Plastic Bag Bans and Third World Countries

FLOODING PROBLEMS WERE NOT CAUSED BY PLASTIC CARRYOUT BAGS ALONE!

By Anthony van Leeuwen, 19 May 2013

Proponents of plastic bag bans frequently list a number of third world nations where plastic carryout bags were banned. For example, countries such as Bangladesh, India, Kenya, Rwanda, Botswana, Uganda, Tanzania, Zanzibar, and Ghana where full or partial bans were adopted.

Most often cited is the severe flooding in Bangladesh that put most of the country underwater and blamed on plastic carryout bags. A careful examination of the issue will show that other factors are chiefly responsible.

Bangladesh is small country with 75% of the country less than 30 feet above sea level and 80% of the country is a giant flood plain or delta. Bangladesh is called a land of rivers as it has about 700 rivers including tributaries.[1] In addition, Bangladesh has five (5) major river systems flowing through the country[2] that are considered among the world's largest.[3] The catchment basin for the Bengali rivers is located in neighboring countries and is half the size of the Mississippi River catch basin with four times the annual rainfall. During the annual monsoon season from June to September the country is at risk of flooding because the volume of water transported by the river system increases by a factor of 20 to 140,000 cubic meters per second[4] [4,944,053 cubic feet per second or 113.5 acre feet per second]. During the normal monsoon season only about 18% of the country is flooded bringing with it fresh deposits of rich silt to replenish the fertile but overworked soil.[5] The volume of silt carried by the rivers into the Bay of Bengal each year is approximately 2.4 billion tons and builds new land along the sea front.[6] Thus, this great river system is not only the country's principal resource and it is also its greatest hazard.

The population of Bangladesh has been estimated to be between 158 and 170 million people. The nation is considered the world's 8th most populous nation[7] and 11th in population density.[8] While Bangladesh boast of being the world's fourth largest clothing exporter it also is one world's largest producers of rice, potatoes, mangos, pineapple, onions, bananas, jute and tea.[9] Most of Bangladesh's population continues to live on subsistence farming in rural villages[10] with health and education levels remaining relatively low.[11]

About three decades ago, polyethylene shopping bags were introduced in Bangladesh and rapidly replaced the traditional cloth jute bag. Environmental groups estimated that 9 million plastic bags were dumped daily in the city with only about 10% being dumped into rubbish bins. Over time these castaway plastic bags ended up clogging up drains and sewers.[12]

In 1989 a catastrophic flood occurred that inundated two-thirds of the country. Again in 1998 a catastrophic flood occurred that inundated about three-quarters of the country. A combination of heavy rainfall within and outside the country and synchronization of peak flows of the major rivers

contributed to the flooding. Both floods caused severe damage and loss of life. Environmentalists and urban planners blamed plastic bags for exacerbating the flooding in 1989 and 1998. The flooding was blamed upon plastic carry out bags that had blocked drains and sewers.[13]

In 2002 plastic carry out bags were banned. But cities still flooded year after year with water covering roadways and coming into houses.[14] Despite an awareness program warning of a steep fine and six months of imprisonment, after about a year the plastic bags began to flood the market again due to a lack of enforcement.[15]

In many areas of Bangladesh people live in slum like conditions. Trash is deposited in makeshift dumps, along the road and in drainage ditches. Drainage ditches and canals are filled with trash. Less than 50% of all waste in urban areas is collected and disposed of in landfills.[16]

Conclusion

While plastic bags may have been a contributing factor to acerbate flooding the following are some observations:

- Less than 50% or urban waste is collected and disposed of.
- Trash is dumped in open areas, streets, and makeshift dumps.
- Low-lying areas, drains and canals are clogged with waste including plastic bags.
- Storm sewer systems are substandard and are not maintained.
- Flooding is an annual problem and is not caused by plastic bags.

Comparing the flooding problems in Bangladesh or other Asian or third world countries as a result of monsoon rains and a substandard and unmaintained infrastructure is simply not applicable to the situation in this country.

In our country a substantial investment in infrastructure over many years has been made. Flood Control facilities are up to standard. 100% of trash is collected and disposed in well regulated landfills. Storm drains and/or flood control facilities are maintained on a regular schedule and trash is removed and disposed of in landfills.

Banning of plastic carryout bags in third world nations is probably one of the easiest and less costly solutions required to solve flooding problems. It will take decades and decades of investment to upgrade their infrastructure to prevent flooding. For these third world countries a bag ban may be justified; whereas, for our country, it is not.

About The Author

Anthony van Leeuwen *is the founder of the* ***Fight The Plastic Bag Ban*** *website and writes extensively on the subject. He holds a bachelors and Master's degree in Electronics Engineering and has over 40 years of experience working in the federal government.*

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