SEMINAR ON E-WASTE: A CAUSE FOR CONCERN

23 November 2005

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Organized by Centre for Media Studies (CMS) and GTZ-ASEM

Panelists

Dr. Juergen Bischoff, *Director, GTZ-ASEM* (Chairperson)

Mr. Ravi Agarwal, *Director, Toxics Link*

Dr. Juergen Porst, *Senior Advisor, Hawa Project*

Mr. Vinnie Mehta, *Executive Director, Manufacturers Association of Information Technology (MAIT)*

Mr. Sudhir Sinha, *Head- Corporate Social Responsibility, Moser Baer*

Executive Summary

"Electronic waste is going to be a major environmental concern in the years to come" said Mr. Sudhir Sinha of the multinational Moser Baer at a seminar on Electronic Waste held as a part of Vatavaran 2005. The seminar on e-waste – IT Shining started with the screening of two very poignant films, "A second hand life by Nutun Manmohan" and "E-Waste: Bangalore's challenge" had as speakers Dr. Juergen Bischoff, GTZ-ASEM, Mr. Ravi Agarwal, Toxics Link, Mr. Juergen Porst, Mr. Vinnie Mehta, Manufacturers Association for Information Technology and Mr. Sudhir Sinha, Moser Baer.

At the electronic waste seminar, Mr. Ravi Agarwal of Toxics Link, an NGO that works on waste management at policy and grassroots level, spoke of the need for a legal policy framework for e-waste management and the need for manufacturers to design sustainable technology. Mr. Vinnie Mehta of MAIT, in response, said it was the shared responsibility of all stakeholders including consumers. He added "We are handicapped in India because we don't manufacture-- only assemble computers". Mr. Sudhir Sinha of Moser Baer spoke of the need for corporates to integrate E-Waste management into the Corporate Social Responsibility policies. Mr. Porst, who has been working with pollution control boards in several developing countries, emphasized the need for starting a formal recycling agency.

Background - Electronic Waste, The Challenge Of The Future

Electronic Waste – or e-waste – is the term used to describe old, end-of-life electronic appliances. It includes computers, entertainment electronics, mobile phones, televisions, air conditioners, refrigerators etc., which have been disposed off by their original users. Electronic waste contains both valuable as well as harmful materials. These materials require special handling and recycling methods, the absence of which leads to serious health and environmental hazards.

Growing concern over India's e-waste

Mountains of e-waste - discarded parts of computers, mobile phones and other consumer electronics equipment - are quietly creating a new environmental problem in India. Besides waste generated within the country, India amongst other Asian countries is witnessing 'dumping' from western countries. Thirty million computers are thrown out every year in the US alone, and many of these are dumped in India and China. Concerns are being raised on the impact of this dumping on both the country's environment, and its people.

The problem is that these computers, which are quite old, have a lot of toxic material in them. Computer components for instance, contain lead and cadmium in circuit boards; lead oxide and cadmium in monitor cathode ray tubes (CRTs); mercury in switches and flat screen monitors; cadmium in computer batteries; polychlorinated biphenyls (PCBs) in older capacitors & transformers; and brominated flame retardants on printed circuit boards, plastic casings, cables and polyvinyl chloride (PVC) cable insulation that release highly toxic dioxins and furans when burned to retrieve copper from the wires.

When extraction or recondition is attempted over these electronic items, toxic chemicals and heavy metals are released into the air, which are disastrous for the environment. Due to the hazards involved, disposing and recycling E-waste has serious **health**, **legal** and **environmental** implications. These materials are complex and difficult to recycle in an environmentally sound manner even in well-developed countries. The recycling of computer waste requires sophisticated technology and processes, which are not only very expensive, but also need specific skills and training for the operation.

As a result, e-waste from countries like United States, South Africa, Hong Kong etc. heads to India, China and Bangladesh because computer recycling is "good business", with much money to be made. Computer recycling involves employing people to strip down the computers and extract parts that can be used again in machines to be sold on the high street. The rest is then

burned or dumped, both of which are potentially highly hazardous to the environment. The process of extraction uses all kinds of chemicals, like acids - which then get dumped into the soil and go into the groundwater.

What is being done?

Government initiative

The Union Government has formed a special cell in the Ministry of Environment and Forests, Govt. of India. The Ministry is in the process of drawing up an action plan to contain and manage e-waste. It is also possible that the government could impose ban on dumping electronic waste in the country. In Delhi, the state government is planning to bring in legislation to manage electronic waste in the capital. The legislation will make it mandatory for industries producing electronic goods to take them back. Delhi Chief Minister Sheila Dikshit asked senior officials of the government to draw up the legislation. This law will prevent the MCD from managing electronic waste and will instead lay the onus on the industries.

Corporate initiative

Many producers are expected to take responsibility for their products throughout their lifecycle, under a new concept called **Extended Producer Responsibility**, or EPR. According to this, Corporations assume the liabilities associated with the final fate of their products, where companies are now being required to phase-out a number of hazardous substances in electronic products and take back their discarded products for recycling.

Environmental Groups Greenpeace, the Basel Action Network (BAN), Toxics Link (India), and the Korea Zero Waste Movement Network (KZWMN) are the major groups working on the issues of electronic waste. The report “Scrapping the High Tech Myth: Computer Waste in India" was the pioneering work on e-waste in the whole of South Asia, by Toxics Link.

Purpose

Developing countries including India have also been witnessing an unwarranted export of these toxic materials from developed countries. As conscious consumers and citizens, it is imperative for us to be aware of these issues. It is towards this concern that a seminar on e-waste is being organized as a part of Vatavaran 2005. The seminar aims to sensitize stakeholders about various issues on toxicity, discuss the policies regarding e-waste management in the country and how corporates can partner with non-governmental organizations for better electronic waste management practices.

Film Screenings

The session started with the screening of two very topical films dealing with the issue of e-waste in India. These were - *A Second hand Life* by Nutan Manmaohan and *E:Waste: Bangalore Challenge* by G.T.Z. Both the films depicted how the growth of e-waste from the IT sector and dumping from other countries has been creating serious damage to human health and the environment. The films also portrayed aspects of occupational hazards as a result of unorganized recycling of e-waste.

Nutan Manmohan addressed some of the challenges she faced while filming. She regrets that her film is not universally applicable as it was aimed at the Hindi and English speaking audience. She voiced her concern on e-waste business operating out in the open despite being illegal. Chennai is where big business happens. Computer business comes in assignments marked as second-hand computers going to particular schools and communities but is directed to the market, which is the big place where re-cycling of waste goes on. The hazards of e-waste are spreading all around us affecting our soil, neighbourhood and community. The film was shot two years back but not much has happened in terms of laws. Consignments are coming into India unchecked and unmonitored so long as they are labeled second-hand computers going to particular schools/villages. Ms. Manmohan agrees that re-cycling industry per se is not undesirable and that it is a source of income for many. She suggests that the problem can be checked through a strict set of regimes and set laws. She warned, 'we are becoming really the dustbin of the world'. A unique combination of ignorance in general public and inaction from the government is furthering the e-waste problem.

She points out that the government should ensure that I.T. industries take up responsibility for the disposal of waste generated by them. It is here that Ms. Manmohan sees a 'global conspiracy of silence' as it costs money to get back that waste and dispose them properly. The root cause of e-waste problem is 'obsolescence' and the short-term life of products. The government should enforce I.T. companies to impose on themselves to ensure longetivity of hardwares.

Dr. Juergen Bischoff, Chair of the session introduced and welcomed the panelists. He is currently the Director of GTZ-ASEM, the Indo–German Environment Programme, jointly implemented by the Indian Ministry for Environment and Forests (MoEF) and the German Agency for Technical Cooperation (GTZ). With several bilateral projects under its umbrella, the programme focuses on sustainable development, resources management and environmental protection in urban and industrial areas.

Presentation by Panelists

Mr. Ravi Agarwal is Director of Toxics Link, and environmental NGO, working in the area of environmental pollution and waste, both at the policy and grassroots level for over a decade. Toxics link also serves as an information exchange and resource hub and also regularly screens environmental films as part of its outreach. He looks at the issue of e-waste in the global context by locating it within global flows of production and consumption in cutting edge technology. Mr. Agarwal elaborated on how digitization, with the increasing number of mobile phone, ipods, computers etc., were generating more e-waste. At the end of its life, these hardwares are burnt, re-used or re-cycled. They contain highly toxic chemicals and as such are environmental and occupational hazards. E-waste is a global problem, not an isolated problem concerning India alone but wastes collected in many countries is coming to Asia, China and Africa. Legislations on it have been made in many countries including U.S., Norway, China, and so on. "We are actually living in the midst of a global explosion of the digital world where we are looking at high obsolescence, high toxic products and laws in many countries on how to dispose them but there is not enough capacity to finally dispose them in many countries."

Mr. Vinnie Mehta Executive Director, Manufacturers Association for Information Technology (MAIT) has worked on wide variety of subjects pertinent to promotion and polices of the IT industry with the Centre and the State Governments in India as also internationally.

For Mr. Vinnie Mehta, the question starts with who controls technology? It is certainly not India. He spoke of the complexity in manufacturing technology wherein designing is mostly done in U.S., Taiwan and Japan, components are manufactured in Taiwan, Malayasia and Thailand and assembled in India. He spoke about the initiatives that MAIT had taken and their partnerships in Karnataka and Maharashtra to re-cycle e-waste. He agreed that industry has a responsibility to e-waste but there is a challenge on who funds the gap as the government is silent on it and no one is carrying it forward. It is easy to turn back and ask why does not the industry contribute? Re-

cycling is, however, not a part of the business chain. He raises the generic issue – can we have a successful professional recycler operating out of India? Recycling costs money. Consumers who

make use of these commodities also have a responsibility. He put the question, would consumers be prepared "…to pay an additional fee for re-cycling because the environment is as dear to you as to me?" emphasizing on the point that e-waste is not just computer generated waste but also other electronic hardwares, he stressed for the need of consumers to be aware of it. He urged that industries, government, common people, NGO's and international agencies have to come together to find a wire media solution that is economically viable and sustainable.

Mr. Sudhir Sinha head-Corporate Social Responsibility, Moser Baer recognizes that e-waste is a global problem and cannot be seen in geographical isolation. Speaking as a practitioner, he contextualizes his presentation within India and Asia. Making a specific case Moser Baer, he reflected on the dimension of how corporates need to take up the issue as a part of their CSR activities to bring e-waste under control. He stressed that since corporates are major sources of e-waste, the solution also lies at their end. Moser Baer started its CSR programme in 2005. Enlisting steps to reduce e-waste, he suggested that internally there needs to be a corporate policy in place covering procurement policy and disposal policy. Externally there should be a group of consultative e-waste management alongwith knowledge sharing and capacity building programmes for proposed e-waste disposal system. He mentioned that studies in this direction and creation of a plan of action should be promoted. Companies must support NGO's and agencies getting into this kind of research. He proposed that a knowledge base should be started to promote the quantitative base. Technical and legal capacities need to be enhanced while the use of environment-friendly designs and marketing methods needs to be promoted towards the cause of controlling and preventing potential damage caused by electronic waste. He emphasized that the problem of e-waste is not the sole concern of I.T. industries producing electronic hardwares but also equally of those companies utilising these products.

Dr. Juergen Porst, Senior Advisor, Hawa Project emphasized on the need to encourage formal recycling in an effort to improve the environmental safety and health (E.S.H.) aspects in this

sector. In his presentation he elaborated on the administrative and institutional set-up that was being attempted in Bangalore. He brought into attention a proposal from the Karnataka State

Pollution Control Board to test the setting up of a disposal agency in Bangalore to collect and distribute e-waste to whoever is re-cycling it. This is still under consideration. Since they work with the government, he emphasizes on the formal recyclers though supporting the informal sectors by encouraging them to form associations and offering technical assistance in promoting E.S.H. situations in their companies. He briefed about the activities of the nodal body which is an NGO chaired by the former Chief Secretary of Karnataka and supported by the Ministry of Environment and Forests. Its main task is to organize e-waste management for Bangalore and it acts as a clearing house. Waste collected from generators is to be registered and in a traceable form brought to the re-cycling sector through the nodal body. The nodal body has been active in formulating drafts and guidelines for e-waste management for the entire country. On the technical aspect of recycling, he explained that there are primary, secondary and tertiary users. The repair shops take out equipments that can be re-used. Dismantling factories remove components containing toxic compounds like PCB, mercury and cadmium. These components cannot be put to re-use.

Discussion

Dr. Bischoff then opened the discussion for the audience.

Ms. Nutan Manmohan described Mr. Vinnie Mehta's approach as 'shrugging off of responsibility' by putting the onus on the consumers. She cited that even in Europe where the consumers pay more for its disposal, the companies are not fulfilling their responsibility but are instead dumping it on other countries.

Ms. P.N. Vasanti voiced her concern that, unless intervened, the e-waste problem would come to assume a disastrous situation in the future. Piecemeal initiatives have been taken up at various levels but there has been neither formalized process nor any accountable agency within the structure of government framework. She called forth an integrated co-ordinated effort of the

government and agencies. Responding to it, Mr. Ravi Agarwal said that the industry for the past fifteen years has been silent on the issue and the argument is that costs would go up if they were to take up recycling is invalid because costs of electronic equipments were actually always going down. It's a question of looking at environmental health and the informal sector. The industry has to be a key part in this. He expressed surprise that while the industries and NGOs have been represented in the workshop, there were no representatives from the Government. Mr. Mehta responded that there is no shrugging of responsibility. It is not just the industry but everyone who are stakeholders of the eco-system and should work in partnership in a concerted effort. An audience pointed out that the industry is a giant resource mobilizer and as such the civic body would like to have a more understanding exposure.

Surjit Mann, environmental scientist, questioned to Ravi Agarwal about the impact on environmental and health in Internet and call centres from the brominated hydro-carbons and toxic compounds. Dr. Bischoff remarked that this was outside the theme. These were low-level emissions at workplace and, according to Dr. Porst, studies conducted have not shown severe impact. Joe D'Ganji, from a Chicago-based NGO working on chemical safety issues, brought to attention one of the principles of the 1992 Real Earth Summit. This was the principle of internalization of full cost by industries for their products over its life. The question was raised to Mr. Mehta if he as a consumer, speaking for an assembling company importing components, has ever tried to find out the biodegradable and recycling aspect.

Conclusion

Mr. Ravi Agarwal strongly voiced that it is high time that the industry stopped talking and do something about the e-waste problem. He remarked that the industry is only interested in marketing its new products while studies, assessment, disposal cycle and recycling industry are left to others. Industries are not interested in looking at internalization of cost, which is happening all over in the world. Sustainable business depends on life-cycle approaches. Dr. Porst outlines three concerns addressed in the workshop. These are - firstly, the role of the government, secondly, responsibility of industry and that of the consumer and thirdly, issue of cost. He enumerated that through the nodal body, they have been able to bring together the

government, industries and NGOs in a round table. He revealed that many Indian and international companies, like Wipro and Philips to name a few, have shown consciousness in not giving e-waste to illegal markets and re-cyclers. But cost is an issue. Bringing re-cycling from the informal to the formal sector means that the cost will increase. The two recyclers in Bangalore are the first ones in India. They are authorized and have received C.F.E. and C.F.O. from the pollution control board but at a higher level, bringing in environment and occupational health and safety-wise, recycling would be rendered more costly in a couple of years. He remarked that it is attractive right now, but in the future consumers will have to start paying for re-cycling in India also.

Chairs Remarks

The chairperson, Dr. Juergen Bischoff, remarked that the two screenings showed two sides of the e-waste problem – while one ravels through the hazards of e-waste recycling, the other showed possibility of solving the problem. He concluded that the discussion that followed has brought out the various problems concerning e-waste.

Key Issues of Concern

E-waste dumping in India, the hazards to health and environment, the legalities of the e-waste problem, role of the government in restricting e-waste dumping, the question of responsibility of the industry and recycling of it are issues that formed the core concerns of the workshop.