

Open A<u>ccess</u>

Can Small Countries Benefit from the E-waste Global Value Chain?

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Editorial

E-waste is a term used to cover items of all types of electrical and electronic equipment and its parts that have been discarded by the owners as waste without the intention of re-use, because this equipment has ceased to be of any value to its owners. E-waste is one of the fastest growing waste streams globally. Since the Rio Summit Earth summit organized by the United Nations in 1992, the concept of sustainability extends to rendering basic services such as Solid Waste Management and dealing with e-waste. People are afraid of e-waste because of its possible negative effects on health and because it could pollute the environment. Indicators of unsustainable service provision concerning e-waste include irregular collection, open dumping, burning of solid and e-waste in open spaces. Often collection covers a small part of the country, cost recovery is limited or not existent, and one notes poor utilization of available resources with no or very limited reuse and recycling.

In many countries the informal sector is handling e-waste. The small operators undertake segregation and dismantling of collected e-waste. A survey conducted by the Asian Development Bank in 2010 showed that in a small country like Bhutan there are mainly four types of e-waste: toner/cartridges, ink, IT equipment and used batteries. Reports emphasize that most e-waste generators are not aware of the implications of improper disposal of e-waste.

Bhutan is situated between India and China. Its government sector is getting rid of its e-waste by simply auctioning it to scrap dealers. The Department of National Properties (Ministry of Finance) collects the e-waste and auctions items that the government surrenders annually. Some of it is bought by local dealers for reuse of parts, but most of it ends up in neighbouring India. What have other small countries been doing about e-waste? Let me give one example of a systematic approach to the issue. In Singapore through voluntary efforts three companies StarHub, TES-AMM, both e-waste recyclers, and courier firm DHL have come together and have installed 200 bins across the island at institutes of education, malls, government offices, office buildings and community clubs. It is costly to mine gold, silver and precious metals from the earth and then dump them. Urban mining is a business idea whose time may not have come yet, but it will be promoted and its time will come eventually according to Vivian Balakrishnan, Minister for the Environment and Water Resources in Singapore.

Many municipalities in developing countries are incapable of meeting the demand for these services, including collection of e-waste and processing it, resulting in both direct and indirect negative effects on the indicators of sustainable development. The steep increase in E-waste is the result of using more computers, mobile telephones, TV sets, etc. However, the picture of how much e-waste is generated every day is usually missing. There are precious metals to recover and polluting components to collect. However, in many countries the legislation, or the implementation of policies to achieve recovery and reuse is often not there, or poorly organized.

It sometimes means that the precious metals get lost because they end up in incinerators. I learned in Bhutan that developing the value chain of e-waste is difficult in a small developing country. The private and household sector often dispose of their e-waste by leaving it to the informal sector. Sometimes these informal operators do not even have to pay for it, they just collect it. Given the need for a certain minimum quantity to allow processing and given the serious investments required for this purpose, most of e-waste ends up in India, where the value chain for the Bhutanese ends, without getting their fair share of the value. The issue for such small country is to determine the potential of reducing e-waste, reusing it, or recycle it in the country itself, instead of exporting it partially illegally to the bigger neighbouring countries.

Received January 02, 2016; Accepted January 02, 2016; Published January 09, 2016

Citation: Van Dijk MP (2016) Can Small Countries Benefit from the E-waste Global Value Chain?. Int J Waste Resour 6: e110. doi: 10.4172/2252-5211.1000e110

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