

Current Status of using Plastic Bags in Vietnam and Some Recommendations to Improve the Environment

KieuThi Thu Chung, Department of Politics, FPT University, Vietnam

Article Info

Volume 83

Page Number: 850 - 855

Publication Issue:

May-June 2020

Article History

Article Received: 11 August 2019

Revised: 18 November 2019

Accepted: 23 January 2020

Publication: 09 May 2020

Abstract:

Nowadays, nylon bags have become familiar in the daily life of the community. With the advantages of durable, strong, cheap price, nylon bags, especially the ultra-thin bags are commonly used in many places, circulated from the sale of vegetables, fruits, meat, fish, to supermarkets, retail stores, street vendors, into every corner of our life. In addition, they are also used a lot to pack food and store small things. The good points of nylon bags are clear, but their impact on the environment and people's health is almost taken care by users. The most concerned thing today is still the attitude and the action of the whole society towards this. While there are no strict legal regulations and different types of bags to limit the use of these bags, each of us needs to take more practical and specific actions to reduce the harm caused by plastic ones. Each household needs to reuse clean plastic bags for the next times and form a habit of consuming products which do not affect our living planet. This paper analyses the situation of plastic bags in Vietnam in comparison with some other countries, thereby offering some tips to build a green, clean and environment-friendly world

Keywords: Environment, Lifestyle, Habits, Plastic bags.

I. INTRODUCTION

Appear in all stores, supermarkets, etc., these durable plastic bags are used for a variety of purposes. From holding a few bundles of vegetables, chilli to large parcels, plastic bags all play a big role to transport goods. In essence, plastic bags are products made from different materials.

The main ingredient in these products, however, is petroleum-based polyethylene granules, along with a number of other chemical additives.

A popular product, often used in everyday life, millions of plastic bags is used every hour. When being in the natural environment, a plastic bag may take hundreds of years to disappear, causing heavy pollution and becoming a pressing problem for society. This has been leading many concerns to the world where we are living.

II. CURRENT STATUS OF USING PLASTIC BAG USE IN THE WORLD

Each year, billions of plastic bags in the world are being used, which is equivalent to 2 million bags per minute. This is a very terrible number of current plastic bag usages. Different countries have different amount of using these plastic products while the world commit to limiting this usage [1].

In fact, there are many problems with plastic products, so this is why environmental bans are applied in many countries. As early as in Denmark starting in 1993, this makes the use of plastic bags reduce 60% quite quickly.

Some countries, including Europe and some very clean countries such as Singapore, Japan, Korea, Hong Kong, etc. control the use of plastic bags very well. Meanwhile, Vietnam is a small country, population ranked 14, per capita income ranked 128

out of 195 countries and territories in the world. In terms of the amount of plastic waste dumped into the sea, Vietnam is again a giant - ranked 4th in the world

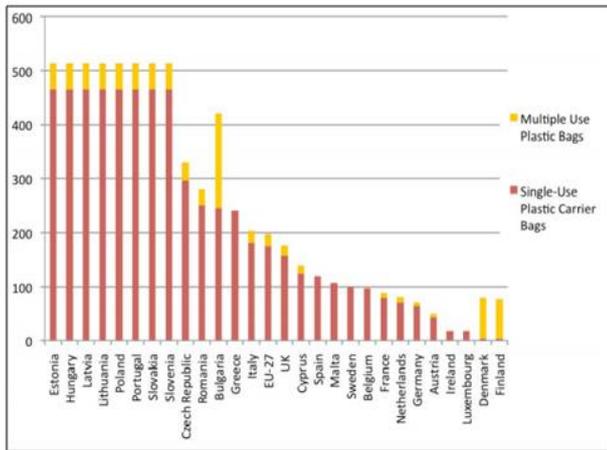


Figure 1. The plastic bag consumption in Europe (Source: EURACTIV.fr)

Perhaps the most well-known solution in Ireland in 2002 is that consumers will have to spend money on bags, leading to a 90% reduction in used bags and a significant reduction in plastic waste. By 2007, usage had increased again, resulting in a rise in the price of plastic bags. Ireland and Denmark are the great countries which other countries around the world should learn about. It is said that the European Union requires an 80% reduction in plastic products by 2019 (Figure 1).

III. CURRENT STATUS OF PLASTIC PRODUCT MARKET IN VIETNAM- SOME HIDDEN RISKS AND PROSPECTS

In the coming time, in order to make good use of the purchasing power in the internal market, finding new markets, making models and improving quality competitiveness is a necessary task. It can be encouraged by the production and export of plastic and suitable products. The use of plastic has increased rapidly every year (Figure 2).

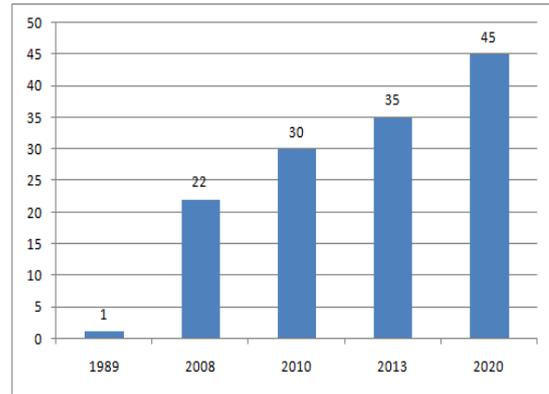


Figure 2. Plastic consumption demand over the years (Source: General Statistics Office of Vietnam)

According to estimates of the Vietnam Plastics Association, plastic consumption per capita in Vietnam tends to increase over the years. When comparing these figures, in 2008, the average plastic consumption per capita is 22 kg per year, that number could be 45 kg by 2020. This shows the high growth potential of Vietnam's plastic industry in the future, however, plastic waste will increase and environmental problems in Vietnam will become more serious. And, one thing that is quite painful is that many people's awareness of using plastic products is still poor [2].

IV. POOR AWARENESS OF DISPOSING OF PLASTIC WASTE IN A WRONG PLACE

Every year, after Christmas or New Year, big city centres like Hanoi Capital and Ho Chi Minh City are full of rubbish, especially on Nguyen Hue walking street or the streets around Sword Lake (Figure 3).



Figure 3. Plastic trash thrown in many places of the country

This is the consequence of the lack of environmental protection subjects in schools and the alarm of young people's awareness in keeping preserving the landscape for the city. In addition to strict laws, the clean environment itself also helps people to be more hygienic. When we go to a clean place, it will be more difficult for us to throw a piece of garbage on the road rather than a place with a lot of rubbish, regardless of whether the law of that place will strictly handle our littering behaviour.

5. Current status of using plastic bags in Vietnam

Using plastic bags in many places of Vietnam is rather alarming. Every year, Vietnam uses billions of plastic bags, however, only a small amount of these bags are reused. Plastic bags, after being treated as garbage, can cause serious pollution and affect human health [3].

According to scientists from the Institute of Marine and Islands Management, part of the Vietnam Maritime and Islands Administration, Vietnam annually releases 0.28-0.73 million tons of plastic waste into the ocean, accounting for 6% plastic bags of the world in total. According to statistics from the Vietnam Plastic Association, in 1990, each Vietnamese consumed 3.8kg of plastic per year, but 25 years later, this figure reached 41kg.



Figure 4. The popularity of plastic bags use in Vietnam market

It is said that there are about 80 tons of plastic waste and bags are thrown away each day in big cities including Hanoi and Ho Chi Minh City. On the

positive side, Vietnam has made efforts to control imported plastic as well as supervise plastic production and consumption.



Figure 5. Flooding plastic waste in some places in Vietnam

In Vietnam, using plastic products in general and plastic bags in particular can be considered as a habit of many people because it is quite handy [4]. According to national statistics, about 25 million bags a day are released into the environment every day. In particular, each household in big cities can use more than 3 plastic bags per day. And in Asia, Vietnam is seen as a country that abuses plastic products alongside countries such as China, Indonesia and the Philippines [5].



Figure 6. The application of recycling bags in Vietnam supermarkets

V. THE INFLUENCE OF PLASTIC BAGS ON THE ENVIRONMENT

Using plastic bags has a range of consequences to the environment. The first consequence is that the

soil might be eroded since plastic bags mixed with the soil, which hinders the growth of the plants surrounded by it, hinders the growth of grass leading to soil erosion. The second is devastating ecosystems, plastic bags in the soil that make the soil unable to keep water and necessary nutrients. Planting on those plots could not produce the desired results because the soil could not best transfer water and nutrients to the plant. This will affect the development of ecosystems on earth. Thirdly, the bags are thrown into the sewers, the river will increase the possibility of flooding of urban areas during the rainy season, this can also cause bad odors affecting the lives of residents. [3].

The fourth is the destruction of organisms in the sea and lakes because when they eat plastic products. Fifth, food plastic containers are thought to cause lung cancer and health effects are quite obvious, including children and adults. Next, the local beauty will be affected by the unconsciousness in the littering of some people, which greatly affects the country's tourism industry [2].

With negative influences on the natural environment and human life due to the usage of plastic bags in the country, the gradual regulations towards our earth that no longer uses plastic bags is a must-do-thing. To accomplish this, we need to encourage a number of specific solutions.

VI. SOME RECOMMENDATIONS OF MINIMIZING AND REUSING PLASTIC BAGS.

There are a few simple ways anyone can do it. Many people doing small things will have a positive influence on the environment. We need to limit the purchase of plastic packaged items; instead we should buy products packaged in glass jars, paper, leaves, etc. We only use cloth bags to store things when shopping and don't use bottled water. We can bring our own cups or bottles to hold water, and then reuse it. The reuse of plastic bottles, plastic bags instead of buying new ones should be encouraged. Let's tell the clerk not to use plastic bags if not necessary. It's also a good idea to wear clothes made

of natural materials. We also need to limit bringing home food because they will be used plastic containers, bags, plastic spoons to repack [4].

Next, it is necessary to change people's habits of using plastic bags. This change of behavior cannot take place immediately and in a limited time but it is the result of a combining many ways from the management and guidance of state. Education about the impact of plastic bags on the environment and human health on people needs to be paid more attention. We need to change the habits of low awareness and indiscriminate. In addition, businesses, markets, supermarkets and shopping malls need to be more aware with the use of plastic waste, that is, the use of plastic bags is accepted when buying goods but should be more limited. Supermarkets also need to use more environmentally friendly bags.

This is both a way to save money, limit the production and use of new plastic, and avoid packaging and packaging processes that can create additional waste. This solution is to encourage distributors / retailers (first of the supermarket systems, large-scale commercial centres then expand the audience) to participate in the voluntary process of reducing nylon bags.

Then, taxes should be increased on the production and consumption of plastic bags through the country. Taxation and tax increase on the using of plastic bags will broaden the way for many other better types of bags. The increase in tax on plastic bags should be taken in consideration in term of protecting our planet. That means that the consumers have to pay for these bags if they need it for any reasons [6].

We also need encourage and support companies in order to produce environmentally friendly bags. Currently, a number of businesses have been investing in the production of eco- bags such as paper bags, reusable cloth bags, etc. made from reused nylon.

There should be certain policies to help businesses that organize the collection and recycling

of plastic waste. At markets, supermarkets, shopping centres, bags are often used only once. Despite being manufactured for one-time use, a small number of households are still reused for household purposes, mainly lining trash, food packaging, utensils, etc. Because of economic value of this thin plastic bag is not high so it is finally disposed of with household waste or dispersed everywhere and causing environmental pollution.

To increase the collection and recycling of unnecessary bags, the government needs to arrange the locations and the garbage collection in the most reasonable way. Customers can be encouraged to use carry-on bags and restrict purchases of plastic bags of any kind [6].

Besides, it is necessary to propagate to raise public knowledge that plastic products. This is an good solution in environmental programs, greatly fostering the success of other plastic bag reduction solutions. Although this is rather costly, the mentioned programs should be carried out regularly under advocacy campaigns and after each round, it is necessary to have a review of lessons learned to readjust the content of the declaration [7].

Lastly, we need to limit the types of plastic containers. Glass and metal containers can be used instead of plastic containers to store nuts, spices, food and even soap, shower gel, washing powder, dishwashing liquid. However, we do not have to rush to throw away all types of plastic containers in use. We can continue using it if it is still good and replace it gradually when it is no longer available to avoid waste.

VII. CONCLUSION

Saying no to plastic may sound hard, but it is possible when we start by changing some daily routines. However, to solve the current issue of using plastic bags is not too difficult. It is important that we dare to change or not alone. Along with raising awareness, changing consumer habits, heavy measures such as banning the use of plastic bags or increasing environmental protection fees are practical solutions. People need action to save

themselves and their environment before it is too late. If not eliminated, we can reduce plastic consumption in the future by starting our new habits to pursue a green lifestyle.

VIII. ACKNOWLEDGMENTS

I would like to show my thanks to the support of FPT University

IX. CONFLICT OF INTEREST

No conflict of interest

X. REFERENCES

1. Van Calcar, C.J. and van Emmerik, T.H.M 2019 Abundance of plastic debris across European and Asian rivers. *Environmental Research Letters*, 14 124051
2. Jalil, M.A., Mian, M.N. and Rahman, M.K 2013 Using plastic bags and its damaging impact on environment and agriculture: An alternative proposal. *International Journal of Learning & Development*. 31-14.
3. Jambeck JR, et al. 2015 Plastic waste inputs from land into the ocean. *Science* 347 6223 768–771. doi:10.1126/science.1260352
4. Johny, Joice, et al. "Automatic Plastic Separating Technology For Solid Waste Disposal." *Research and Development (IJCSEIERD)* 3.2 (2013): 99-108.
5. Van Emmerik, T., Loozen, M., Van Oeveren, K., Buschman, F. and Prinsen, G 2019. Riverine plastic emission from Jakarta into the ocean. *Environmental Research Letters*. 14084033
6. Das, S. U. C. H. E. T. A., et al. "Magnetic susceptibility of road dust from Kolkata-in relationship to road traffic." *International Journal of Applied and Natural Science*, 6 (5) (2017): 65-78.
7. Harianja, A.H., Saragih, G.S. and Fauzi, R. 2019 Replacing single use plastic bags with compostable carriers: socio-economic approach. In *IOP Conference Series: Earth and Environmental Science*. 407 012001
8. Tejeswini, K. "Engineering behavior of soil reinforced with plastic strips." *Research and Development (IJCSEIERD)* 3.2 (2013): 83-88.
9. Nadaf, Yasmin Begum R., and Shamshuddin M.

Nadaf. "Green marketing: challenges and strategies for Indian companies in 21st century." International Journal of Research in Business Management 2.5 (2014): 91-104.

10. Radini, F.A., Wulandari, R., Nasiri, S.J.A. and Winarto, D.A 2017 Performance comparison of plastic shopping bags in modern and traditional retail. In IOP Conference Series: Materials Science and Engineering. 223 012058
11. Kumar, R. A. S. H. M. I. "Indian jute industry and its future." International Journal of Business and General Management (IJBGM) 6.4 (2017): 21-32.
12. Khoiruman, M. and Haryanto, A.T 2017 Green purchasing behavior analysis of government policy about paid plastic bags. Indonesian Journal of Sustainability Accounting and Management. 131-39.
13. Gill, Mukti. "Bioplastic: a better alternative to plastics." Int. J. Res. Appl. Nat. Soc. Sci 2 (2014): 115-120.