TO:

FROM:

SUBJECT: BAN ON PALSTIC BAGS

DATE: 6/10/2019

Technologies do not stand still, they develop as if in a geometrical progression. But the rapid pace of digitalization makes people increasingly think about the environment. In what form will we leave the planet to our descendants?

Plastic bags invented in the United States in 1957. By 2002, the total global output of plastic bags was calculated in the range of 4 to 5 trillion pieces a year (Parker,2019). One of the main enemies of the Earth are plastic and polyethylene. According to estimates of the World Wildlife Fund, 6 million 300 thousand tons of garbage are dumped into the ocean each year, most of which are exactly these two products, which leads to the death of 1 million birds, 100 thousand marine mammals and huge amounts of fish. By the way, the usual packing bag was invented in the USA in 1957 for packaging sandwiches, bread, vegetables and fruits. By 1966, about 30% of bakery products produced in the country were packed in bags. By 1973, the volume of production in Western Europe amounted to 11.6 million units. In 1982, plastic bags with a handle appeared in the largest shopping centers for sale (Parker,2019). And by 2002, their total global output was estimated at between four and five trillion. pieces per year. Today, scientists have calculated (Andone,2019). Throughout, New York State, plastic bags have become a global sight on the landscape. Plastic bags can be seen everywhere from litter to water ways, from stores to stomach of animals or even stuck in plants. Plastic bags are destructive to the health of societies and the environment alike. This report delivers an outline of the problems triggered by plastic bags, and it examine the use of plastic bag reduction actions undertaken in New York State. (Andone,2019)

Plastic bags are produced from crude oil, and as a result of the synthesis process, a dense or soft material is obtained. The age of a plastic bag hardly reaches the age of one generation, but during this time it has already managed to become synonymous with garbage. Mainly, due to its convenience, a plastic bag has gained widespread use in many areas of life, but the process of its decomposition of a plastic bag is very long. For example, at sea, it does not decompose at all. Plastic bags according to the type of decomposition can be divided into 3 main groups.

**Bags made of plastic film**

These are the most common packages that are produced from oil and the decomposition time of which is probably from 700 to 1000 years (Katz,2019). Under adverse conditions, they do not decompose at all. Plastic bags break up into smaller particles, releasing toxic compounds during this period. At the same time, they are a deadly temptation for fish, birds and animals. Plastic bags, for example, caused clogged sewer pipes in NY city. As a result of the flood, thousands of people died. The polyethylene film can be recycled again, but, unfortunately, according to experts, no more than 1-3% of the total produced polyethylene film reaches reprocessing. (Katz,2019)

**Packages with an accelerated decomposition process**

These packages are often mistakenly called biodegradable. In addition to polyethylene, they also consist of molecules of plant origin. The film, once in a favorable environment, is exposed to bacteria. Bacteria eat filler and form a large number of voids in the film, due to which the porosity of the film increases, which, in turn, contributes to the further decomposition of the package in various ways, including under the action of bacteria. On the conservation of nature through the use of such packages was a lot of controversy, as a result of the rapid decomposition of the plastic bag does not disappear. It simply turns into smaller particles that are a burden to nature and dangerous to animals and birds. On the food chain, plastic wrap reaches our table. In the body of modern man there are about 100 synthetic chemical compounds, which 50 years ago were not there yet (Cote,2019). Such packages are certainly not suitable for a waste bin with bio-waste and, in essence, are also not suitable for containers with plastic waste, because they make the whole process difficult.

**100% Biodegradable Packages**

These are bags made from a substance that is totally consumed by bacteria - for example, from corn, coconut or rice starch, from soy protein or other similar material. Unfortunately, such bags are weaker and more expensive than plastic bags. But in favorable conditions, they biodegrade completely and in a short period of time. At the same time, their production raises the overall price of food products throughout the world. Such packages can be put in compost pits.

**Assessment of the Problem**

 **Why plastic bags are harmful?**

Plastics are chemically very stable. Plastic products only break down into ever smaller particles until they become microparticles (microplastics). However, these particles are not completely degraded. If plastic gets into the environment or into water as wild waste, then the decomposition into microplastics takes many decades. For a plastic bottle in the sea, the Federal Environmental Agency expects up to 450 years (Campbell,2019). The consequences this can have for nature and people cannot yet be estimated. But there is a suspicion that the particles return to humans via the food chain.

Effects of plastic waste in nature on marine animals and birds are already visible. In the stomachs of many seabirds you can find plenty of plastic pieces that were kept for food. The animals starve to death with a full stomach. Also, in the smallest crayfish one has discovered plastic particles.

Manufacture of plastic bags is a money-making business that started in America in the fifties of the last century. Translucent disposable bags made a factual revolt, and they began to be used everywhere. But the ecstasy did not last extended. Now numerous countries impose a constraint or ban on their use, as individuals have grasped the harm of plastic bags for the environment and human health.

Nevertheless, the entire world has previously comprehended the harm it causes to the ecology of the planet. 6 million 300 thousand tons of garbage, most of which is plastic, is discharged into the oceans every year. (Campbell,2019). Packages also position a serious threat to birds and marine mammals, which regularly take them for food. Floating bags repeatedly deceive sea turtles, who think that this is their beloved target - jellyfish. A large number of animals die each year after swallowing plastic bags of asphyxiation. Plastic bags under the effect of sunlight for a long time suffer physical devastation (Cote,2019). Ultraviolet radiation rifts the plastic into numerous small particles. They are then combined with soil, lake sediments, picked up by streams of water and eventually donate to the creation of the Great Pacific Garbage Plot, or other oceanic buildups of debris. Lastly, the manufacture of plastic bags, conveying them to stores, and then to landfills entails millions of liters of oil, a non-renewable natural reserve that could be used for more useful purpose.



The ecological harm caused by plastic bags is massive. Plastic is 80% of the trash on roads, parks and beaches, and is 90% of the fluctuating garbage in the deep-sea. In each square mile of the ocean, more than 46,000 pieces of plastic were found. This places a marvelous load on the environment (Iverson,2019). Small fragments of plastic act as a type of chemical sponge. They captivate a million times the absorption of composites such as deadly PCBs and DDE associated to the close sea water (Reusablebags.com). Sea creatures eat these scraps and die. It is assessed that more than 100,000 diverse birds, seals and whales die respectively each year (Reusablebags.com). After the animal dies, its corpse decays, and the plastic moves easily again in the marine and kills over and over. (Iverson,2019).

**Literature review**

Packages contain a large amount of harmful substances, including lead, glue and paint, various bacteria that live on the surface of these products, including dangerous E. coli. There is also mold and fungus that lives inside the packages in a humid and warm environment with products.

If you keep products in bags, they deteriorate many times faster, start to rot and the likelihood of poisoning increases. And if you talk about foods with high acidity, such as sauerkraut or cottage cheese, they quickly destroy the upper layers of polyethylene, releasing harmful chemical compounds outside (Connected,2019).

At low temperatures, polyethylene releases toxins, so keeping food in the refrigerator in bags is not very useful. At high temperatures, it releases formaldehyde, which leads to cancer. When using non-food polyethylene, monomeric phthalates are released from it, which are bad for the health of the liver and kidneys.

 According to the UN report for 2015, about two billion tons of municipal solid waste is generated annually on our planet. Plastic bags make up 15 percent of this number, i.e. 300 million tons. The demand for packages is incredibly high. According to the UN Committee on Nature Conservation, 4% of world oil production is spent on the production of polymer bags. (Xanthos and Walker,2017).

The number of used packages is growing rapidly, winning from the creators and former users, that is, ourselves, the increasing surface of the globe. For example, a large Pacific garbage patch — the whirlpool of man-made garbage in the North Pacific — has a dynamic size of 700,000 to 15 million square kilometers, or about 8.1 percent of the total Pacific area. According to the UN for 2014, it consists of from 300 thousand tons of the polymers which are a part of plastic bags in the form of 5 billion various fragments (Iverson,2019).

Until recently, in New York, they used only a measure very dangerous for the destruction of packages - they were burned. According to the US Environmental Protection Agency, burning one kilogram of waste containing chlorinated plastic, which is part of the polymer bags, releases about 40 μg of dioxins, that is, poisons that are dangerous to nature and human health.

Social activists are concerned about the widespread use of plastic bags, which, according to various media, produce from 4 to 5 trillion a year. Most of these packages, according to nature conservationists, find themselves at a landfill soon after the purchase, causing significant harm to the environment.

The disadvantage of plastic bags, due to which environmentalists demand that they not be used, is the complexity of their disposal. According to the website of the ECA Movement, an active supporter of the complete prohibition of plastic bags, when in the ground, the final decomposition of polyethylene leaves about 100-400 years.

Plastic sheets cover coral sticks, sponges or mussel beds and thus prevent their colonization. Covered by the tarps, the marine organisms are cut off from oxygen exchange and suffocate. Endangered are also rare cold-water coral reefs.

Plastic often contains additives that give the product desired properties but can harm people and animals. Bisphenol A, phthalates (plasticizers) and brominated flame retardants can impair sexual development, damage the genetic material or have a carcinogenic effect. These toxins penetrate into the fatty tissue of marine organisms and may possibly subsequently enter our food chain

Light plastic bags scattered along the coast are blown away by the wind and pollute the world ocean, representing a real threat to marine life that swallows pieces of film, taking it for food. The website of the ECA Movement cites data from the UN Committee for Nature Protection, according to which plastic waste annually causes 1 million birds to die, 100 thousand marine mammals and an innumerable number of fishes. (Derraik,2012)

In addition, with regard to water pollution, experts say that about a quarter of the water surface is covered with plastic bags. This leads to the fact that different types of fish and dolphins, seals and whales, turtles and sea birds, taking plastic for food, swallow it, get confused in bags, and therefore die in agony. Yes, all of this happens mostly under water, and people do not see it. However, this does not mean that there is no problem, so you should not turn a blind eye to it.

About 75 percent of the up to ten million tons of garbage that is flushed into the oceans every year is made of plastic. According to the United Nations Environment Program (UNEP), up to 18,000 plastic parts of all sizes are drifting on every square kilometer of the sea surface. But what we see is only the tip of the iceberg, more than90 percent of the waste sinks to the bottom of the sea and remains hidden from our eyes. Plastic is almost imperishable in the sea, it is only slowly decomposed by salt water and sun and gradually releases smaller fragments to the environment.

Although some economists tell us, the cost of the environment cannot be calculated. The life of these animals is very important, which is impossible to evaluate in our usual ways. If people understood the terrible impact on the environment or actually saw the number of animals that die from plastic bags, almost every person would switch to reusable bags.

Not only do we have to limit people's consumption of plastic bags, but we also need to make sure that the packages that are consumed are further recycled, and not just littered on the streets.The leftovers of our casual culture kill up to 135,000 marine mammals and one million seabirds each year (Cva,2017). The animals go short of food to death with full stomachs, as plastic clogs the digestive system, whales and dolphins, but also turtles, get caught in old fishing nets, drown or suffer serious injuries in liberation attempts. A special spectacle are the so-called garbage strudel. Hydrographic vortices collect gigantic rubbish carpets here. Probably the best known is the "Great Pacific Garbage Patch" in the North Pacific, it has now reached the size of Central Europe. (Cva,2017)

The decomposition processes release dangerous ingredients such as bisphenol A, phthalates or flame retardants, which can accumulate in the food chain and have lasting effects on the genome and hormone balance of marine organisms. Also, in the long-term consequence harmful effects on humans cannot be ruled out. The small plastic particles attract environmental toxins dissolved in seawater such as the insecticide DDT or PCBs like a magnet. A deadly meal for filter feeders like shells or corals. Only in recent years has been known that many cosmetic products contain plastic particles. The international campaign "Beat the Microbeads “who also belongs to the NABU, acts against it.

Every year millions of tons of plastic are thrown away in Europe after a single use. Plastic bags, plastic bottles and cigarette butts are among the most common finds on the beach. Most of the waste comes while the country carried out to sea, walks thrown carelessly and rivers and the wind. In addition, the entries from shipping, fisheries and the offshore industry also play a major role regionally. At the lowermost of the North Sea alone, more than 600,000 cubic meters of garbage are predictable, which is equal to 1.5 times the Cologne Cathedral. (Cva,2017)

**Policy making**

The current policy seeks to sensitize member states regarding environmental conservation by controlling the increase in the single-use of plastic bags in the United States of America. There are a set of objectives and guidelines towards achieving the above goal. In this line of thought, it is essential to explore the appropriate approaches needed to ensure flawlessness of the process. First, tax-related policies will be the primary focus of this campaign. In this regard, it is paramount to evaluate the impacts of the proposed tax policy on the different stakeholders involved in the use of plastic bags in the member states. Second, the key players in the implementation of the policy ought to be highlighted to facilitate effectiveness and efficiency of the process. As such, the government will incorporate an evaluation process in the selection of the representative organizations to enlist only the most experienced and qualified agencies in the prevention and conservation of the environment.

 Third, the subsequent process will involve a comprehensive assessment of the proposed policies to determine their economic relevance to the member states in the region. At this juncture, a critical analysis will be appropriate. Of course, the government will be willing to allocate premiums on the most effective policy regarding the decrease of plastic bags in the United States.

Fourth, the government seeks to preserve the ecosystem by promoting eco-friendly measures. From an ecological perspective, plastic bags stance a noteworthy threat to aquatic life and the nature as a whole which has emerged as a cause for concern. In this school of thought, the policies adopted by the member states ought to ensure that all the agencies emphasize on the urgent need to inform all the stakeholders regarding the imminent danger possessed by biodegradable materials on the environment both in the short-and long-term basis. Therefore, the most viable solution to the problem would obliterate any adverse effects associated with the single-use of plastics in the current society.

 Fifth, the current paper aims at ascertaining the various options to be adopted towards achieving the overall objective regarding preventing the environment from the imminent danger of plastic bags. Each member state is obliged to cooperate and assist the stakeholders in promoting environmental sustainability. Core to this, both governmental and non-governmental organizations must contribute to the process to enhance effectiveness concerning the effectiveness and the implementation of the proposed policies. The public administrators should acknowledge the role of NGOs in the façade and integrate them in every decision-making process. Finally, the partnership will help in analyzing and evaluating the impacts of the policies to the immediate users. In this case, it is essential to ensure that the policies do not violate any ethical considerations. As a result, the level of resistance from the public will be alleviated substantially while promoting corporation between the policymakers and the public domain which is a key determinant towards the progressiveness of the entire process as a whole.

 **Stake holders view**

New York lawmakers and the governor agreed on the state budget for fiscal year 2020 in the amount of $ 175.5 billion. One of the points reached was the adoption of a law that significantly limits the use of plastic bags. The new rules, as expected, will come into force on March 1, 2020.

According to the law, employees of most stores in the state will not be allowed to provide one-time plastic bags to customers. Instead, buyers will be offered paper bags. Representatives of the constituencies shall have the right to set the value of paper bags in the amount of five cent.

(Connected,2019).

Under the new rules, two cents, obtained from the sale of each paper package, will go to the county coffers, and three cents - to the state environmental fund. From its funds are allocated, in particular, for the protection of forests and wastewater treatment.



In this case, however, it is worth noting that the law provides for some exceptions. Plastic bags can still be used as a package for vegetables and fruits bought in stores, they will be issued when you buy food in a cafe or restaurant. It is also not prohibited to sell meat and fish in plastic containers. In addition, the restrictions do not apply to plastic bags, in which customers are given things from dry cleaning.

New York will become the third US state, on the territory of which the use of plastic bags will be significantly limited.

On one hand plastic bags are harm full but cheap and, on another hand, there are many who are not in favor of banning plastic bags. Environmentalists and grocery store lobbyists have expressed concern that customers will increasingly use free paper bags, which are more expensive to transport and store, or thicker plastic bags that are exempt from the ban. In 2015, Chicago banned the use of plastic bags, but after 16 months, canceled it in favor of a collection of 7 cents after stores and customers simply began to use paper bags more diligently. Adrienne Esposito, executive director of the Civic Campaign for the Protection of the Environment, also said that ultimately you should introduce a fee for paper bags.

So here question arises?

Do we need to ban plastic bags in New York?

Or we can put taxes on it?

Or we can find another alternate of plastic bags?

In this policy paper, various stakeholders are actively involved in its enforcement. They both play different roles in coming up with a solution reduce the misery of plastic bags in the environment. It is necessary to remark the position performed by each party in implementing the policy for the benefit of the public. It is important to note the inter-link between different stakeholders and their stake in the policymaking. Through this, it will be made possible for the administration to enforce and proceed with full implementation of the policy for the benefit of the public. In this case, it is essential to consider retailers, the government of the member states, consumers and manufacturers as main players in this policy paper. They all have a significant role to play in coming up with a solution to plastic bags menace.

1. **Retailers**

Retailers are always impacted both negatively and positively with a change in market structure. Any form of an increment will affect their business operations. Whenever there is an increase in baggage cost, they will always have a challenge in convincing their customers to accept the stated prices in the market. The number of sales per day may reduce affecting their profit margin in turn. Retailers control the supply chain between manufacturers and direct consumers. They are the intermediaries that ensure there is adequate continuity in business. Most consumers will rely on the data from retailers concerning the product. In the case of plastic bags, they will take center stage in controlling the usage of the plastic bags. They have the opportunity to advise consumers on the alternative packaging bags, like the biodegradables and make them aware of any possible change in pricing. Through such initiatives, it will be possible for them to help in achieving the results of banning the use of plastic bags. Retailers are also the first contact points between consumers and manufacturers. Unavailability of the product at their end of operations will make it possible for consumers to change their behavior in the market. The standard packaging done at the point of sales is always the leading cause of disposal of plastic bags. Consumers at some point get the packaging bags for free making it easy to dispose them into the surrounding. By doing so, they affect the environment and the entire human life. Finding a solution to this problem relies entirely on the move by retailers to advice their customers on the alternative means of packaging. Multiple-use bags given at high prices should be encouraged in the market.

1. **Consumers**

The first groups of people to be affected by any market change are consumers. Unavailability of plastic bags in the market will affect their operation since they will be forced to study for an alternative means of packaging. Behavior change will be an issue when trying to adapt to the change in product and services. Additional fees for purchasing reusable bags will be a burden to consumers.

1. **Manufacturers**

Manufacturers will be affected in the market structure in various ways. Reduction in profit margin will be a significant blow to the sector. Finding readily available raw materials to produce reusable bags will be a significant bottleneck in the industry. Taxes imposed by the government will affect their business operations most. To adjust to the market to fit in the business spheres will also be a challenge in the face of potential competitors. Loss of jobs will also be occasioned by any change in business operations.

1. **Government**

The governor of New York, Andrew Cuomo signed into law a statewide ban on single-use plastic bags. It is assessed that nearly 23 billion plastic bags use only in New York yearly. Out of those 50 percent of plastic bags goes to landfills and around the city and waterways (Nace,2019). By signing the law on Earth Day, Cuomo said the bill would help reduce pollution and protect New York’s wildlife (Nace,2019). It is the enforcement authority of the policy. Government is one of the most critical agencies in enforcing the plastic bags ban in the market. Introduction of taxes to limit consumption will be the role of the government. The government will have to work in conjunction with other relevant agencies to implement the policies. The government is in charge of controlling revenue records and also assisting in enforcing the plastic bags policies. The government is also in charge of assigning various agencies duties to help in the cleaning exercise.

**Option specifications**

No doubt it is a big risk to keep using plastic bags and ultimately the decision to make them ban is a good solution, but it should only be ban on low grade or plastic film bags. Bigraded bags are safe and can be used as an alternative rather than paper bags.

In recent years, New York state has also begun to pay attention to environmental issues. In particular, the government proposed banning plastic bags and plastic containers throughout the country. Such a statement was made by the Cabinet, considering the draft law “On the ban on the import, production, sale and use of plastic bags and plastic containers within the biosphere territory (Connected,2019). He proposed to introduce criminal, administrative, disciplinary and material liability for violation of the law in case of its adoption. The government considers it possible to adopt the bill, considering comments and suggestions. It is worth noting that since the bill is aimed at regulating business activities.

BUND expert Rolf Buchmann criticizes that the problem with a plastic bag is as a rule that it is too thin to use several times. In other words, if plastic bags are used, they should, in his opinion, be designed to last longer - so-called returnable bags. The problem is that returnable bags are hardly recognizable, the trade must explicitly identify them.

No, says the BUND. Even though the eco-balance of compostable alternatives of cellulose and starch is better, they also contain a small proportion of so-called simple polymers. They remain in the compost as dangerous micro-components back. But there is another problem: the alternatives are almost indistinguishable from other plastic products. "If you put this bag into organic waste, it will be sorted out as biological waste from the biological treatment plants," explains Buschmann. "If this bag ends up in a yellow sack again, it will disturb the material cycle, because it is not a classic plastic and therefore not easy to recycle.” (Connected,2019)

**Plastic bags**: the oil used to make 14 plastic bags is enough to drive 1.6 km by car. Trillions of plastic bags that people throw out each year, made from millions of barrels of oil, contribute to global warming, depleting petroleum resources. The danger to wildlife caused by plastic bags is well known. More than a billion, Seabirds and mammals die annually from ingesting plastic debris (Wagner,2017).

 **Paper Bags**: Paper bags have the highest impact on global warming compared to other types of bags. In the production of paper bags, 70% more carbon dioxide is released than in the production of plastic bags, and 50 times more water is polluted. (Maes, Blanke,2015).

 The production of paper bags also contributes to global warming and on the other hand - large-scale cutting of trees occurs. For example, in 1999, Americans used 10 billion paper shopping bags, cutting down 14 million trees for their production. Although paper bags are decomposed by microorganisms, 80% of them are buried along with other debris, where they almost do not decompose due to lack of oxygen. Thus, the impact of burying paper bags as trash in terms of weight, volume, and cost is higher than most people think (Maes, Blanke,2015).

**Biodegradable bags**: In the production of biodegradable bags, between a quarter and two thirds less oil resources are used than in the production of traditional plastic bags, but other resources, such as grain or other raw materials used in production, are also wasted.

 It is known that decomposition is the decomposition into simple and non-toxic substances as a result of the action of living organisms or under the influence of sunlight. Material that decomposes “for real” returns to nature as food for plants and microorganisms.

 Biodegradable plastic has a short life cycle and is not recyclable. But here is not so simple. In fact, bioplastics is not completely decomposed. Buried in the ground, it can persist there for decades.

 According to Greenpeace research, only one-tenth of this material really rot, and the remaining 90% turn into the smallest plastic pieces or dust. "Greens" believe that bioplastic is even more dangerous than ordinary polymer, due to the fact that small pieces are sprayed around and accumulate in plants, animals, soil. In addition, during the decay of bioplastics, carbon dioxide and methane get into the atmosphere, which enhances the "greenhouse" effect. When "growing" bioplastic is spent much more non-renewable minerals than to create a synthetic polymer.

**Waste management**

The environmental impacts of waste management are caused by the transport and treatment of waste. Environmental and health hazards arising from the collection and transport of waste include environmental spills, air emissions and noise and dust from collection and transport. Disadvantages of waste treatment are in the vicinity of the plants and their employees. The disadvantages depend on the quality of the waste being treated.

Landfills may have adverse effects on surface and groundwater. Oxidizing decomposition organic material generates methane. It is a powerful greenhouse gas. Landfills cause about 50% of all methane emissions in Finland. Some dumps collect methane for fuel use. Discarded landfills are classified as contaminated land. They must be repaired before commissioning. (Maes, Blanke,2015).

Despite a comprehensive waste management system, waste accumulates outside the environment. Their harmfulness depends on their toxicity, degradability, accumulation in organisms, pathogens living in waste or other properties. Sharp objects in the terrain damage the animals. When discarded from boats and ships, water wastes oxygen and causes problems with the oxygen supply of the organisms during the ice cover. The land-based waste load also takes nutrients to the wrong place and ejects water.

Landfills, waste incineration plants, hazardous waste facilities and other large waste treatment facilities always require an environmental permit and their environmental impact is assessed in advance. The regulations on waste management and environmental impact have been clarified and their compliance monitored. Some accidents and abuses occur occasionally.

In developing countries, the environmental concerns of expanding cities include inadequate waste and water supply and sanitation. In the sparsely populated region, the lack of a sewer network and the use of 'natural toilets' is still successful, but in a million city it poses a serious health risk. Even if the sewer system is in operation, the waste may be discharged into the waterways completely untreated. Dry toilets have become more common in some areas as a result of development cooperation. Waste collectors and landfills have finders and users of useful goods.

In developing countries, environmentally hazardous substances are exposed to the environment because of the lack of legislation or lack of legislation. Information on the use of toxic substances may be inadequate and occasional use control. Waste is burned on streets and yards and even the landfill is not uncommon.

**Harm to ecology**

Environmentalists from the globe broadcasting about the hazards of plastic bags. Trillions of tons of polyethylene yearly transpire in a landfill, polluting the earth with toxic materials. Obviously, they decompose more than a period of 100 to 500 years, so if not falling their production, the complete planet will soon be overwhelmed with used packages. Burning such trash is hazardous. In the course of burning, an huge number of carcinogens are emitted into the atmosphere, which pollute the air and destroy the ozone layer. Waste recycling is underdeveloped. According to environmentalists, only 1 percent of polyethylene on the planet passes through it.

Light weight bags are promptly transported by the wind over long away, polluting rivers, forests and mountains. (Ritch, Brennan, Macleod,2019). Tons of plastic yearly fall into the oceans. There are two enormous garbage plots where the current takes away a lot of human waste. The total area of ​​garbage in them surpasses the terrain of the USA. The size of the garbage areas are rising per annum.

**The world community against polyethylene**

To preserve nature and improve the environment, more than 40 countries have imposed restrictions or a total ban on the use of disposable plastic bags. (Xanthos,2017)

In Singapore, Taiwan and Bangladesh in the early 2000s, catastrophic pollution by such river and sewage waste occurred, leading to large-scale flooding. These countries were the first to introduce decrees prohibiting the use of transparent bags. Soon Tanzania, China, Italy, Australia and some Indian states joined them.

Denmark has introduced a significant tax on the distribution in stores disposable plastic bags. This immediately reduced their use by 90 percent. (Xanthos,2017)

In England, bio packets are popular, which completely decompose over 4 years. Most supermarkets use paper bags for packaging products.

In Finland, there are vending machines in the outlets that accept used plastic bags for recycling.

In USA, environmentalists have not yet achieved official restrictions on the distribution of plastic products. Social activists are constantly working in this direction, telling people about the dangers of packages and urging them to purchase safe environmental packaging for products.

 **Recommendation**

The successful implementation of the plastic ban in the United States of America requires a clear action plan. In light of this, this section of the current paper highlights the various steps necessary towards ensuring that the single-use of plastic bags is combated in the American community. The following steps would help the member states to achieve the overall objective regarding environmental pollution.

**Step 1: Adopting a Fast-Result Strategy**

 The first crucial step in dealing with plastic bags should involve adopting an effective mechanism to put the entire nation under imminent pressure to acknowledge the need to promote a sustainable environment. This process should require the local governments taking the initiative to collect all the plastic bags in the major cities within the shortest period possible. The programs should be tailored towards setting up plastic dropping and collection points and organize on the transportation as well as final disposal. In the same capacity, a mandate should be issued to all stakeholder to adhere to the new program and assist the government in addressing this environmental issue. (Ritch, Brennan, Macleod,2019).

**Step 2: Public Campaigns**.

 Similar to any other community development and welfare program, the waste management plan should incorporate all the stakeholders and the public domain as well to achieve any level of progress. The public campaigns should be aimed at creating awareness to the citizens, major stakeholders, and small-scale players in the society. The level of public involvement is paramount to enhance mobilization of the available resources and promoting the decision-making process regarding future activities. Every level of the waste management such as the planning, implementation, monitoring, and evaluation should be communicated to the public. Both formal and informal techniques can be utilized to ensure that every individual in the society is aware of the actions undertaken by the government as well as the perceived impacts to their livelihoods. The public campaigns will awaken the nation and sensitize the inhabitants to accept the changes therein.

**Step 3: Adopting Technological Advancements**

 Due to the ever-changing nature of the current societal setting, it is imperative to incorporate technological means in the waste management strategy to enhance effectiveness and efficiency. This step of the action plan should focus on the industries, manufactures, market-related activities, and agriculture. In essence, these sectors should be informed and pushed to adopt waste-management/recycling technologies to reduce the impacts of their actions on the environment. The government should allocate personnel to assess the level of technology utilized in the economic phenomenon and report the necessary recommendations regarding reducing the overreliance of plastic bags in their processes.

**Step 4: Organizing Waste Management Demonstrations**

 The member states should set up demonstrations to guide the people on the various recycling and disposal methods necessary to do away with plastic bags in America. The process should also highlight the possible benefits of recycling to the people as well as the environment. Further, third parties such as learning institutions and professional groups should be lobbied to facilitate the process in different levels.

**Step 5: Sound Environmental Governance Strategy**.

 The governance approach adopted by the member states will be critical in achieving any profound level of success on the plastic ban policy. Since there is no present legislation on waste management in the United States of America, the policymakers should define their strategies by the global guidelines. To begin with, the key stakeholders in the process should be informed about their roles and responsibilities as well as coordinate with each other to enhance effectiveness. All the data and information reported at any level should be shared among different departments for analysis as well as provide a foundation for improvements.

**Step 6: Prudent Management of Financial Resources**

Similar to any other public activity, the action plan will be vulnerable to embezzlement and misappropriation of funds. Towards this end, the available financial resources both from the private sector and the government should be utilized solely for the interests of the policy. Notably, it vital to ensure the former is engaged in the financial etch because the entire process will benefit not only the public but also the private sector. A multi-player contribution program should be encouraged to accommodate all the interested parties. In this context, there must be guidelines to control the allocation and use of the funds at any given level of the action plan. Efficient and cost-effective approaches should be adopted as well as ensure that the activities are within the set budget.

**Step 7: Further Research and Development Programs.**

 The local governments of the member states should establish research and development programs to investigate other approaches towards addressing the environmental issue. At this juncture, it is of paramount importance to sensitize higher learning institution, research bodies, and NGOs the dire need to focus on the various ways in which the environmental sustainability can be enhanced. This process is solely aimed at coming up with a large body of research and knowledge to deal with the already existing impacts of the plastic bags as well as establish a reference for future environmental conservation developments.

Provisions for Monitoring/Evaluation The process of monitoring and evaluation begins by conducting a policy analysis to evaluate its effectiveness and efficiency. The personnel involved in delivering the policy should conduct frequent analysis and evaluations throughout the process to identify, and flaws, areas of improvement, and the level of progress attained. The group also communicates the details to the stakeholders to enhance the trajectory of the solutions to the single-plastic paper use. In addition, they address any possible conflicts and resistance from the community. The team is charged with the responsibility of establishing a consensus corporation among the key players in the policy-making process and the public. With a compelling analysis, the plastic ban policy is likely to gain far-reaching influence within the shortest time possible before an environmental crisis emerges in the USA.

The second step involves disseminating information to the key stakeholders to address any possible uncertainties and complaints. It constitutes providing the people with not only relevant but sufficient information on the best practices necessary to reduce the use of plastic bags in the society. Although, the people may be aware of the dangers associated with the use of these biodegradables, it is vital to inform them about the challenges they are bound to face after the implementation of the policy. The information should be delivered to the general public in the most simple and understandable way to avoid further complications or rejection. Similarly, a platform should be established to encourage a dialogue between the members of the public and environmental experts to guide them when the need be. The feedback obtained in the process should be utilized to make further adjustments to the existing programs as well as introduce new policies.

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