BANNING POLYTHENE : AN ANALYSIS OF THE EFFICIENCY OF THE LEGAL REGIME

Dr. Md. Nazrul Islam

1. Introduction

Plastic products have shaped the style, standard and comfort of human livelihood for decades. Because of the advantages it offers as a versatile, lightweight, low cost, recyclable, tough and durable materials it is used for various domestic, industrial, commercial and other economic purposes. Until recently, the rate of the average annual growth in plastic consumption outpaced average annual growth in GDP of many countries. During 1970-1997, this rate was 2.5% in USA, 1.9% in Germany and France, 2.3% in Italy and UK, 4.5% in Turkey. Among the Asian Countries, this rate was 1.4% in Japan, 2.5% in Malaysia, 2.5 in Indonesia, 1.2 in China, and 3.6% in India.¹

One of the most common plastic products is polythene shopping bag used for packing, containing or carrying goods. It is used in preference to bags of other materials like jute, cotton and paper due to its special attributes to contain liquid and humid items and because of its low price and lightweight. Introduced just over 25 years ago, the world's consumption rate is now estimated at well over 500 billion plastic bags annually, or almost 1 million per minute.²

Polythene shopping bags like many other plastic items however have serious environmental implications. Due to its nonbiodegradable nature, littering of polythene causes irreversible damage to the environment. As a plastic waste Polythene hinders natural aeration process of the surface water bodies, choke municipal sewer lines and storm water drains. It also obstructs various agricultural operations, hampers natural recharge of

^{1.} www.bccresearch.com/plastics/P224R.html

^{2.} www.plasticsnews.com/subscriber/fyi.html?id

underground water and causes visual pollution. With advanced scientific and technological knowledge, polythene bags are now considered to be a more serious thereat to environment, biodiversity, habitats comparing to similar items made of paper, jute or cotton.

The competing environmental and economic implications of the use of polythene therefore require a rethinking for modifying the management regime of polythene industries. Many countries have responded to that need by establishing or modifying legal and institutional tools for regulating the use of plastic products in particular the polythene shopping/carry bags.

This paper focuses on the legal aspects of the efforts Bangladesh Government has made for dealing with polythene products in order to examine their effectiveness, efficiency and desirability. First: it analyses relevant laws and regulations to assess the transparency, clarity and effectiveness of the legal, procedural and institutional (administrative/judicial) regime. Second: it examines whether the legal and institutional regime concerning polythene industry strike a proper balance between environmental concerns and development needs by making a comparative study of the relevant laws and policies of other countries. Finally it summarises the findings and make recommendations for legal and institutional measures for environment friendly and cost effective polythene industry.

2. Regulating Polythene: the legal regime

Among the plastic goods, the use of polythene bag reached an alarming state in particular from the mid-eighties. Uncontrolled production and use of the polythene bags has threatened sewerage, drainage, garbage disposal system, land fertility and human, animal health. According to a study conducted in 2001 by SMEC (Bangladesh) for the Ministry of Environment and Forest (the MoEF), around 10 million polythene bags were used everyday in Dhaka City alone (hereinafter mentioned as SMEC study).³ The

^{3.} SMEC (Bangladesh) Ltd. 2001, A study on control & management of polythene bags in Bangladesh, Draft Final Report, prepared for DoE, MoEF, GoB, p.ii.

SMEC study therefore suggests a number of measures for control and management of polythene bags. These measures include "new legislations for control and management of polythene bags in Bangladesh; and legislation to manage and control solid waste in Bangladesh; and legal framework for alternative technology."⁴

The scopes for taking legal measures against the indiscriminate use of polythene bag were beefed up through the promulgation of the Environmental Conservation Act of 1995 (the ECA).⁵ The ECA authorises the government to make notifications and orders for taking measures for controlling the manufacture, trade and use of environmentally polluting substances and under these authority the government took a number of legal steps for controlling the plastic industry. A critical analysis of these legal measures is presented in the following sections.

2.1. Environmental Conservation Act (The ECA), 1995

The ECA is designed to conserve the environment, improve environmental standard and control and mitigate environmental pollution. It has established its overriding effect and that of any rules and direction made under it over other inconsistent laws,⁶ established a Department of Environment (DoE) empowered to intervene in almost all areas of environmental concerns,⁷ provided operational definition of important phrases like conservation, environment, eco-system, pollution etc,⁸ and prescribed punishment for various environmental offences.⁹

Authority to close or regulate industries

Under Section 4 of the ECA, The Director General (DG) or any other delegated official of the DoE has wide powers and functions

9. Section 10, ibid.

^{4.} Ibid, p. iii

^{5.} For text of the Act, see Department of Environment/BEMP, *Poribesh Ain Sankalan* (A Compilation of Environmental Laws), Dhaka, DoE, 153-166.

^{6.} Section 2A, The Bangladesh Environmental Conservation Act, 1995, ibid,

^{7.} Section 3.1., ibid

^{8.} Section 2, ibid.

that include issuing direction to close, prohibit and regulate "any industry, undertaking or process". The 2002 amendment of the Act inserted section 4A to authorise the DG of DoE or any person delegated by him to seek assistance from law enforcing agencies and service providers for effectively implementing the provisions of this Act.¹⁰

Authority to ban plastic products

The 2002 amendment of the Act also incorporated a new provision in the form of Section $6A^{11}$ under which the polythene products are banned afterwards. Titled "Restrictions on manufacture, sale etc. of articles injurious to environment" It reads as follows:

> If, on the advice of the Director General or otherwise, the Government is satisfied that all kinds or any kind of polythene shopping bag, or any other article made of polyethylene or polypropylene, or any other article is injurious to the environment, the Government may, by notification in the official Gazette, issue a direction imposing absolute ban on the manufacture, import, marketing, sale, demonstration for sale, stock, distribution, commercial carriage or commercial use, or allow the operation or management of such activities under conditions specified in the notification, and every person shall be bound to comply with such direction:

> Provided that such direction shall not be applicable to the following cases:--

- a) if the article specified in the notification is exported or used for export;
- b) if the direction mentions that it is not applicable to any particular kind of polythene shopping bag.

Explanation - In this section "polythene shopping bag" means a bag, *thonga* or other container which is made of polyethylene or poly propylene or any compound or mixture thereof and is used for purchasing, selling, keeping or carrying another article.

^{10.} Section 4A was inserted by section 4 of Act 9 of 2002, For text of the Act See, *Poribesh Ain Sankalan, N.5, p.239-243*

^{11.} Section 6A was inserted by Section 5 of Act 9 of 2002. Ibid.

An analysis of this section suggest that:

- Government may issue direction imposing *absolute ban* on the manufacture, import, marketing, sale, stock, distribution, commercial carriage and commercial use of i) all kinds or any kind of polythene shopping bag, or ii) any other article made of polyethylene or polypropylene, or iii) any other article.
- Alternatively Government may allow conditional operation and management of the above activities.
- Government may issue above directions if it is satisfied, on the advice of the DG or otherwise, that the aforesaid articles are injurious to the environment and such direction would be issues by notifications in the official Gazette.
- Such direction shall not be applicable to export items or to any kind of polythene bags that would be exempted by the direction itself from its application.
- "Polythene shopping bag" means a bag, *thonga* or other container made of polyethylene or polypropylene or any compound or mixture thereof and is used for purchasing, selling, keeping or carrying another article.

By implication of the provision of Section 10 of ECA, once polythene is banned or regulated, any person authorised by the DG will have the power of entry into any building or any other place to inspect, search or test whether any offence or prohibited activities under this act or ensuing order or notifications is being committed. This section also provides that the provisions of Cr.P.C. would be followed in conducting such search or inspection. Under Section 11, the aforesaid authorised persons shall have the power to collect samples as well.

2.2. Conformity of the Notifications with the ECA

The specific and separate mention of polythene shopping bag in Section 6A and defining it in the explanatory note to the said section clearly indicates that the *polythene shopping bag* was considered to be a different item from other polythene products or other articles made of polyethylene or polypropylene. These also imply that the regulations to be imposed on those bags were not intended to be necessarily applicable to other polythene products. The ECA provisions, however, were followed by a number of notifications with confusing and contrasting meaning as to the restrictions on polythene products.

2. 2. 1. First Notification: Partial Ban on Polythene Bags

The first notification was issued by the DG of DoE apparently under section 4 of the ECA. This notice of 25 December 2001 was published in the additional volume of Bangladesh Gazette dated 30 December 2001 (hereafter mentioned as First Notification).¹²

This notification conforms to the proposal of a briefing paper¹³ prepared for the consideration of a cabinet meeting which provided for banning of thin polythene bags (up to 20 micron of density) gradually all over the country. To that end, The First Notification imposes ban only on the use and marketing, in the Dhaka metropolitan areas, of polythene *shopping* bags (up to 20 micron of density) from 1 January of 2002. For this purpose, all are requested not to use and market, in all Dhaka metropolitan areas, polythene shopping bags (up to 20 micron of density) from 1 January of 2002.

2.2.2. Second Notification: inconsistency with the ECA

The above-mentioned proposal of the MoEF and the subsequent Notification was only a partial respond to the measures proposed in the 2001 SMEC Report. One of those proposed measures was 'to manage and control solid waste' the needs for which was underscored in the decisions of an earlier inter-ministerial meeting held in 8 October 1998 at the MoEF. As recorded at the proceedings of that meeting,¹⁴ those decisions suggested measures including proper management of the polythene bags used in the VGF and Test Relief programme, public campaign against the use of polythene, imposing higher tax on the raw materials used for polythene bag production.

14. Dated 1-11-1998, reference being Pabama-4/7/65/98/683

^{12.} For text, see, Poribesh Ain Sankalan, N.5, p.297

^{13.} Dated 22-12-2001, reference being Pabama-4/7/65/2001, part 1/882

Instead of taking account of those more comprehensive measures for management and control of polythene bag, the Government issued a Notification on 8 April 2002 (hereinafter 2nd Notification) whereby polythene bag was totally banned in the whole of Bangladesh.¹⁵ The Notification provides that:

- The manufacture, import, marketing, sale, exhibit for sale, storage, distribution, transportation or use for commercial purpose of any type of polythene shopping bag is absolutely prohibited in the whole country from the date of the publication in the government Gazette Notifications (the publication date was 11-4--2002)
- Polythene shopping bag means polyethylene, polypropylene, or any bag, *thonga* or any other container made of any compound or mixture thereof that is used for purchasing or selling any goods, or keeping or carrying anything.
- The ban is imposed under the authority of section 6A of Environmental Conservation Act of 1995 (amended 2002)
- The ban shall not be applicable if the goods described in these notifications are exported or used for export activities or if the exemption of any specific shopping bag from this notification is mentioned in subsequent notifications issued by the government.

The above definition of "polythene shopping bag" in the 2nd Notification includes not only bags, thonga (tiny bags) or containers but also any type of polyethylene and polypropylene that was not meant in the text of the ECA, the parent Act. Whereas the ECA defines Polythene Shopping Bags as bags or containers made of polyethylene and polypropylene, by Polythene Shopping Bags the 2nd Notification purports to mean any product made of polyethylene and polypropylene.

The total ban the 2nd Notification imposes on polythene products indicates shift of government's previous stand for partial ban as it was reflected in the 1st Notification and the ministerial proposal

^{15.} See the Notification in Poribesh Ain Sankalan, N.5, p.297

of 22 December 2001. These loopholes are attempted to be remedied in a subsequent Notification of the MoEF dated 11 August 2002 (hereinafter Third Notification).

2.2.3. Third Notifications: loopholes addressed?

The Third Notification¹⁶ limits the application of the 2nd Notification for certain products. It provides that the ban imposed by the 2nd Notifications shall not be applicable for the use of polythene shopping bag as wrapper of the following products:

- Biscuit, *chanachur*, flour, wheat, lachacha semai, tea, chocolate, Milk (power and liquid), naphthalene,
- Inner liner of fertilizer and cement bag and
- Oral saline, various necessary things used for medicine industry including disposable syringe

The Third notification, however, clarified that i) the density of polythene used as wrapper shall not be of below 100 micron and ii) it cannot be used as shopping bag in wholesale or retail market or as repacking or in the market.

The Third Notification thus confirms the confusion made by the second Notification regarding the definition of polythene shopping bags. It purports to mean *wrapping* materials as *shopping* bags although the attributes of the *shopping bags* as defined in the ECA (i.e. selling, purchasing, keeping or carrying) do not include *wrapping* anything. The last lines of the said notifications, however, indicates that the Government was aware of the fact that the use of polythene as shopping bags is different from its other uses including its use as wrapper. Given that, the government failed to explain why the second or third notification should be understood to mean polythene wrappers as one kind of polythene shopping bags.

The Third Notification reflects another deviation from previous position of the government for banning bags of only up to 20 micron density. It imposes more stringent requirement by

^{16.} See the text in Poribesh Ain Sankalan, N.5, p.298

specifically determining the permissible density as 100 micron and by specifying the products that are permitted to use polythene wrapper. Its failure to define `wrapper' can create further confusion as 'wrapping' is somewhat similar to certain attributes (for example, to keep), the ECA specifically mentioned to define 'polythene shopping bags'.

2.3. Procedure and Penalty under ECA and Environmental Court Act

The penalty for polythene related offences are described in section 15(1) of the Environmental Court Act (ECA).¹⁷ As it provides, penalty for manufacture, import or marketing of polythene products in violation of any ban or restrictions made under section 6A would be imprisonment not exceeding 10 years or fine not exceeding 10 lac taka or both. Compared to that, punishment for sale, exhibit for sale, stock, distribute, commercial use etc would be imprisonment not exceeding 6 months or fine not exceeding 10 thousand taka or both.

The Environmental Court Act, 2000 (amended in 2002) provides for the establishment of one or more Environmental Courts, primarily in every Division of the country, with specific terms of references to deal with environmental offences under ECA. The Government has so far established one Environmental Court in Dhaka and another in Chittagong. By virtue of section 4 and 5 of the ECA, the Joint District Judge who sits in an environmental court would deal with, among other things, environmental offences relating to manufacture, import or marketing of polythene products which is punishable with maximum ten years imprisonment.

Under newly inserted section 5(B) by the 2002 amendment,¹⁸ environmental offences for which penalty would be imprisonment not exceeding 2 years or a maximum fine of 10 thousand or both

^{17.} For text of the Environmental Court Act, see *Poribesh Ain Sankalan* (A Compilation of Environmental Laws), Dhaka, DoE, pp. 167-177.

^{18.} For text of the Environmental Court (amendment) Act, see Poribesh Ain Sankalan, n.5, pp. 249-255

or confiscation of anything would be tried by special magistrates. Accordingly Special Magistrates would hear cases relating to sale, exhibit for sale, stock, distribute, commercial use etc. of polythene products. These magistartes could be appointed by Gezette Notification by the Government from among the 1st class magistrates or metropolitan Magistrates.

It is alleged that due to the confusion made by the definition of two categories of polythene offences and a wide disparity in the punishment of these two categories, law enforcing authorities are harassing the polythene traders. Whereas the maximum punishment for marketing banned polythene products is 10 years imprisonment and a fine of 10 lac taka, the punishment for stock and distribution of the same products is only 6 months imprisonment and a fine of 10 thousands taka. The cases so far filed (examples include Poribesh 4/2003; Poribesh 5/2003; Poribesh 7/2003; Poribesh 8/2003) in relation to the polythene offences have all been transferred by the Environment Courts to the Concerned Special Magistrates as those were related to less serious offences punishable with maximum six months imprisonment and a fine of 10 thousand taka.

3. Polythene laws in India and Pakistan : Although known as one of the most environmentally conscious countries, India's plastic laws are less stringent but much more diverse compared to Bangladesh. The federal law consists of banning certain categories of polythene carry bags, determining the production qualities and specifying recycle and disposal procedures. In case of Pakistan, the Provincial Government of Punjab has banned only the black polythene in the province.

3.1. The Federal Rules of India

The crux of polythene carry bag related obligations in India are spelt out in the 'Recycled Plastics Manufacture and Usage Rules, 1999'.¹⁹ The Ministry of Environment and Forest of India (MoEF) have issued the Rules under the Environment (Protection) Act, 1986 on September 2, 1999. The salient features of the Rules are:

^{19.} See, http://envfor.nic.in/legis/legis.html#J

- No carry bags having less than 20-micron thickness, can be manufactured, stored, sold and/or used;
- Carry bags made from recycled plastic would have to be coloured, specially marked and should not be used for carrying foodstuff;
- The recycling procedure should strictly follow the Bureau of Indian Standards specifications; and
- Carry bags manufactured from virgin granules should either be transparent or white.

The MoEF, through an amendment of the above Rules (being the 'Recycled Plastics Manufacture and Usage (Amendment) Rules, 2003', came into effect in June17, 2003) have imposed further restrictions on the use of plastic carry bags prohibiting the manufacture, storage, distribution and use of plastic carry bags whose dimensions are less than 8 inches X 12 inches (20 X 30 cms). It has been clarified that the minimum weight for 50 carry bags should be taken to be 105 gms and the carry bags of larger sizes shall be of proportionate increase in weight.

The Hazardous Wastes (Management and Handling) Rules, 1989, and its amendments in 2002, provides for collection, reception, treatment, transport, storage and disposal of hazardous wastes including plastic wastes.

3.2. West Bengal Laws:²⁰

The regulatory regime of the State Government of West Bengal relies mostly on banning Plastic Carry bag only in specified areas and determining the allowable thickness of those bags in other areas.

The West Bengal Pollution Control Board (WBPCB) has imposed a blanket ban on the manufacture, sale and use of plastic carry bags with effect from September 15, 2001 in the a number of ecologically sensitive areas of the state, viz, the entire Sundarban area, Coastal

^{20.} For detail, see http://www.wbpcb.gov.in/html/orderdirection.shtml. See also, http://www.wbpcb.gov.in/html/press.shtml.

Regulation Zone areas, hilly areas of Darjeeling district, and entire forest areas in West Bengal. The ban was imposed in exercise of the powers conferred by section 33A of the Water (Prevention and Control of Pollution) Act, 1974 and by section 31A of the Air (Prevention and Control of Pollution) Act, 1981. The subsequent directions issues by the WBPCB on May 7, 2003 and on August 24, 2004, have extended the blanket ban on the entry, use and sale of plastic carry bags in the 23 heritage/tourist sites (gardens, lakes, Memorial Hall, Palace etc.) of the state. In case of any violation of the direction, the administrators of the heritage sites may lodge a complaint with the police against the violator under section 188 of the Indian Penal Code.

The State Department of Environment issued another order on March 4, 2004, imposing ban on the use of plastic carry bags, cups and containers of less than four inches in height and 40 microns in thickness in all government buildings in West Bengal. This order has been circulated to all the secretaries, government magistrates, superintendents of police and administrative heads of all departments for immediate action.

In addition, the WBPCB has been conducting raids in units manufacturing plastic carry bags as well as wholesalers' premises and shops and establishments. Penal action has so far been initiated against 948 units (from 2002 to August 2004), and a total amount Rs 13,02,500 fine have been imposed.

3.3. Pakistan's Law

The Punjab Government issued a notification imposing ban on the manufacturing, sale and use of black polythene bags (black shoppers) throughout the province with from 5th June 1995.²¹ The ban was imposed in pursuance of power delegated under clause 4(1) and 6(1) of Pakistan Environmental Protection Ordinance, 1983. A notification to this effect has been issued directing the Commissioners, Deputy Commissioners, Magistrates and police to enforce the restrictive laws vigorously to check the production

^{21.} see the Notification in http://www. punjab.gov.pk/epa/ Manufacture_of_black_shopping_bags_ban.htm

and sale of black polythene bags. While justifying the ban, The Secretary, Environment, Punjab held that black polythene contains more injurious-to-health contents and contaminate eatables and it was also a major cause of pollution and blockade in the sewerage and drainage of water.²²

4. Summary of Approaches In Other Countries²³

Different countries and jurisdictions around the world have taken a range of approaches to plastic bags and other packaging materials, none of which is as stringent as the laws of Bangladesh.

Among these countries, Ireland is the only country with a plastic shopping bag levy paid directly by consumers. South Africa currently has a proposal to introduce a similar levy. Denmark and Italy have indirect taxes which apply to plastic shopping bags, which are absorbed into the overall costs of products to consumers. The federal system in the US means that many states or local jurisdictions have initiated actions aimed at retail packaging. One example of this is in New Jersey, where a tax is applied to the manufacture, wholesale, distribution and retail of 'litter generating' products.Other leading plastic producing country relies on a host of measures including levi, tax, waste disposal, economic disincentives, alternative bags and voluntary measures for control and management of the use of polythene bags.

In Europe, one principal measures implemented to deal with plastics are the Producer Responsibility mechanisms used by Member States to implement the Packaging Directive. This is premised on the need to organise national collection systems to meet specific targets for recycling, and influence *post-consumption* activity.²⁴

^{22.} Ibid.

^{23.} see, National plastic bags working group, Report to the national packaging covenant council, 6 December 2002, 12-16, available at www.ephc.gov.au/pdf/Plastic_Bags/ Plastic_Bags_WG_Report.pdf. See also Environment Australia, Plastic Shopping Bags – Analysis of Levies and Environmental Impacts, 11-18 at www.ephc.gov.au/ephc/plastic_bags.html - 26k

^{24.} Michele Raymond, Extended producer responsibility laws: A global policy analysis. at http://www.raymond.com.

Producer Responsibility mechanisms do not target plastic bags specifically but aim to encourage the recycling and recovery of plastics. Essentially, Member States choose to set a target for recycling and recovery of packaging materials. This is to be chosen from a range set by the European Commission in the Packaging Directive.

Different Member States use different approaches. In Germany and Austria, the onus is 100% on the producer – other countries still allow government to collect, but industry must ensure the "markets." Spain and Belgium go farther want packaging reduction plans from businesses, while Denmark and Norway seem to like their voluntary agreements.

While disposing of their responsibilities, in most countries, packaging industries make payments to designated bodies who are responsible for arranging for the collection, separation, recycling and recovery of the required amount of packaging.

5. Findings and recommendations

The above discussion clearly suggests that the stringency of the polythene related laws and regulations of Bangladesh do not conform to the regulatory rules and norms of other countries including the neighboring countries of similar socio-economic perspectives. Bangladeshi laws are not well though and they lack in striking a proper balance between economic and environmental aspects of polythene industries. Instead of taking a comprehensive approach to deal with polythene waste by making provisions for their disposal, rational promotion of alternative carry bags and partial ban of thin and small polythene bags, Bangladesh government has imposed an almost blanket and somewhat confusing ban on polythene products. The major findings of the analysis undertaken in the foregoing sections and the recommendations in that context are outlined below.

1. The actual intention of the ECA as to the regulation of polythene products is not accurately reflected in the subordinate Notifications of 2002. The specific and separate mention of polythene shopping bag in Section 6A of the ECA and defining it in the explanatory note to the said section clearly indicate that the *polythene shopping*

bag was considered to be a different item from other polythene products or other articles made of polyethylene or polypropylene. These also imply that the regulations to be imposed on those bags were not intended to be necessarily applicable to other polythene products. By banning Polythene Shopping Bags, the 2nd Notification and 3rd Notifications purport to mean banning any product made of polyethylene and polypropylene, although the ECA defines Polythene Shopping Bags as only bags, thonga or containers made of polyethylene and polypropylene.

2. The Third Notification has added to the confusion made by the second Notification regarding the definition of polythene shopping bags. It purports to mean *wrapping* materials as *shopping* bags although the attributes of the *shopping* bags as defined in the ECA (i.e. selling, purchasing, keeping or carrying) do not include *wrapping* anything. The last lines of the said notifications, however, indicate that the Government was aware of the fact that the use of polythene as shopping bags is different from its other uses including its use as wrapper. Given that, the government failed to clarify why the second or third notification must be understood to mean polythene wrappers as one kind of polythene shopping bags.

3. The total ban the 2nd Notification imposes on polythene products reflects a shift of government's previous stand for partial ban as it was reflected in the 1st Notification and the ministerial proposal of 22 December 2001. The reasons for that shift have not been adequately explained in any government documents. The Third Notification reflects another deviation from previous position of the government for banning bags of only up to 20 micron density. It imposes a more stringent requirement by specifically determining the permissible density as 100 micron and by specifying the products that are permitted to use polythene wrapper. Its failure to define `wrapper' can create further confusion as 'wrapping' could be confused with some other attributes (for example, to keep) the ECA specifically mentioned in defining 'polythene shopping bags'.

4. Bangladeshi laws on polythene industry are more stringent than that of India and Pakistan. The Indian law canters around banning

polythene bags more used for a single time. It thus prohibits bags of less than a particular dimension (20X30 cms) as well as density (20 micron). The state law of West Bengal is more detailed as well as specific primarily to protect environmentally sensitive areas from any use of polythene and protecting other areas from thinner polythene bags of 20 or 40 micron. In Pakistan, the Punjab government has banned only the black polythene bag for its excessive impact on environment.

5. The European countries and USA, although much more environmentally conscious, have taken a range of approaches to plastic bags and other packaging materials, none of which is as stringent as the laws of Bangladesh.

In fine, it must be acknowledged that in view of the severe drainage and flooding problems in Bangladesh, indiscriminate and excessive use of polythene products must be stopped along with other measures like waste management, flood management, recycling and reuse of shopping bags, introduction of alternatives, imposition of higher taxes. But, while controlling the use of polythene, regards should also be given to the economic and practical benefits it provides. A wise approach in this regard could be striking a proper balance between the economic and environmental aspects of the use of polythene. The laws of West Bengal which relies on diversive measures including blanket ban on the use of polythene in environmentally sensitive areas and partial ban on polythene in other areas in terms of size and density of polythene products could provide an ideal guideline for reviewing the Bangladeshi laws that is more stringent, confusing and taxing for the polythene industry.