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In our modern world and lifestyle, we have become more and more dependent on modern hi-tech equipments, gadgets and home appliances. Some of them are good quality and are long lasting but many are not. Most of these hi-tech consumer products contain a cocktail of chemicals. Without knowing the contents of chemicals substances and its implications to our family's health, we might make a wrong decision about which products to buy.

As soon as the products, equipments and electronics no longer serve its purpose, they become wastes. With the wastes, the chemicals substances remain. They continue to exist in our homes, blood and bodies although we are no longer use the equipment. Most of the wastes will end up in andfills, which then host a more complex and toxic legacy for the next generations.

In the last 10 years some progress has been undertaken on waste management in several countries. Some progress in developing countries demonstrated active participation of grass-root organisations, communities and NGOs in tackling waste problems. As waste is more regarded as a valuable resource, more and more communities are involved in community-based waste management which is a step forward in social and economic development at micro level.

Obstacles and constraints to implementation

Lack of strategy, regulation and enforcement: Many developing countries still lack of national strategy and regulation to translate the MEAs and other international agreements due to lack of capacity and resources.

Electronic waste

Electronic waste threatens human health and the environment: In contrast to Rio Principle 14, 20 - 50 million tonnes of electronic waste is transferred to developing countries each year, much of it illegally. This has resulted in an influx of toxic waste and resulting contamination of land, water, and humans. Near end-of-life and end-of-life electrical and electronic products are a growing concern as a result of dumping in developing countries, which results in the illegal transboundary movement of their hazardous constituents such as heavy metals and brominated flame retardants.

Accumulation of toxic waste: Many developing and transition countries have tens of thousands of tons of obsolete pesticides and hazardous waste from industry and medical facilities that now pose a serious threat to human health and the environment in these countries themselves and in neighbouring countries as well. Inadequate public awareness of health hazards, poor quality of storage facilities, unprotected storages - all these factors result in a situation when local residents illegally apply unidentifiable mixtures at their private land plots. As a result, pollution flow through solid, groundwater to food products and environmental media continues, causing adverse health impacts especially to women and children.

Many developing countries and countries in transition face the ongoing threats of illegal waste dumping while the quantity of hazardous wastes requiring special management and elimination is growing exponentially. Communities continue to deal with the runoff or emissions from hazardous waste stockpiles and contaminated sites.

Incineration of municipal and medical waste is a serious threat to human health and the environment. Serious concerns are caused by uncontrolled open burning of waste on streets, burning landfills and plans to construct new waste incineration plants in developing countries and economies in transition where there is lack or no waste diversion services.

Greater waste reduction and diversion through zero waste could be achieved by a landfill ban of recyclable materials, landfill disposal levies, penalties, certification, etc., as well as green procurement to drive markets for recycled materials; and the promotion of the development of special programs focused on - collection of hazardous municipal waste such as single use batteries or mercury contained lamps, paints, etc.;

Waste reduction programs at the source level with specific target to be achieved should be promoted.

New Challenges

Compact Fluorescent Lightbulbs (CFL)

Cost-effective substitutes are not yet available for some mercury-containing products such as compact fluorescent light bulbs which are in great demand due to energy saving and energy efficiency needs. Growing amounts of used and broken bulbs is a big problem in developing countries and economies in transition where there is no proper system of waste diversion and waste collection. Used and broken bulbs are stored at schools, day cares or are disposed at landfills as solid waste.

Recycling is a positive step, but it will not remove the toxic chemicals in the wastes. For example two commercial mixtures of brominated flame retardants, known as pentaBDE and octaBDE, were added to the Stockholm Convention on POPs at its last Conference of Parties in May, 2009. Under the Stockholm treaty wastes that contain POPs cannot be recovered, recycled, reclaimed or directly reused. The listing of pentaBDE and octaBDE was accompanied by an exemption that will allow their recycling to continue until as long as 2030.

Toxics removal at the source, green design, clean technologies and extended producer's responsibility are options that manufacturers must make available to consumers, to empower all of us to make the right, safe and environmentally sound choice for ourselves, our families and our communities.

We would like to echo the Zero Waste approach which proved to create jobs for men and micro-business opportunities for women, produce less harmful wastes to the environment and lead to Zero Warming.