

A Study on Corporate Social Responsibility: Applying issues of Producer's Extended Responsibility

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Abstract- This research represents a study of Corporate Social Responsibility (CSR) of electrical and electronic firms and an examination of the relationship between CSR and financial performance of such firms. The purpose is to understand and examine the significant influences of CSR towards Sustainability policies of the firm. The study uses the sustainability approach of companies towards environment and society as a whole through EPR strategies. The purpose is to create awareness amongst consumers about managing e-waste, protecting the environment, and importantly for following the recycling and take-back process for end of life products. The study aims to create awareness amongst Industries and related stakeholders about EPR & its implementation. As it tells the firms to look beyond profits eloquent their role in society as a part of Corporate Social Responsibility (CSR). The study will contain information on the economic, social, and environmental impacts of EPR or product stewardship programs. The focus is to create awareness amongst Government and related stakeholders about & to encourage and facilitate implementation EPR to enhance the competitiveness of the Indian Businesses. In short the approach of companies towards CSR & Sustainability. For undertaking the research methodology adopted is descriptive in nature & so the research design. Data collection tools will include Structured Questionnaire/ Schedule or personal interview with Service or manufacturing industries which will be used to collect first hand primary data. Sample Source: Primary Information from Industries (Service & Manufacturing). Sample size: Appropriate, rational & adequate sample size will be considered to reach out the accurate decision. The main goals of this study are how to make electronic products more sustainable and environment-friendly and moreover how can the life of used electronics be extended through refurbishing/reusing and by other means.

Key Words: Corporate Social Responsibility, Sustainability Report, electrical and electronic equipment, environmental policy

I INTRODUCTION

The worldwide market for electrical and electronic equipment (EEE) has expanded drastically. In recent times the varied use of electric & electronic equipment such as mobile phones, computers & different Gadgets has seen enormous growth. The use of Electronic Goods has affected our everyday lives in many ways both positively and negatively.

Most of the large firms in India and worldwide have been constantly focusing on developing a sustainable business practices in their respective organisations and reducing the environmental impact of their activities. These activities include reduction in emissions to diminish the impact of climate change, Electronic waste and a move towards renewable sources of energy. Indian companies do prepare their sustainability reports as per the various guidelines. In order to facilitate effective implementation of Corporate Social Responsibility (CSR), the Ministry of Corporate Affairs (MCA) has released a mandatory action towards sustainability environment in August, 2013.

This paper will explore the functionality of Extend Producer Responsibility (EPR) as a major part of corporate social responsibility in the management of Electrical and Electronic waste (e-waste) in Madhya Pradesh, India. Here we will focus on creating awareness amongst Indian Electronic manufacturers towards their extended responsibility. Also to develop an understanding to which electronic manufacturers connect towards existing Environmental Management System and sustainability.

Due to swift industrialization, economic growth and urbanization results in the increasing changes in consumption pattern and production of electronic waste and its rapid growth in the coming future. *Robinson (2009) stated that technological changes will affect the electronic waste produced globally.*

Electronic waste in India occupies the highest rank in case of domestic generation and import include both legal and illegal imports. Extended Producer Responsibility (EPR) is one of the best policy measures which is being progressively recognized globally as an effective and efficient E-waste management policy with its application in the area of end-of life management of the product. It is necessary to first have a better understanding on how to tackle the problem of e-waste management and discuss the various challenges and opportunities of electronic waste recovery, and the jump on an Extended Producer Responsibility (EPR) system.

Keeping in mind the emerging problem of Electronic Waste this thesis will focus on exploring the role of Extended Producer Responsibility (EPR) in electronic waste management in India. Herein we will specifically look at the situation that surrounds the end-of life management of Electronic Waste in Madhya Pradesh by different electronic companies.

II OBJECTIVE

To study the extent to which electronic manufacturers connect towards Corporate Social Responsibility and sustainability

1. Incentivize strategic implication for electronic manufacturers to adopt 4R's Model (Reduce, Reuse, Recycle and Recover).
2. To understand the awareness amongst Indian Electronic manufacturers towards Global Environment Fund (GEF) as a part of Corporate Social Responsibility activity.

III RESEARCH METHOD

This study is based on secondary data. The Data has been collected by way of extensive documentary analysis. The present research uses qualitative research methods, based on the secondary data sourced from journals, magazines, articles and media reports. It's a type of Conceptual paper & the sustainability initiatives taken up & disclosed by companies under study on their Websites and in their annual reports, sustainability reports, policies, codes, and so on were considered for analysis.

IV STATEMENT OF RESEARCH PROBLEM

In today's world we have several types of electronic products/devices that we all use on a daily basis like from mobile phones, different Gadgets, computers, electronic music players, photocopier machines and electronic circuit boards. In fact, electronic-waste is one of wastes which is the fastest growing waste in the world, and researchers say the trend keeps on growing on daily basis. Electronic waste is also known as E-waste, or waste from electrical and electronic equipment (WEEE), or electronic products that have come towards the end of their 'useful life'. A record 53.6 million metric tons (Mt) of electronic waste was generated worldwide in 2019, up 21 per cent in just 5 years. The new report also predicts global e-waste - discarded products with a battery or plug - will reach 74 Mt by 2030, almost a doubling of e-waste in just 16 years, according to the UN's Global E-waste Monitor 2020. (*ISWA International Solid Waste Association*) Despite a lot of work being done on E-waste and CSR, still there is a lack of research on EPR policy which is the main policy of E-waste management. However if we talk about Madhya Pradesh people are not much aware of the EPR policy by Government of India for which CPCB/SPBC are the controlling bodies. However, the already existing literature and knowledge comprehension base of EPR were dominated by survey analyses of its applicability in the European Union and with the main focus on product categories such as Waste Electrical and Electronic Equipment Directive (WEEE) and packaging (*Nash and Bosso 2013*).

The Global E-Waste Issue

The Global E-Waste Monitor 2020

- China
- US
- Japan
- India

According to the same report, Asia the only continent generated the greatest volume of E-waste in 2019 around 24.9 Mt, followed by the America (13.1 Mt) and Europe (12 Mt), while Africa and Oceania generated about 2.9 Mt and 0.7 Mt respectively. (*Source: ISWA (International Solid Waste Association)*)

V COMMENCEMENT OF ENVIRONMENTAL POLICY IN INDIA

At International level it was in 1989 the first development towards protection of environment emerged. It was The Basel Convention that came into existence, the purpose of which was to reduce the movements of hazardous waste between nations and moreover they specifically wanted to prevent the transfer of hazardous waste from developed to less developed countries (LDCs). The Convention also ensures environment friendly management of toxic and hazardous waste and to assist less developed countries (LDCs) for the same. In India at national level, the Environment Protection Act (EPA) came into existence in 1986 for protection and improvement of the environment and also to prevent mankind and other living creatures, plants and property in the wake of Bhopal Gas Tragedy. This Act was an umbrella legislation which dealt indirectly with E-waste since it deals with hazardous substances or materials.

The Central Government of India has time to time passed various Acts and Rules for the sound management and re-use of e-waste such as:

- a) Hazardous Waste (Management and Handling) Rules, 1989;
- b) Bio-Medical Waste (Management and Handling) Rules, 1998;
- c) Batteries (Management and Handling) Rules, 2001;
- d) Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008;
- e) E-Waste (Management and Handling) Rules, 2011; and
- f) E-Waste (Management) Rules, 2016.

VI E-WASTE (MANAGEMENT) RULES, 2016

Preceding the enactment of the E-Waste (Management and Handling) Rules, 2011; it was Hazardous Waste Management (HWM) Rules that covered E-waste. The E-waste (Management and Handling) Rules, 2011 were legislate and came into force from 1st May, 2012 under the Environmental Protection Act 1986. These Rules came into existence in order to enable recovery and/or reuse of useful material from E-waste, thereby reducing the hazardous wastes to ensure the environmentally effective management of all types of e-waste and to address the safe and environment friendly handling, transporting, storing, and recycling of e-waste. It was for the first time, the concept of Extended Producer Responsibility (EPR) was

introduced which made producers physically and economically liable for safe disposal of electronic products. Thereafter, the E-Waste (Management) Rules, 2016 were enacted in replacement of the 2011 Rules and came into effect from 1st October, 2016 and producers, manufacturers, refurbishers, dealers and Producer Responsibility Organization (PRO) were also brought under the purview of the Rules.

VII EXTENDED PRODUCER'S RESPONSIBILITY

India's one of its first regulations on Electronic waste, known as E-waste under (Management and Handling) Rules, 2011 used Extended Producer's Responsibility (EPR) approach that required the manufacturers of electronic goods to set up their collection centres and must inform the consumers on how they can return used electronic products/appliances to the collection centres. The regulations that have been disseminating to manage e-waste are based on the principle of extended producer responsibility (EPR).

EPR is defined as an environmental protection strategy that makes the manufacturer of the product responsible for the entire life cycle of the product and especially for the take back, recycling and final disposal of the product (Lindhqvist, 2000). Formally the concept of EPR was first introduced in a report titled "Modeller for forlangt producentansvar" or Model for Extended Producer's Responsibility by Thomas Lindhqvist in 1990. This concept was published in a report to Swedish Ministry of the Environment in 1990. Initially it got introduced in various European countries like, Germany Austria, Netherlands, Switzerland, and the Scandinavian countries, at the time when they were rigorously planning for and commencing the implementation of various policy instruments to improve the management of products' end life. Gradually it started spreading to most of the OECD countries and several developing countries including India in past few years.

VIII ADVENT OF EPR AT INTERNATIONAL LEVEL

Europe: Organisation for Economic Cooperation and Development (OECD) already in 1972 launched the "polluter pays principle" (PPP) under WEEE Directive which signifies that those who are

responsible for environmental pollution must be held accountable for it. Within European Community PPP is one of the fundamental principles of the environmental policy and it works towards preventing and reducing pollution, therefore, it has also been included in the RoHS (restriction of hazardous substances) and WEEE (waste electrical and electronic equipment) Directives. PPP is included in the WEEE Directive in the form of extended producer responsibility (EPR).

The beginning EPR was first initiated in Germany under its Packaging Ordinance of 1991. Germany back then faced severe landfill shortage, along with packaging waste which amounted to about 30% by weight and 50% by volume of the country's total municipal waste stream. Therefore under this Ordinance, the Dual System (DSD - Duale System Deutschland AG) was established, where the manufacturers/producers of all kinds of packaged products were asked to take back their packaging and must be responsible for handling its packaging waste. DSD used to charge for its green dot label to producers, who then printed these green dots on metals, plastics, and composites, which were then collected in yellow bins or bags located at households. Infact EPR in Europe is applied for the waste management of EEE and to create an economic incentive for manufacturers to have an environmentally sound manufacturing and product design.

IX EPR AND TAKE-BACK SCHEME IN INDIA

In India the initiatives of take back have started by the OEMs (Original Equipment Manufacturers) like Nokia, Wipro and Dell in the country. Some of the well distinguished and eminent companies like Apple, Sony, PCS, Philips, Microsoft, Panasonic, Sony Ericsson and Toshiba, HCL have adopted take back policy option at their production plants as well. The companies like HCL and WIPRO have one of the best take back policy in India. Even Nokia, Acer, Motorola are follow the policy at a good pace. Since we have such a large population only one collection centre is not enough. Even a big and renowned company like Samsung claims to have a take back service but have only a one collection centre in India.

There are majorly major reasons for the failure of the take-back scheme in India. Firstly, the following rules

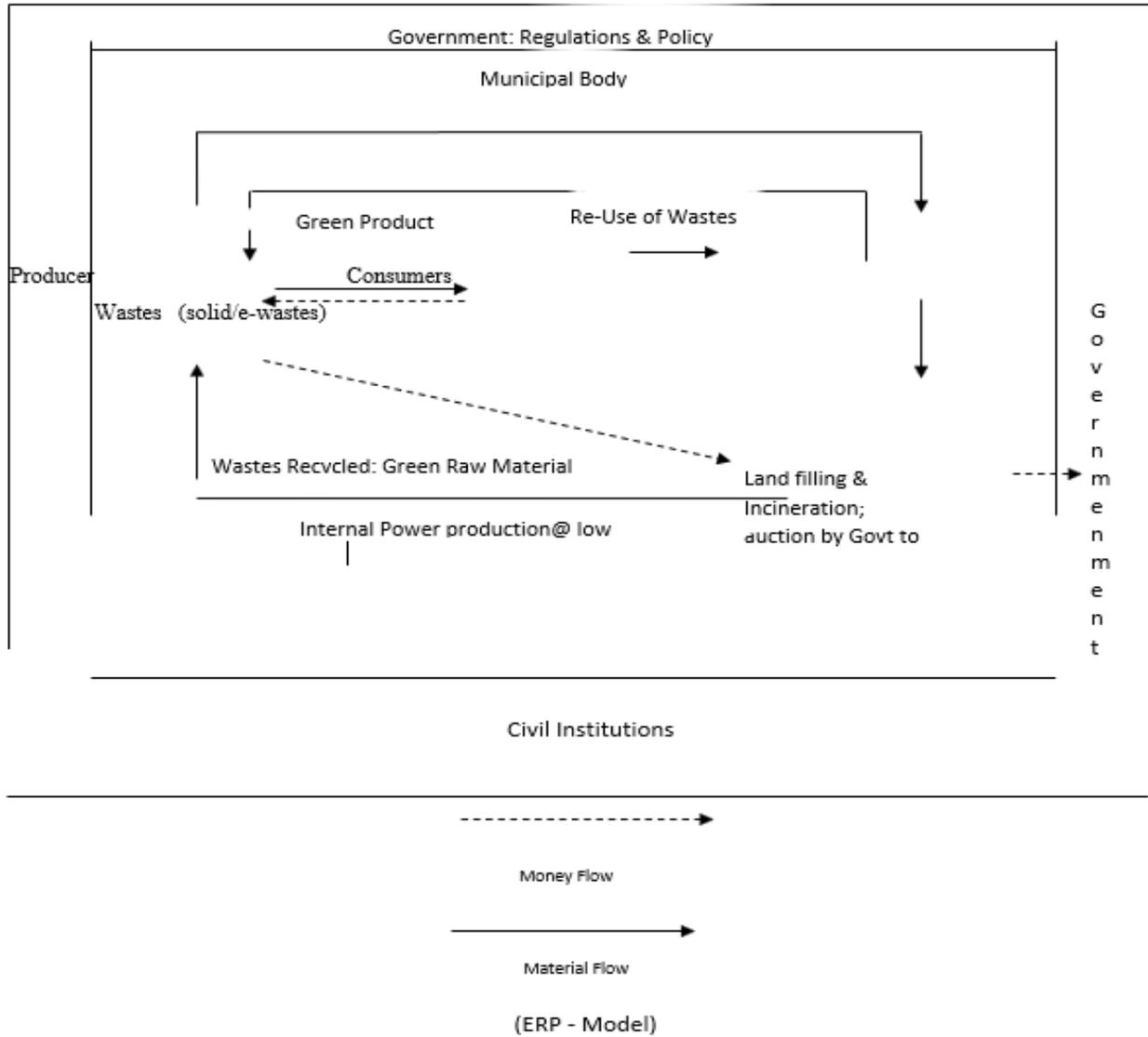
state that the manufacturers have to meet the collection target in a phased manner, which shall be 30% of the estimated quantity of their waste generation during first two years after implementation of such Rules followed by 40% during the third year and fourth year and 50% during fifth year respectively. However it lacks the apparatus to verify the claims of these companies. Secondly, the rule predominantly focuses upon the formal sectors of recycling process even though in our country most of the recycling process is handled by informal sectors. Additionally, it neither provides incentives for the informal recyclers either to sell to the formal recyclers nor to formalize the whole system and structure. Thirdly, considering the low scale of operational and locational aspects of manufacturers and end-users, it may not be economically viable and physically feasible for each and every manufacturer/producer to establish an e-waste recycling unit nor will it be feasible for them to set up collection centres either individually or collectively.

The manufactures have become much more aware over the last couple of years. Until recently the manufacturing industries seemed quite reluctant to associate itself with the environmental problem and acknowledge its responsibility for the same. A study conducted by Greenpeace India way back in 2008 evaluated the manufacturers those who had a take-back policy in place and actual take-back systems in operational mode. The study revealed that out of 20 monitored brands, nine had no take-back service in place. Several had only one collection centre or limited the take-back to one product (e.g. mobile phones).

X CSR MODEL (EPR)

This CSR model illustrates that the wastes produced during manufacturing/ production may be partly reused to minimize the input (R/M) requirements and rest unused wastes may be auctioned by government to the producers. This will facilitate producers to squeeze cost of input and the auction will impact economically on material supply affecting the cost & time advantage of production. This may be one of the effective ways to reduce channelization of resources economically. Of course, the civil institution and Government will have a sincere watch and control on the whole economical process of waste management.

Regulations & Policy



XI DISCUSSION AND CONCLUSION

The results of the studies and the subsequent analysis of the identified variables comprehends that the success of EPR depends on an effective regulatory framework highlighting the role of different stakeholders and proper guidelines for producers. In most of the cases, the role of manufacturer is restricted to carrying out the financial and economic responsibility and outsourcing the collection and recycling by paying a fee to responsible companies. Design of the products must be changed to reduce the environmental impacts and setting of the recycling and recovery targets. In India we could only see better results in terms of collection, recycling and recovery

rates when the producers of electrical and electronic products take up financial responsibility and outsource physical responsibility. This enables the producers to achieve the targets that invariably reduce the environmental burden of their products.

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