton

INTERVIEW

Dipesh Kharel is a Kathmandu based documentary film maker. His film '**A life with Slate**' was screened in the Toxics Link film festival '**Quotes from the earth**' in last December. **A Life with slate** is a film, which is done differently from the conventional style. **The film has no background narration.** Dipesh says he made this film using '**participant Observation method**'. He talks to **Bindu Milton** about his experiments and experiences in documentary film production

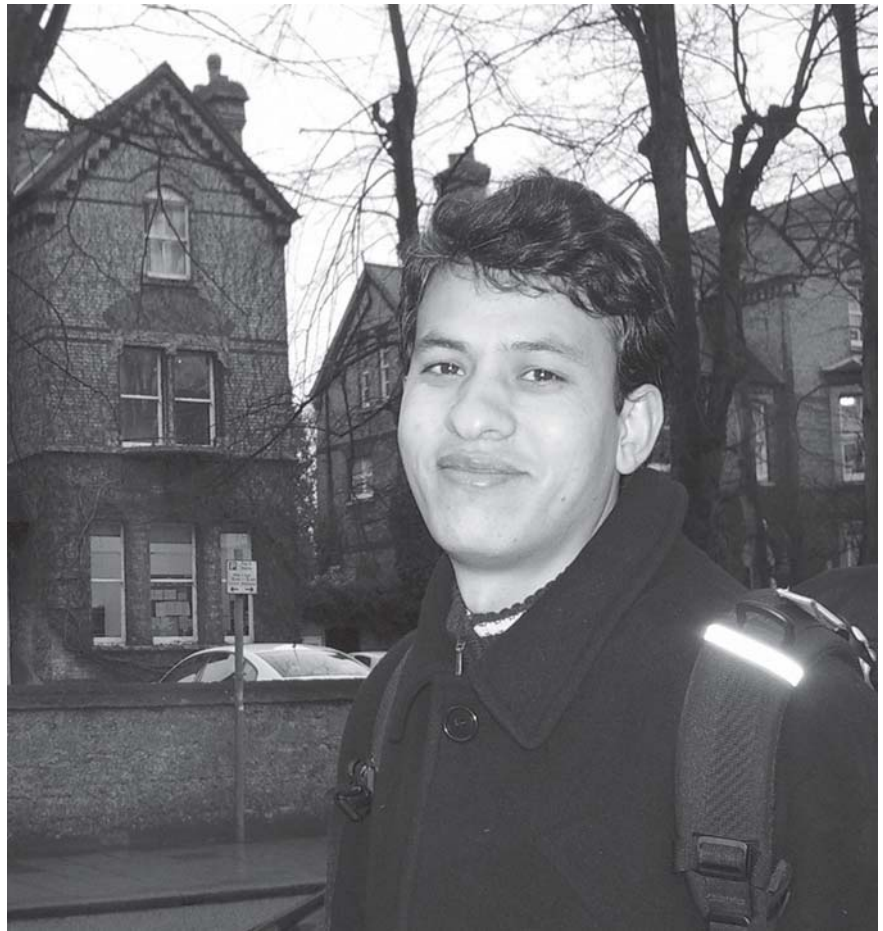
• **Could you explain briefly how you came to the world of documentary film production?**

I came to documentary film production after I was inspired by my uncle's work, who is a TV producer and documentary film director in Nepal. I have learned about camera, editing and the documentary film production process by involving in my uncle's film project. My educational background is environmental engineering but after I involved in documentary film project I found more interesting to be a documentary filmmaker. I feel pleasantly cool to be with people, talk with them and record their activities and bring it to the other people who are living in different context.

• **Are you making films only on environment? Are there films on any other topics or Issues?**

I am making film not only on environment. I have already produced several documentary films about the gender issues, sanitation, health and socio- cultural life of people. But, it is true that I am much interested to make films on environment. It could be because of my education background. And there is always interrelationship between people and nature in their daily life. So, if we are making film about people and their daily life, their environment also coming together while we are filming.

• **The film, which was screened in the festival 'A life with Slate' is really distinct from other films in many**



ways. It is remarkable mainly because it has no background narration. What prompted you to move away from the conventional style of filmmaking?

Yes, you are right. "A life with slate" is different from the conventional style of documentary films. Because it follows a different production methods. In my film, I used **participant observation** method with using camera as a research tool. After I studied MPhil degree about visual anthropology and documentary film at University of Tromsø, in Norway I have learned **participant observation** method to make a realistic documentary film, also called ethnographic film. During my study, I have gained knowledge; how to see, feel, taste, touch and make sense of society and everyday life of people during film making and fieldwork. I did my fieldwork, filming and editing based on the knowledge, which I have gained through my study that made me able to produce this kind of observational film called "ethnographic film". I did not keep the narration in my film because I

wanted to have subjective voice (characters voice) in my film; how they define their world is based on their own understanding. As a documentary filmmaker, my role is not to discover new things and make a new story from the particular community and people and keep their visual in a sentimental narration. This will be out of our profession and ethics. Documentary filmmaker has right only to record footages of incidences in a community and organizes these footages in editing system for building the story without changing the originality and reality. Before my study in Norway, I used to make documentary with the background narration. If I watch those films now, I will find lot of unrealistic things and most of the story in narration is from me, not from the characters. According to me those films with background narration could be a TV documentary but not a documentary film. To be a documentary film, there should be reality, subjective voice, and story from the characters. And as a filmmaker, we have to be a member of that society about which we are going to make the film and have to

involve in their daily life to bring their real story. I did it for 'A life with Slate'. I think "A life with slate" is the first film in Nepal, which was produced, in a different style.

• **How you were attracted to slate workers and their life?**

I met a group of slate porters at my home in Sunkhani Village, Dolakha District, Nepal some 17 years ago. It was unexpected and quite surprising for me to see them at my home with their heavy load of slate. At first, my eyes settled on the beautiful slate carried on the porters' backs with a head strap. Then, the situation gave me a fascinating glimpse of the slate porters lives. They looked different, significantly different, from the people of my village. Of course, their language was funny to me, but the funniest thing was their behavior and appearance. They looked poor and dirty. Their clothes were covered by dirt and almost worn out. I was quite shocked with the situation but I kept them at corner of my mind. After that, I met them in several time on my way, when I used to visit my hometown. I used to talk with them about their profession, income, daily life, slate mining and their village. They are very opened to me and shared their life story. I was attracted by their honesty and hardworking nature. Since then, I have cherished a desire to go to their village and see their slate mines and mining.

• **Could you share some of your experiences while shooting in such tough terrains?**

Oh, It was really unforgettable experience in my life. I went there with my wife Asami Saito. She was also involved in research and editing works of the film. She is a Japanese. Most of the things in that village were new and quit shocking to her. We stayed there about two months in our main actor's home where we shared their food and life. It was really cool to watch those fantastic landscape and mountains but equally tough to walk and follow the daily life of slate miners. The heartbeat used to be on the peak when coming up and down in the mining site. In each situation, probability of death is there. But the mental pressure due to the political situation in Nepal was much more tougher than the physical pains. The place was like the base camp of the Maoist army force. Anytime there could be attacked by the government army. Each day, we had to report our work to the Maoist village commander. They were daunting us that we came there to take their information. And what happened one day, few Maoists came to us and told us to leave the village and they captured our equipments. That was one of the sad days in our life. All the Thami people around us cried and cried till late night. Next day, we had to leave the village. But great things we were able to bring the recorded footages safely.

• **You have copied their real life without disturbing their routines. How was it possible?**

It was my main aim to record the reality and make a completely observational documentary. For that I followed the scientific methods in each step of my fieldwork.

From my presentation, introduction with those people, selections of the characters and I involved in their every day life too; in each step I tried to be member of that society. Slowly, I got in to the miner's group. I learned the slate mining and how to carry it myself. Sometimes I used to support them, if sometime they needed my help. They also knew about the camera and its function. Sometimes, they used to ask me to use the camera. So, I became so closer with those people, and then I could be able to get near to the reality.

• **Does the film depict the rural life in Nepal in general or is it particular to the slate workers?**

Not really. The social economic level and socio-political situation could be similar with other village but their social cultural practices are completely different from other rural villages in Nepal. They have their own way of defining their world.

• **Do the slate workers suffer any occupational diseases?**

During my fieldwork, I witnessed several accidents though not very serious. They also told me that few people also died in some accidents in the mines but they did not want to mention it. They think, if Government knows it, they will ban mining and then they will without any employment. These people often complaint of chest pain, back pain and problem in lungs. All these are related to their occupation.

• **Does it have any impact on environment?**

This is a village based slate mining industry so does not have a noticeable environmental Impact. They have been using all the local tool and instruments with their own environmental knowledge. They think slate mine is a symbol of God and God has made it. So they want to use the slate mine very properly.



• **Whether the slate workers get any government help?**

Not at all. Instead, each mine owner has to pay 50 Nepali rupees to Nepal government annually. In that village, it is difficult to see any sign of the state presence. I had seen one health post without any health worker.

• **What are your new projects?**

Now, I am working on the film project "A waste miner- Scavenger" (working title) in Sisdol Sanitary Landfill Site which is

receiving 308 ton/day solid waste from Kathmandu Metropolitan city. Due to the lack of well management system of collection and segregation at transfer stations, all type of the waste (decomposable, reusable, recyclable) directly go to the Sisdol Landfill Site every-day. Each morning, more than 30 scavengers are waiting at landfill site for the garbage carrying truck coming from Kathmandu. As soon as truck will dispose the waste, there will be a crowd of scavengers for collecting the recyclable and reusable waste, which are recycled in factories in

India and Nepal. The Scavengers are working in very poor condition; they are not using anything (gloves, Mask, boots etc.) to protect from the risk associated with hazardous waste. The working condition of the scavengers and the overall situation of landfill site reflect the image of a poor dumping site rather than a "sanitary landfill site". I have already completed the preliminary research. Now, I am looking some organization to support me for the production and postproduction works.

NEWS

Himalayan nations to discuss glacial threat

With glacial lake outburst floods (GLOFs) posing a huge development challenge to the countries in the Himalayan belt, the UNDP Bureau for Crisis Prevention yesterday said it would hold a special workshop to discuss the issue.

The effort is based on the realisation that hazards in the Himalayan region were bound into a delicate relationship of cause and effect and together combined to increase risk in the entire region. Just one of the ways in which a crisis might emerge is this - an earthquake may render the glacial lake moraine (natural dam) unstable, leading to a GLOF; a GLOF quite surely renders land in its path unstable, accentuating the probability of a landslide. It may further affect downstream communities and high-value socio-economic assets, thus affecting the worth of nations.

It is to find answers to these problems that the UNDP would host a special assembly of the four affected Himalayan nations - India, Pakistan, Bhutan and Nepal. The meet would be held on January 20, 21 at Paro in Bhutan and would discuss responses on how nations could factor in GLOF risk reduction in their development projects and community level contingency plans.

Senior functionaries from India, UN, NGOs and research scientists from the four project countries as also from UK,

Switzerland and Thailand would attend the brainstorming session.

Source: ENN

Yamuna remains most polluted river

Yamuna enjoys the distinction of being the most polluted river in the country. The latest status of water quality in India 2007 released by the Central Pollution Control Board, Ministry of Environment and Forests, observes that the total coliform and faecal coliform numbers are the highest in this river.

Even at the intake point of the Warzirabad barrage, the Yamuna water does not meet the prime criteria of beneficial use and this is now true for its entire 500-km stretch up to Etawah.

The water quality at the Okhla and Nizamuddin Bridge was found to have very high amounts of bio-chemical oxygen demand (BOD) and ammonia. In fact, the Yamuna river water has been found to have deteriorated from Paonta Sahib up to Allahabad. The Hindon, Ghaggar and Satluj also have very high levels of pollution.

The highest BOD (an important pollutant indicator) was observed in the rivers Amlakhedi (522 mg/l) followed by Sabarmati (310 mg/l), Kalinadi (233 mg/l), Markanda (218 mg/l), Khan (125 mg/l) and Hindon (120 mg/l).

Yamuna followed with (93 mg/l) while the Ganga had (14 mg/l) and the Ramganga (14 mg/l) and the Gomti with (12 mg/l).

Source: The Asian Age

High levels of mercury found in fish could prove detrimental to health, according to a

new study carried out by the non-government organisation Toxics Link in association with Disha.

The survey was carried out on fish collected from Kolkata and other locations in West Bengal during 2007-08. The 264 samples spread over 56 varieties of fish and crustaceans showed that 52 samples had mercury concentration above Prevention of Food Adulteration standards (0.50 mg/kg).

The study was conducted to quantify and assess the level of mercury in fish collected and to try and arrive at a reasonable conclusion regarding the nature and extent of mercury contamination in fish.

Dr. Abhay Kumar of Toxics Link, one of the investigators of the study, said on Friday: "Mercury is one of the most dangerous environmental pollutants, both in its elemental form and in chemical combination. When mercury is released into the environment it gets transformed into methyl mercury through microbial action. The methylation of mercury is a key step in the entrance of mercury into the food chain. This methyl mercury is mercury in its most pernicious form. Methyl mercury accumulates in fish and enters the human body when the fish is eaten. The risk associated with the observed mercury concentration found in this study suggests an alarming level, given the fact that West Bengal has a large population dependent upon fish."

Combining these results with contamination levels, the study found that in an overwhelming number of cases the provisional tolerable weekly intake was exceeded.

Source: The Hindu

RESOURCES

Chasing Earthquakes

Duration : 45 minutes

Produced by : National Geographic Channel

Earthquakes have always ripped the Earth open, swallowing people and lives they built, in one swift moment – perhaps the reason why they are feared across the world. What makes them so menacing is the fact that they creep up almost like death itself with absolutely no warning, changing lives forever. Though a vague estimation or prediction of the area can be made, the exact location or time-frame when it'll strike can never be pin-pointed despite the giant leaps and breakthroughs in science.

Predicting an earthquake is perhaps one of the few things in science that is desperately sought and until that day arrives when a true-blue prediction of where, when, the magnitude and probability of it actually striking can be deciphered, many will



continue to turn towards a handful of people who believe they have the gift of predicting an earthquake. They defy conventional science but their methods have an almost scientific feel and though they might not be taken seriously by established scientists, their story deserves to be investigated and told.

Chasing Earthquakes talks to scientists who have passionately pursued and researched this topic with the quest to predict the next big disaster. Their goal is simple - 'save lives'. Chasing Earthquakes has been filmed internationally.

My Father's Garden

Duration : 50 minutes

Produced by : Miranda Productions

My Father's Garden is an engrossing, emotionally charged documentary about the use and misuse of technology on the American farm. In less than fifty years the face of agriculture has been utterly transformed by synthetic chemicals, whose power

to control the forces of nature is rivaled only by that of the atom bomb. These chemicals have also changed the farmers who have used them. This film tells the story of two such lives, different in all details, yet united by their common goal of producing good food.

My Father's Garden follows Fred's story as it unfolds through the changing seasons. The differences between organic agriculture

and conventional agribusiness are clearly demonstrated. The issues of farm history, industry, and ecology are all addressed in a simple and direct manner. Beyond the machines and methodology of food production lies another drama, that of Fred's neighbors. In sharp contrast to the robust successes of the Kirschenmanns, these family farms are slowly being erased by market forces beyond their control. The consequences of this loss are sadly witnessed, both for the men and women of the Midwest and for those of us who would eat the food they grow.

More than a cautionary tale, *My Father's Garden* is a one-hour documentary that tells a story of hope. The memories of the past serve to teach us that we do not have to repeat the mistakes of our fathers. The present is given direction through the explanation and practice of the philosophies of sustainability. Food cannot grow forever on a damaged earth, but Fred's lesson is that we can bring health and beauty back into the Garden, if we are willing to cooperate with nature's infinite intelligence. This wisdom holds the secret to our children's future.



China's Water crisis

Author : Ma Jun

Published by : East Bridge

Published in : February 2006

China's Water Crisis (*Zhongguo shui weiji*) is the most comprehensive, authoritative, and up-to-date source of information on the enormous water resource crisis confronting the People's Republic of China. The author describes in great detail the floods, water scarcity, and pollution problems existing in all seven of China's major drainage basins—large and small—and proposes workable solutions for sustainable management.

Of greatest concern to Mr. Ma is the condition of China's two major rivers,

the Yellow and the Yangzi. The very existence of the Yellow River is threatened by massive reductions in water flow caused by a variety of man-made programs while chronic soil erosion resulting from deforestation together with dam construction has led to a cycle of flood and drought in the Yangzi River basin. The same issues are reflected in China's smaller rivers. Mr. Ma documents the persistent drought conditions in the southeast, the impact of pollutants on the Tibetan plateau, the defects in China's large-scale reservoirs, steadily diminishing underground water tables, and the growing abuse of aquifers for urbanization and industrialization.



The River Runs Black: The Environmental Challenge to China's Future

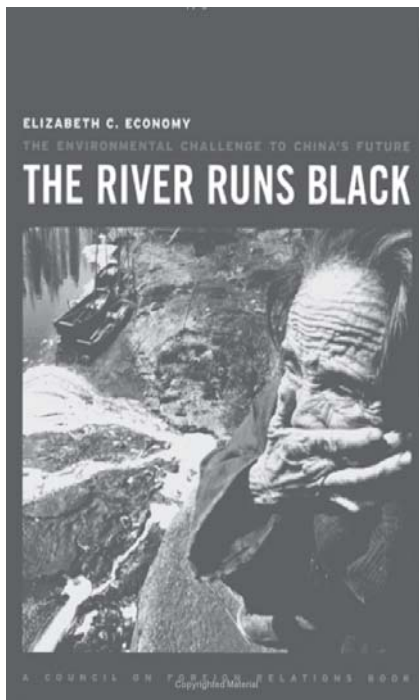
Author : Elizabeth C. Economy

Published by : Cornell University Press

Published in : February 2006

China's spectacular economic growth over the past two decades has dramatically depleted the country's natural resources and produced skyrocketing rates of pollution. Environmental degradation in China has also contributed to significant public health problems, mass migration, economic loss, and social unrest. In *The River Runs Black*, Elizabeth C. Economy examines China's growing environmental crisis and its implications for the country's future development.

Drawing on historical research, case studies, and interviews with officials,



scholars, and activists in China, Economy traces the economic and political roots of China's environmental challenge and the evolution of the leadership's response. She argues that China's current approach to environmental protection mirrors the one embraced for economic development: devolving authority to local officials, opening the door to private actors, and inviting participation from the international community, while retaining only weak central control. The result has been a patchwork of environmental protection in which a few wealthy regions with strong leaders and international ties improve their local environments, while most of the country continues to deteriorate, sometimes suffering irrevocable damage. Economy compares China's response with the experience of other societies and sketches out several possible futures for the country.

Leh model of waste management

Leh may be the first district in India to impose a strict ban on plastic but much attention has not been paid by the government to reuse as waste clothes, tins and plastic containers. Most of these wastes are dumped or burned causing more pollution. But with the efforts of People's Action Group for Inclusion and Rights (PAGIR) primarily a rights movement working for the betterment of disabled in the far regions of Leh-Ladakh, the region is

fast becoming a clean area without waste dumped around. The organisation with the help of its members reuse all possible waste including old clothes papers, containers and plastic and the attempt makes Leh's journey towards clean environment more easy.

PAGIR was formed in March 2007 with a purpose to bring disabled people to the mainstream and let them be a part of society same as the way of normal people.

Within a short span of time PAGIR took up a higher task to keep the region clean and

healthy by recycling waste and also to earn a livelihood for its members. They recycle waste like used paper, plastic bottles, cooking oil containers, tins, clothes wastes from tailor shops, egg trays and make various products for daily use. The group comprised of 20-30 members mainly make paper bags for shops and shoppers as plastic are banned in Leh. Apart from achieving this great target, the members can earn a marginal income of Rs. 300-3000 by selling these products.

Chemical Management in India

The Indian economy is growing at a fast pace and witnessed rapid industrialisation. Hence the country continues to produce and consume large amount of highly toxic, bio-accumulative and persistent chemicals. The chemical industry being one of the oldest largely caters to the domestic requirements of chemicals for various purposes.

India has over the years enacted 15 Acts and 19 Rules for chemical management. Recently India has also drafted a National Chemical Management Profile for a better chemical management in the country. The government has issued a guideline for environmentally sound management of electronic waste. Though Indian government has endorsed Strategic Approach to International Chemical Management (SAICM) in 2006 but the government is yet to come up with a concrete national action plan for SAICM implementation.

Moreover some NGOs in India are actively contributing to improve the chemical safety scenario of the country. They are mostly involved in conducting research studies, raising awareness, capacity building of target-audience enlarging and strengthening NGO networks, encouraging public participation in policy development and monitoring and implementing concrete projects on chemical safety issues.

The NGOs in India also are playing crucial role in creating data and campaigning on issues of heavy metals in products demonstrating models on sound management of biomedical, municipal and e-waste and promoting alternatives to the chemical fertilizers and pesticides. But NGOs contribution to the national chemical management profile and in other policy formulation process is limited. The government has not been very open to NGO and public participation in the process of SAICM.

Finally there are certain gaps, which need to be worked out for a better chemical management in India. These are:

- Issues of information access
- Issues of transparency
- Lack of greater public participation at policy level
- Issue of inspection and vigilance
- Absence of inter ministerial coordination committee
- Issues of implementation of rules and regulations
- Issue of resource mobilization
- Capacity building on chemical safety issues
- Sustained support to grass root NGOs
- Building partnership and networking
- Lack of coordination among the governments, industries and CSOs
- Better North-south cooperation

Piyush Mahapatra

Toxics Link-Disha study on mercury in fish released

The joint study done by Toxics Link and Disha on the alarming level of mercury in fish was released at a press conference in the capital on February 6, 2009. The study, conducted on 60 varieties of fish in West Bengal revealed shockingly high levels of mercury. This is a cause for concern among fish eaters in the capital too, considering markets in the Capital receive at least six quintals of different varieties of fish daily from West Bengal.

“We took food and drug administration (FDA) standards as a referral point for this study,” said Dr Abhay Kumar, senior programme officer with Toxics Link. According to this, the acceptable presence of mercury in fish should be 0.5 parts per million (ppm).

Mercury is a toxic heavy metal that affects the nervous system. Methyl mercury exposure in the womb, due to consumption of fish and shellfish that contain methyl mercury by the mother, can adversely affect a baby's brain and nervous system. It also affects cognitive thinking, memory, attention, language, and

fine motor and visual skills in children exposed to methyl mercury in the womb.

More dangerous is the presence of chemical methyl mercury. In all, 129 samples showed presence of this deadlier form in amounts considered dangerous,” said Ravi Agarwal, Director, and Toxics Link.

“Our study revealed mercury levels were high in several varieties of fish. In some cases they were as high as 50 per cent of the referral figure. The fish analysed include popular species such as Katla and Rohu. West Bengal's most sought after fish Hilsa was not a part of the study,” said Shantanu Chakraverti, lead Researcher of DISHA.

He added, “This study is not meant to cause alarm. Fish is one of the richest sources of protein and useful elements like Omega fatty acids. But the government certainly needs to take steps to counter environmental and industrial pollution, which is one of the major causes of mercury presence in the fish.”

Annual Eco meet held

Toxics Link had set up a stall on E-waste at the annual Eco meet organised at Pragati Maidan from December 14-17. Delhi Chief Minister Sheila Dikshit inaugurated the meet, organised by Environment and Energy Technology in collaboration with Ministry of Power, Ministry of Environ-

TL in 'Samanvay'

It was so happy to see the students from all age groups crowding in front of Toxics Link Stall put up at Salwan Public School as part of 'SAMANVAY', an environmental programme on 17 January after noon. The Programme organised to bring together like-minded people for the cause of environment was inaugurated by J K Dadoo, secretary, Environment, Delhi government.

The children crowded in front of the stall were so keen to see the posters and other materials on display and each was seen ensuring themselves that they missed no materials. 'Samanvay' is an environment conference for students of classes VII to IX to address the environmental issues. 'Samanvay 2009' offered a host of competitions and activities to sensitize the youth of today towards the global concerns for environment protection.

Toxics Link was one of the few NGOs to put up stalls in the school. The stall displayed posters on E waste, Mercury, waste management, flyers and bookmarks. The demand for E-waste posters among the future generation was really surprising. Two films-Mercury spill management and E-waste animation film by Toxics Link also were screened in the stall.

ment, Government of NCT of Delhi and Ministry of Environment and Forests.

Toxics Link stall displayed various computer parts and highlighted hazards related with various electronic equipments like mobile phones and computers.

The display was very interesting to the students from schools and colleges visiting the meet. Some of the photographs demonstrating the environmentally unsafe practices by the informal sector also drew lot of attention and concern from student as well as individuals. The animation film on E-waste 'E-waste-Flooding the city' was also very well received. The students and teachers found the display as well as the flyers very informative.

More than 3000 students visited the stall during this four-day event. There were a lot of queries from school students, including very basic like what is E-waste, how is it dangerous etc, along with some requests on organising sessions in their institutions. We had lot of individuals as well as companies also visiting our stall and inquiring on how they could recycle E-waste in a safe manner.

PROFILE

Center for Environmental Justice

Center for Environmental Justice (CEJ) is one of the most important environmental NGO, based in Colombo in Sri Lanka. The aim of CEJ is to protect the environment, to ensure equal environmental rights for all people and to promote ecological sustainability by supporting environmentally sound community activities.

At present CEJ is involved in cross cutting environmental issues ranging from sustainable agriculture, waste management, protection of coasts, persistent organic pollutants and climate change. CEJ adopts different strategies like awareness generation, doing research, publishing articles and implementing various projects at the grass root level. CEJ has also played crucial role in shaping various environmental policies at national level in Sri Lanka. Thus CEJ has made its presence felt as both grass root level organization and policy level organization.



Toxics Link as the regional hub of South Asia is working closely in association with CEJ in various chemical safety issues, towards a better environmental scenario in South Asian region. CEJ also actively participated in the International POPs Elimination Project (IPEP) and prepared the country status report on POPs. Recently Toxics Link and CEJ also forged partnership to work on lead free paint campaign in Sri Lanka. Other than these CEJ is also implementing a project on advocacy and awareness on chemical pollution in Sri Lanka

Piyush Mahapatra

Hepatitis B outbreak in Modasa - Another scary tale of medical waste management

After so many life lost to Hepatitis B in Modasa, Gujarat Pollution Control Board (GPCB) sealed five units in city on Mar 9, 2009 after investigation reports proved that they were using biomedical waste for packaging food items and medicines. Most of them were bottling units. Sealed units include Gujarat Pharma Laboratory, Ketlik Pharma, Shri Madh traders, Gujarat Remedies and Medivate laboratories.

Ironically, one of the best-adjudged states for Bio-medical waste management in the country reports Hepatitis B outbreak because of untreated medical waste.

The recent Hepatitis B outbreak in Modasa, Gujarat, is a major disaster considering that the virus causing it is blood borne and needs contact with contaminated blood for infecting a new patient. The Bio-medical Waste (Management and Handling) Rules were notified in 1998. The rules not only

enlist different waste categories and the materials that belong to the individual categories but also prescribe colour codes and detail the type of treatment technology for each of these categories. There are 10 categories in all, although the major chunk of waste fits into 3 categories (most of the other waste is location specific).

According to the CPCB annual report more than 50% of the medical waste in the country is left untreated every day and this accounts to approximately 18MT of contaminated infectious medical waste open to the common man. Flouting industry and erring hospitals apart, even the government departments are not serious. Out of the states surveyed by the Comptroller and Auditor General only 46% of the states were monitoring the implementation of Bio-medical waste management (CAG Report 2007).

What we saw in Modasa is not only shocking but also shameful. For monetary gains people have resorted to play with the lives of thousands by washing and repackaging this deadly waste. The 2009

Gujarat Hepatitis B outbreak is an epidemic infecting over 125 people and killing around 49. Several doctors were investigated and arrested after the outbreaks. The doctors were accused of re-using syringes, which had been contaminated with the virus to treat other patients. Scientists believe that a mutated virus has assumed deadly virulence that has made the correlation easier.

"It is scary to even think the threats that are posed by the 50% untreated bio-medical waste in the country. Although we have guidelines since 1998 the flouting of the same is being taken very complacently. One needs to bring the culprits to book and let not greed rule over our better judgement in managing such life threatening waste", says Satish Sinha, Associate Director, Toxics Link.

Some research papers now suggest that Hepatitis B virus (HBV), Hepatitis C Virus (HCV) and Human Immuno - Deficiency Virus (HIV) can all survive outside the human body for several weeks. WHO's Global Burden of Disease



Dumped syringes

study suggests that annually in developing countries, 32% of new Hepatitis B virus (HBV) infections (8 to 16 million), are attributable to contaminated health-care injections.

If this is the state of affair of medical waste management in Gujarat, which finds its name under the good practices category in the latest report of the Comptroller and Auditor General of India (March 2007), one can very well imagine the situation in other states, where the report found grave anomalies and stark violations of the Bio-medical waste Rules, including open dumping, open burning and reuse of medical waste.

NDTV was successful in exposing the repackaging racket in Modasa, where four large warehouses of repackaged syringes were hauled. But our memories are quite short-lived. Such incidences are not new to us, as we never ensure that they do not repeat. January 2003- two premises raided in West Delhi found more than 200 quintals of medical waste. In 2004 the High Court Expert Committee found a

similar godown in Jaipur. In 2004 again 4 truckloads of plastic disposables was hauled near Delhi, to list a few.

A study by India CLEN Program Evaluation Network (IPEN) on "Assessment of Injection Practices in India" highlighted that: approximately 3 to 6 billion injections were being administered annually and nearly a third of all injections (31.6%) carried a potential risk of spreading Blood borne Virus i.e. HBV, HCV, and/or HIV.

Based on these findings, the GOI-MOHFW made the use of Auto Disable syringes a must. The use of AD syringe solves fraction of the larger problem of improper health care waste management. As there are other disposables used in this sector with the same risk of transmitting infection. Thus the ultimate answer to the problem is segregating, treating and mutilating medical waste at source so that it cannot be reused.

"Today's revolution is tomorrow's convention", so is the case with medical waste management. Segregation, dis-infection and

mutilation, which were considered a hassle and a time consuming job by staff 11 years ago are just as convenient and as much part of the job as administering an injection. The whole idea is how much value we attach to our lives.

The present cost attached to waste mismanagement is too low. As it does not account for exposures to HIV, HBV and HCV to health care workers and patients, most of these cases are going unacknowledged.

"Even after 11 years of enforcement of the rules and continuous reporting of several heinous crimes by such traders, there have been no penalties. Gujarat practically suffered the consequences of municipal waste mismanagement in Surat, and now again in medical waste", says Anu Agarwal of Toxics Link.

With less than 50% of the medical waste being treated in the country, the country is surely sitting on a ticking time bomb. It is time that the environment and health department team up to fight this menace, rather than passing the buck.

Quotes from the Earth

The *Quotes From The Earth*, environmental film festival from Toxics Link held a screening at the School of Environmental Studies, Vishva Bharati, Santiniketan on 2nd and 3rd February. The festival focused on themes of Hunger, Water and Survival, Climate change, Energy efficiency and sustainable development got a warm welcome at Santiniketan and over 350 students from schools and the university attended the screening.

Altogether 14 films were screened. Professor P. Mandal of Mathematics department inaugurated the festival. A panel discussion was organised on the closing day. The panelists were Prof. Dikshit Sinha, Prof. Onkarnath, and Mrs. Manju Soren. The festival ignited a passion for environment among the students and they want to host their own festival annually in future. Flyers, posters and information materials were distributed to the participants.

Pragya Majumder



Enthralled audience at the festival



(Left to Right) Prof. Onkarnath, Mrs. Manju Soren, Mrs. Pragya Majumder, Prof. Dikshit Sinha



Toxics Link
for a toxics-free world



E-toxic listserve

Toxics Link coordinates an electronic discussion group for sharing and disseminating information. If you would like to join the group, please e-mail us at tl Delhi@toxicslink.org

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