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## Responding to Climate Change: A Study on Eco-Labeling Practices in Consumer Goods of Bangladesh

Mohammed Solaiman

Department of Marketing Studies & International Marketing, University of Chittagong

Chittagong – 4331, Bangladesh.

E-mail: [drmsbd@yahoo.com](mailto:drmsbd@yahoo.com)

A. K. M. Tafzal Haque

Department of Management Studies, University of Chittagong

Chittagong – 4331, Bangladesh

E-mail: [tafzal90\\_cu@yahoo.com](mailto:tafzal90_cu@yahoo.com)

Shanta Banik (Corresponding Author)

Department of Marketing Studies & International Marketing, University of Chittagong

Chittagong – 4331, Bangladesh.

E-mail: [shantobanikcu@gmail.com](mailto:shantobanikcu@gmail.com)

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### Abstract

Eco-labeling is a marketing strategy that comes from inclined environmental awareness in the global climate change. The study followed a theoretical framework developed by Oyewole (2001) conceptual relation among industrial ecology; green marketing and environmental justice make it clear how eco-label through green marketing can be a tool to ensure equity in different socio-economic and environmental perspective. The study was conducted in five super markets. The key information was collected through observations and depth interview from consumers and service providers. The study identified that the new eco-products formed new “green market”. It is observed that the green market appears to be real and growing. The study revealed that health and environmental concerns are main reasons why people become aware of eco-labeled products. The survey data evidenced that 17 percent of consumer read labels to see if products were environmentally safe, 11 percent sort out products and packaging made from recycled materials and 7 percent said they had boycotted a company that was careless about the environment. The study pointed out that there is a gap between policy and practices in eco labeling. The study recommends some suggestions to make the success of eco-labeling in green marketing perspective such as creation of awareness among the consumers, voluntary initiatives in environmentalism and consumerism, environmental appeals in advertising, practice of environmental protection law, integration between environmental justice and eco-system services in eco-labeling program etc.

**Keywords:** Eco-Labeling, Environmental Justices, Ecosystem Resources, Green marketing, Green Consumerism.

### 1. Introduction

The concept of eco-labeling has been emerged in response to global environmentalism movement. Environmentalism is a social movement of concerned citizens and government seeking to minimize the harm done to the environment and quality of life by conventional marketing practices. It calls for curbing consumer wants when their satisfaction would create too much environmental cost ( Kotler & Armstrong, 2008). Thus eco - labeling can be seen as a representation of the need to de-regulate environmental protection by allowing industry to make the decision of whether or not to apply to the label and allowing consumers to decide to shop accordingly ( Gertz , 2006 ). Eco labeling is one of the initiative that stated several decades ago in order to mitigate environmental impacts by promotion of environmentally friendly products ( Zaman et. Al. 2010 ) Literature survey suggests that green market is growing with green products and it needs consumer's green needs, ecological and societal performance too . Apparently eco- labeling can also enhance corporate and brand image, save money and open new market for products calling to consumer's need to maintain a high quality of life. Marketing activities without environmental consideration can cause serious environmental damages that impair the quality of life of present and future generations ( Panwar,2002) Thus, eco-labelling is a sort of environmental quality certification. It is generally agreed that the eco- labeling is a marquee of environmental quality . This evidence may motivate consumers to pay higher price for eco- labeled products . In summary , the literature review suggests that there is a gap between policy and practices of eco- labeling strategies in developing countries, in general and in Bangladesh in particular. It is this context that we investigate in this paper.

### 2. Methodology

The study followed a theoretical framework developed by Oyewole (2001) conceptual relation among environmental justice, industrial ecology and green marketing make it clear how eco-label through green marketing can be a tool to ensure equity in different socio-economic and environmental perspective. The study was conducted in five super markets in order to know the practice of eco-labeling in Bangladesh. These markets have been selected purposively for research purpose. The exploratory research design has been used in the present research work. The sample respondents are 100 and these samples have been selected based on purposive sampling technique. The key information was collected through observations and depth interview from consumers and service providers. Necessary supporting data were collected from policymakers, environmental and consumer groups, NGOs, private sector through questionnaire survey. Secondary data have been used in support of questionnaire survey and other sources of data for the research purpose.

### 3. Environmental Justice

Environmental justice has been defined as the pursuit of equal justice without discrimination based on race, ethnicity, and/ or socio-economic status concerning both the enforcement of existing environmental laws, regulations and the reformation of public health policy (Chavis, 1993). It is the equal protection and meaningful involvement of all people with respect to the development , implementation and enforcement of environmental laws, regulations, policies and the equitable distributions of environmental benefits ( Zaman et.al. (2010). Against this background , the relevant data and information have been collected and presented in the following captions :

### **3.1 Protection of Environment: The role of Government**

There are various government and non-government organizations/ agencies which have been working to protect living environment of the people of the country. Table 1 in appendix shows government agencies and their strategies for protection of environment in the country. These agencies are working directly / indirectly to protect environment of Bangladesh. The main aspects of the government policies are (i) issuing no certificate of a new company without environment protection program in their plant designing and operating before establishing new industry (ii) establishing standard for effluent control (iii) restriction to produce and sale environmentally harmful products. Again, government made classification of all industrial units according to their environmental impacts such as (i) green class (ii) pink- k class (iii) pink-kh class (iv) red class (Bangladesh Gazelte Supplementary 2007). It appears that these agencies, policies and strategies are contributing to make the entrepreneurs, industrialists and other stakeholders environment oriented in the study areas.

### **3.2 Protection of Environment: The Role of NGO**

NGOs are working actively in environmental issues in Bangladesh. There are different types of NGOs based on their activities e.g.(i) awareness build up NGOs (ii) development NGOs (iii) research NGOs (iv) activist NGOs ( Huq & Uhan 1994). NGOs are involved in protection of environment related activities such as toxic waste disposal, environmental education and awareness, environment and disaster management, training in environmental issues of the target groups. The important NGOs are IUCN, CARE, RDRS, CARITAS, BRAC, PROSHIKA etc. A number of donors have initiated assessment of environmental programs, activities and incorporating the outcome of the assessment in their development, planning, policies, programs and strategies. These organizations are DANIDA, NORAD, USAID, CIDA, UNDP etc. The literature review suggests that a good number of NGOs and donor agencies are playing important role to protect natural environment and to develop environmental friendly green business in Bangladesh. Thus, it creates demand of eco-labeling products in market and eco-label based market segment in gradually growing on day by day in study areas.

### **3.3 Protection of Environment: The Role of Media**

In creating consumer awareness, the media is playing an important role in Bangladesh. They are publishing environmental events in such way so that it can enter in the minds of people. Thus, people are emerging as an environmental conscious citizen and gradually they are converting green consumers. Besides, special issues, supplements, brochures, newsletters etc. are used as instrumental tools in the creating of voluntary pressure group for social awareness through incorporating different social groups, religious groups, civic society as a stakeholder of environmental groups. As a result, environmentalism as well as green consumerism movement growing on day by day in Bangladesh. Thus, the demand of eco-label based product is increasing and it creates differentiated market in competitive business environment with competitive advantages.

### **3.4 Protection of Environment: The Role of Civil Society**

The marketing operations takes place in a society to serve the need of its members, and its success is closely related with the patronization of the members of a society (Islam,1998) A social movement under the leadership of Bangladesh civil society can motivate consumers to consume environment friendly product which would create opportunity for green product and improve quality of life. (Hoque,2000) In addition, the

member of the civil society can play a leading role to build- up the necessary social movement in this regard. Thus, deep ecological movement is an important and effective instrument in creating social awareness about adverse impact environment pollution and motivate entrepreneurs to start, organize and manage green business as well as green products.

#### **4. Eco- System Services**

The greening of marketing will not take place until consumers and producers recognize the imminent ecological crisis. Such marketing institutions would produce more ecologically benign products, develop modes of promotion that do not encourage ecologically as well as develop mode of marketing distribution that minimize ecological impact on both environment and resource use ( kibourne,1995) Economic theory recognizes four kinds of capital, e.g human, financial, manufactured and natural. Ecosystem resources are the equivalent of natural capital (Chee, 2004). The Millennium Ecosystem assessment (2005) as the benefits people obtain from ecosystems. These benefits are water, forest, soils, fisheries and these are the outcome of proper ecosystem management. The impact of environment on eco system management services may be outlined as follows:

##### **4.1 Pollution**

Environmental pollution is the act of introducing into the environment some extraneous substances or energy that may result in unfavorable changes. The pollution can cause health, economic, and ecological problems. The causes of environment pollution are many but the important causes are overpopulation, urbanization and industrialization. Overpopulation forces over expectation of natural resources viz. renewable and non-renewable resources . Urban pollution represents the combined results of industrial , commercial and domestic activity . Industrial emissions pollute the air, effluents pollute water and some industries may cause noise pollution too.

##### **4.2 Depletion**

Depletion of natural resources is a fundamental challenge to quality of environment in Bangladesh. Technological innovations have created substitutes for many commonly used non- renewable resources e.g. Optical fiber now replaces copper wire. It appears that the greatest threat to ecosystem resources management is depletion of the renewable resources of Bangladesh. Further, the problem of ozone depletion due to use of CFCs is also threatening for the purpose of ecosystem management of the country.

##### **4.3 Poverty**

Poverty can be both cause and effect of environmental degradation . The poor can not afford to protect the environment , have a tendency for overusing ecological resources. Observations confirmed that woman and children spend an average of 3 to 4 hours per day searching for fuel wood and sometimes waiting a day for procuring drinking as well as bath water. Marginalization of small farmers, continuation of landlessness for flood and exploitation of female and male poor labor are common phenomena of a developing country like Bangladesh. Thus poverty alleviation object may be high agenda in order to protect living environment and ensure ecosystem management .

#### **5. Green Marketing**

The concept of 'green marketing' is the business practice that considers consumers concerns with regards to preservation and conservation of the natural environment (Coddington,1993). Since the late 1980's marketers have been responding to consumer concern about the natural environment by making a variety of environmental appeals in the marketing policies and strategies. For consumers, being green involves a lifestyle that has a minimal adverse environmental effects on the consumer is faced with a variety of consumption choices. Thus, green marketing that has been previously and primarily focused on the ecological context has been shifted more sustainability issues in the marketing efforts and main focus now is in socio- economic and environmental context (Zaman et.al.2010). In fact, environmentalists make a distinction between deep ecology and shallow ecology depending on the degree of environmental concern demonstrated by life style choices. Environmental consciousness of consumers motivate to consume eco – friendly products and to create demand of environment friendly consumer goods (Haque,2000). Thus green marketing in context of eco- labeling will be explain in the following manner:

### **5.1 Eco-Labeling Products**

Industrialists of Bangladesh have been responding to consumer concern about the better living environment by producing eco-friendly product, for example, "Revit and Colman' a company in Bangladesh has declared its products- ' Mortein Aerosol' is environmentally friendly and chlorofluorocarbon free (CFC). Marketers of Bangladesh are also becoming amore aware of environmental issues as it opens up new business opportunity for innovative and dynamic enterprises (Solaiman & Akteruzzaman,2001) Against this background, we were interested to know from the sample respondents regarding eco-labeled products. Table -2 in Appendix depicts the opinions expressed by the sample respondents in this regard. Table-2 reveals that 41 percent sample respondents read labels, 27 percent respondents read labels sometimes, 25 percent respondents never read labels of products and 7 percent respondents have no comment on issue. The survey data agree that the majority consumers are concerned about the environmental impact of what they buy? An overwhelming majority may believe that pollution is a serious problem and getting worse day by day. In such a context, service providers may modify their existing procurement policy and giving preference on eco-labeled products for their costly shelf of super market for achieving two folds objectives e.g. maximization of profits and customer satisfaction too.

### **5.2 Environmental Quality of Package**

Consumers are getting maximum product information from packaging. Literature review suggest that 52 percent of consumers learn about products environmental attributes from product packaging ( Wasik,1997) . Further, data were collected about environmental qualities of packages. Table 3 in appendix depicts that 68 percent sample respondents prefer bio- degradable and ozone safe packaging and 19 percent in favor of rational packaging system . Only 10 percent surveyed consumers did not make any comment. Apparently , developing environmentally friendly products, industrialists not only provides an opportunity to do the right things, but it also can enhance corporate and brand image, save money; and open new green markets for green products creating to consumers needs to maintain a high quality life.

### **5.3 Pricing of Eco-Labeled Products**

Research indicates that consumers are concerned enough to consider paying more for environmentally friendly products ( Solaiman ,2005) .Data were collected from sample

consumers and presented in Table-4 in appendix regarding price of eco-labeled products. Table-4 portrays that 43 percent of sample respondents expressed their willingness to pay 5 per cent addition price for eco-labeled products. The survey data show that 21 per cent, 18 per cent, 12 per cent, and 6 percent consumers are ready to spent 10 per cent, 15 percent, 20 percent, and above 20 percent additional money for eco-labeled products. It appears that producers who do not take programs which are environment friendly will be penalized in the competitive green market. Their products will lose value and their reputations will be tarnished in context of growing growth of eco-labeled products. Thus, there is an interlinked among green marketing, eco-labeling and strategies of environmental protection.

### 6. Conclusion

People live on nature and its resources, but the resource endowments of nature are limited. Thus, protection of environment may be ensured by using green marketing tools such as eco-labeling, eco design, environmental management and audit scheme, environmental product differentiation, recyclable, bio-degradable packaging and the likes. Moreover the Government, NGOs, civil society, media can contribute through environmentalism and green consumerism movement. Apparently, the success of eco-labeling scheme depends to a great extent on integration among environmental justice, ecosystem resource management and green marketing.

### Appendix

**Table 1:** Government Agencies and Strategies for protection of Environment

No	Government Agencies and Strategies
1	Ministry of Environment & Forest
2	Department of Environment (DOE)
3	National Conservation Strategy
4	Coastal Environmental Protection Plan
5	Inland Water resource management strategy
6	Flood Action plan
7	National Environmental Management Action Plan

[Source: Government Documents]

**Table-2:** Consumer's opinion about label of products

Response Patterns	No. of Sample Respondents	Frequency in Percentage
Read labels	41	41%
Do not read labels	25	25%

Sometimes read labels	27	27%
No comment	7	7%
Total	100	100%

{Source: Consumer Survey}

**Table- 3:** Environmental Qualities of Packaging

Attribute	Number of Sample Respondents	Frequency in percentage
Bio- degradable package	68	68%
Traditional package	19	19%
No comment	13	13%
Total	100	100%

[Source: Questionnaire Survey]

**Table-4:** Differential Pricing for Eco- labeled Products

Differential Pricing	Number of sample	Frequency in package
Upto 5 percent	43	43%
5 percent to 10 percent	21	21%
10 percent to 15 percent	18	18%
15 percent to 20 percent	12	12%
20 percent and above	6	6%
Total	100	100%

[Source: Personal Interview ]

## References

- Chavis, Bf Jr (1993) , “ Superfund : The need for Environmental Justices, Equal protection and the environment testimony before the committee on government, U.S. House of Representative, National Association for the Advanced colored people. Bangladesh Gazette Supplementary (1997), 3115
- Chee, Y.E (2004)” An ecological perspective on the valuation of Eco-system resources” Biological Conservation, pp 549-565.
- Coddington,w.(1993),Environmental marketing, New York: McGraw Hill .
- Gertz, R. (2006) “Eco-labeling-A case study for De-regulation”, Law Prob.Risk, Vol.4, No.3, pp.127-141.
- Haque Mahfuzul and khan, Mayeen, A .(1994), “Environmental Activities in Bangladesh’ Environment and Development in Bangladesh, University Press Ltd. Pp. 83-p-85
- Hoque, Tafazal, A.K.M (2000)”Green musieries as a competitive advantage for South Asia: Opportunity

and Challenges in Bangladesh perspective” South Asia Journal of Management, p 486

Kotler, Philip and Armstrong, Gary (2008), Principles of Marketing, Pearson Prentice Hall, p.616.

Ottman, Jacquelyn (1993), Green Marketing: Challenges and Opportunities for the New Marketing Age, Lincolnwood, IL: NTC Business Book. P. 141.

Panwar, J.S.(2002), “Sustainable Industrial Development in the South Asian Issues: Challenges and Strategies”, South Asian Journal of Management, April, pp.15-17.

Solaiman, Mohammad (2005), Green Marketing, Chittagong: Star Publication

Solaiman, Mohammad et.at.(1999),”Environmental marketing: The Bangladesh Perspective “,South Asian Journal of Management,Vol.6,No.5,p.5.

Warik, Joha F. (1994), Green Marketing and management: A Global perspective, U.K: Blackwell Oxford, p951.

Zaman, Atiq uz et-al. (2010) “Green Marketing or Green Wash? A Comparative Study of Consumer’s Behavior on Selected Eco and Fair Trade Labeling in Sweden, Journal of Ecology and the Natural Environment, Vol. 2, No.6. p 105.



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