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The Impact of Plastic Ban on Businesses and the Its Alternate Measures

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Abstract:The economic growth and development of a country depends upon the natural resources to a large extent. In recent years, the economic growth and development in India has been curtailed due to the limited natural resources, environmental degradation and extreme climatic changes. There are a number of serious environmental issues in India, and one such thing is the usage of plastics. On one hand, having used plastics for decades have resulted in environmental degradation, and on the other hand doing away with plastics this year has brought in a lot of hardships to all sectors of businesses.

The impact of state legislation across the country has led to businesses scrambling for cost effective measures. Businesses in food, drink, retail and e-commerce industries were most affected by the changes in the environmental policy regarding single-use plastics as it contributes heavily to the packaging cost.

1. E-COMMERCE:

In e-commerce, packaging charges include 2-3% fulfilment cost, i.e. the price of delivery, shipping and compensating selling for discounts. Changing the policy of packing may result in switching over to other alternatives which may further lead to the investment in machinery or consumption of materials, escalating the packing charges. And thereby result in the reduction in margins of profit and rise in the price of the commodity.

2. FOOD PROCESSING INDUSTRY:

Going in for an alternative packing material from plastic may result in food spoilage. To reduce this impact on businesses, most states have currently offered exemptions. The exemptions vary from state to state. The regulatory bodies are likely to tighten the legislation and enforcement which may lead to a greater impact in future on production, packing and supply chain.

3. PLASTIC BAN IN INDIA:

In 2009, Himachal Pradesh was the first state to ban plastic and polythene bags in India. After which 25 states have adopted similar measures. Some states have implemented complete ban on plastics while some have adopted partial-ban on plastics. The capital (Delhi) banned plastics in all forms in 2017, whereas Karnataka enforced the ban in 2016. Following which Bihar, Maharashtra, Odisha, Tamil Nadu and Uttarakand have announced and banned the usage of single-use plastics this year.

4. STATE WISE RESTRICTIONS ON PLASTIC BAN:

***Bihar*:** The state introduced the complete ban on manufacturing, importing, storing, distributing, transporting and usage of carry bags, irrespective of their size and thickness in its urban city from 14th December 2018.

Exemption:

1. Use of plastic above 50 micron thickness for collection, storage and disposal of medical waste.
2. Plastic containers for raising plants in nursery.
3. Dairy packaging.

Maharashtra: The state of Maharashtra banned plastic use in manufactures, transport, wholesale and retail sale and storage, disposable products, thermocol for decoration, plastic bags with or without handles, spoons, glasses, forks, containers, plastic straw, pouches, and any other plastics used in food industry.

Exemption:

1. Plastics used for packing medicines.
2. Plastics used for handling solid waste.
3. Plastic bags for exporting
4. Food grade virgin plastic used for milk packing.
5. Materials used for horticulture and agricultural purposes.

The ban created a pressure on business houses leading to alternative machinery for producing the packing material or additional purchase cost of an alternate material used in packing. As a consequence of the ban, some of the business firms were even fined for having used single-use plastics. A fine of about 6 lakh rupees was imposed on more than 80 companies including McDonalds and Starbucks.

Odisha: The state banned plastics in six cities from 2nd October 2018. Plastics of 50 micron thickness were banned in storing, transporting and packing food items, milk products and edible oils.

Exemption:

1. No ban on plastic in nursery, horticulture, agriculture, healthcare sector.
2. Polythenes of more than 50 micron thickness
3. Water bottles more than 500ml
4. Thermocol used in packing of electric goods
5. Packing and wrapping materials used at the time of manufacturing.

Tamil Nadu: TN announced its ban on 1st January 2019. The ban was primarily on carry bags, plastic plates, cups, flags, sachets in packing water etc.
Exemptions:

- Plastic used in packing dairy and medicines.

Why did India pass the anti-plastic law?

The consumption of plastics in the world varies from country to country, and fortunately India is not at the top rank of plastic consumption. It consumes only 10% of plastics compared to the consumption in bigger and developed countries like US. The problem is not just with the use of plastics, but is something beyond that.

India is very badly affected by the consumption of plastics mainly because of the poor system of waste management in our country. The recycling sectors which are operated in the country are informal and unregulated and are operated without proper government intervention. The waste generated every day is nearly 33.1 million pounds of plastics, out of which only 19.8 million pounds of plastics are collected and recycled, leaving the rest to be the main cause of pollution. This has in fact created a concern in usage of plastics and its ban henceforth. The surfaces of the canal in India are carpeted with plastic wastes. These canals have been a breeding ground for mosquitoes. Plastic bags are seen flung on tree branches, float on water, dropped haphazardly in the soil, thereby resulting in environmental degradation on whole.

Environment minister Harsh Vardhan on World Environment Day made an announcement that by 2022 single-use plastics will be totally eliminated from India. This announcement led to the ban of plastics in at least 25 of the country's 29 states. Yet, it has not helped the country lesser the percentage of pollution as expected.

5. IMPLEMENTATION AND ENFORCEMENT:

India needs to go miles ahead to curb this environmental pollution by putting into practice a ban on the usage of single-use plastic. India's environmental laws should follow the "polluter pays principle" which means the polluter is punished. Though pollution issues are discussed and ideas are shared still not much effective results can be felt as this stringent action is effected only on paper. Therefore accountability becomes a major issue.

Even though the move of banning single-use plastics has been a positive one, there is a serious concern on how the decision will be implemented in a country where existing bans have proved problematic. The implementation and enforcement has been very poor, where in spite of the use of plastics there is no imposition of fine, and checking happens once in a blue moon. There is no consistency in the enforcement of the law to curb the menace.

In Karnataka, even though there is a complete ban on use of plastics, political parties use plastic banners, flags, etc. where the administrative officers are unable to enforce. Imposing ban on the businesses contributing to the problem should be audited and tightened says GAIA.

Rosie Cotgreave, plastic free campaigner from Friends of Earth says imposing pressure on businesses will be the key to make the ban work. Onus of ban should not only be on the consumer, it should be by imposing legislation on big businesses to end their use and such innovate alternatives will put an end to plastics.

1. The government should take strict initiatives in rules against plastic littering.
2. Implement the collection of used plastic back from the environment for recycling.
3. Make companies accountable for the plastic waste that comes out of their business houses/products.
4. Recycling need to be strengthened.

The implementation of the ban on use of plastics is of greater need and significance in the present times, but on the other side, it does causes a major impact in the society that we live in.

6. IMPACT ON EMPLOYMENT:

The huge rise in the demand for the ban on the use of plastics also has some defects. For instance, the ban on plastics in India marked more than 300 plastic bag manufacturers to close down their business, throwing thousands of people out of work. While people started to use aluminium containers to pack foods, residents were confused as to whether or not to use garbage bags, hotels and restaurant workers found it difficult when foods had to be packed and many more could be stated as examples. But, this scenario did not extend for more than a week.

Within a week's time, the scenario changed as the government relaxed the ban on plastics. The government had to do so as they received pleas from people of different business sectors like plastic manufacturers, milk suppliers, small traders, consumer giants like Pepsi, Coca-cola and e-commerce companies like Amazon and etc. According to All India Plastic Manufacturing Association (AIPMA), the closure of firms and loss of jobs has led to the loss of millions of dollars.

7. ALTERNATIVES FOR PLASTICS:

The use of plastics by man all over the world has become unavoidable. Yet, there are chances to redeem ourselves from using such a toxic element which affects not just the human beings but also the environment on whole. It is high time we try to eradicate the use of plastics on whole by making use of some of the alternatives.

Glass: The use of glass is one of the alternatives. Glass is made from sand and not made from fossil

fuels like plastics. Hence it is easier to recycle, reuse and dispose of it at any point of time and can be done indefinitely.

Reusable shopping bags: Plastic bags are non-biodegradable and need a lot of non-renewable resources for it to be manufactured. An average reusable bag has a lifespan equal to that of more than 700 disposable plastic bags. The use of reusable shopping bags will result in,

1. Prevention of environmental pollution
2. Reduce in the unwanted use of non-renewable resources

This in turn, will reduce the time and money spent by man in devising new ways to clean up the mess caused by the use of plastics.

Chicken Feathers: Research shows that chicken feathers when cleaned, made into fine dust and added chemicals to it through the process of polymerization, formed a new material which was stronger than materials that were similar to it, like plastics. Due to the presence of keratin, a tough and durable protein like plastic, these can be used as water resistant thermoplastic.

PCL Polyesters: Polycaprolactone (PCL) is a synthetic aliphatic polyester that's not created from renewable resources but could degrade after weeks of composting. But, PCL polyesters are not preferred much mainly because of its high manufacturing costs.

Milk Protein: This contemporary milk product is produced through natural process and takes less time to decompose in comparison to that of plastics. It helps in producing a biodegradable plastic to make insulation, furniture cushions, packaging and other products.

Liquid Wood: This has composition and color similar to that of a natural wood but acts as a thermoplastic polymer. It looks, feels and acts like plastic and is biodegradable and hence scientists call it as the 'plastic of tomorrow'.

8. CONCLUSION:

"The world currently produces more than 300 million tonnes of plastics annually, and there are at least five trillion plastic pieces floating in our oceans. Micro plastics have been found in the deepest sea trenches and high up the earth's tallest peaks and plastic consumption is growing year-on-year."

Amidst such serious situations prevailing in the world, the paper shows examples of various states that have tried to implement the ban on plastics and how despite the ban, our country still suffers under this major issue of environmental pollution caused by the use of plastics. A systematic approach to the collection of plastics and the process of recycling needs to be followed to eradicate the pollution caused by plastics.

In a developing country like India, the rapid economic growth has led to the steady rise in the plastic production and consumption and is expected to double in2022. On the other hand, waste collection and management also being an issue, especially with the increase in the production and use of plastics will only lead to hazardous environmental issues.

Only when the chain of alternatives for the use of plastics pointed out in this paper is widely accepted and made use of by the government, can the desired effect be seen. The other important factor for environmental degradation is the lack of public participation in conservation of limited resources and the intention to indulge in the use of environment – friendly products.

The complete ban on the use of plastics will clearly be hard for people on whole and will not be widely accepted. And with India being a country relatively high in recycling of plastics clearly shows how the people from the informal sector (rag pickers) depend on this. The manufactures of plastics may also be heavily affected if the ban is strictly implemented by the government. It is the role of the government to intervene and create alternative job opportunities for all these workers.

In this modern world of technology of smart phone users, The National Institute of Ocean Technology and The National Centre for Coastal Research have recently launched "marplasts" a mobile application that can track the plastics in marine environment.

Thus, if these suggestions could be made into strict environmental policies, if the government and the people make it a point to put these into action, a solution to the menace of the plastics could be achieved.

REFERENCE:

[1] https://e360.yale.edu/features/as-indias-largest-city-shows-banning-plastics-is-easier-said-than-done
[2] https://www.huffingtonpost.com/entry/single-use-plastic-ban-india_us_5b3a09b6e4b0f3c221a28a07
[3] https://www.india-briefing.com/news/plastic-ban-india-business-impact-state-specific-regulations-18145.html/
[4] http://greencleanguide.com/burning-environmental-issues-in-india/
[5] Plastic in focus at UN environmental forum, The Hindu, 12 March 2019.