# Time to Quit Using of Disposable Plastic Tableware -A Step Towards Sustainable Development

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Over the years the usage of disposable plastic cutlery has increased tremendously. France has been through significant environmental problems like emission of carbon dioxide which in turn is causing air pollution and raising the temperatures causing climatic concerns.

So in an initiative to save the environment, France became the first nation to ban plastic tableware. The nation introduced this ban towards the end of August, 2016. The law is a part of "Energy Transition for Green Growth Act" which will be effective from 2020. So France will be very soon saying "au revoir" to the very handy plastic disposables. This step has been introduced to cut down on greenhouse gas emissions and also to foster the usage of renewable and sustainable energy resources. As we are moving from conventional methodologies to the newer and advanced techniques, why shouldn't one apply the same approach towards our beautiful environment.

The present paper studies how the extensively the plastic tabewares are used in our daily routines and the adverse effects that it is creating on the nature. The survey is being done through the secondary research. The outcome is to achieve and identify few measures and steps that can be taken up to combat the risk which these disposable cutleries are causing.

Keywords: Plastic tableware, pollution, waste, plastic cutlery, environment, climate change

## INTRODUCTION

Our environment constitutes of the living organisms that interact among themselves and the physical surroundings that envelopes them. They are all interdependent on each other for their proper functioning. It is necessary to maintain a balance in nature so that none of these factors get exploited to fulfil the needs of the other. As a result this imbalance will contribute to various irregularities in the ecosystem that would give rise to climatic changes as well as environmental problems.

Cups and cutleries are like the basic products for the food joints to work. They are also extensively used by hospitality industry in aeroplanes, trains and many more places. But in an attempt to fulfil these necessities we are degrading the nature. These plastic disposable are very conveniently used in our day to day lives, be it to run a business, host a party.

France passed the law to ban the usage of disposable tableware such as plastic plates, cups and cutlery. Further the law suggested to use biologically sourced material for replacing the plastics like polypropylene (PP) and polystyrene (PS) which is currently used in its production. Plastics are synthesised chemically by heating crude oil and other organic compounds at high temperatures using different processes. Formation of plastics like PP and PS takes place at high temperatures and also they are difficult to recycle.

The world is transforming at a very rapid rate in terms of technology, fashion, choices so we must inculcate a few habits that can conserve the environment.

## OBJECTIVES

The present study attempts to understand the ground reality through the following objectives.

- To assess the level of attitude of the public towards disposal of plastic wastes.
- To identify and propose a more sustainable plastic waste recovery strategy

#### **LITERATURE REVIEW**

Rajavani (2012): The author throws light on how packaging can be one of the prominent factors that may influence the sales growth of the product. According to him marketing strategy must be carefully designed by the marketers. They must keep in mind that over a period of time, there is a shift in the consumer behaviour for fast moving consumer goods. So while making marketing strategy, marketers must study the behaviour and attitude of the consumers so that there is utmost feeling of satisfaction among them and thereby value is created.

#### **RESEARCH FINDINGS**

According to the studies majority of the waste i.e. 60% is contributed from just five countries namely China, Indonesia, Philippines, Thailand and Vietnam. To save its land from any undesired contribution France came forward to abandon the usage of disposable plastic tablewares.

#### Reasons of growth in usage of plastic:

Disposable plastic products are extremely durable as they are resistant towards water and chemicals. Also plastic cutlery and cups have physical characteristics such as they are strong and have high thermal and electrical insulation. Plastic products are water proof in nature. All of these attributes make them an easy to handle product. Plastic dishware's are available in abundance and are inexpensive. Due to the excessive use and consumption there is rise in production of plastic products. Although plastic products have great advantage for the food industry but the huge increase in plastic packaging has immensely increased plastic waste. People have become more inclined towards single use plastic cutlery as it has eliminated the use of water, electricity and manpower to wash them which added to the convenience.

## Reasons behind ban:

Plastic disposables pose a great threat to our environment. If dumped openly and in contact with moisture and rain, they might become a cause for generating germs and viruses. Further that can spread diseases

Incineration of waste disposal emits harmful pollutants and fumes. They are hazardous to living organisms. They pollute the water bodies and have adverse effects. Its decomposition time is quite high so until then they remain in the environment. For the production of plastic, fossil fuels are consumed that in turn degrade our climate and environment. Disposable plastic table wares are mostly made from polypropylene (PP) and polystyrene (PS) which is very difficult to recycle. As it is a very

complex process to recycle them so they eventually are disposed into landfills. Also forks and spoons are made from Polyvinyl chloride (PVC). It is very toxic gases are released even it initial production stage. It poses a great risk to the workers health.

Most of the consumer plastic is send to landfills which take ages to break down. These are used for quite a short duration but it takes years to get degrade naturally.

Plastic bags are also used excessively as they are very cheap and strong. These are used for serving multiple functions. Problem arises as with the growing population their use is expanding. They not only take time to decompose but are also responsible for visual pollution. They are dangerous for both terrestrial and aquatic animals. Rapid industrialization and unplanned urbanization has contributed largely to the degradation of the environment.

## Controversies:

Few people argued that the law was violating the existing European Union law formulation that there should be free movement of goods and services. Introduction of banning posed a hindrance in it. Further, manufactures of plastic cutlery products were at loss, they wanted protection for themselves. Also Pack2Go Europe, a food packaging association confronted France's ban and asked for legal action for violating the European law. People also connected it with anti-social belief as it influenced lower income families who rely on plastic utensils. As a result the ban got postponed till 2020.

Even India has taken a step forward to ban similar kind of products. National Green Tribunal has initiated a ban on plastic bags and tableware in National Capital Territory.

### *Effects to people:*

Plastic dishware is a massive business worldwide. It not only serves directly to the end customers but is also used extensively by food outlets for serving and packaging purposes. Be it a coffee vending machine where one can find plastic cups and glasses or the takeaway restaurants which highly rely on plastic spoons, knives and forks. Also ban will pose difficulties to plastic disposable manufactures. They would be affected by this step.

But looking into the flip side of this ban it will enable sustainability in the environment. The pollution levels in the air, of water and land can be curbed. It will ensure a safe and secure place for marine species and human beings.

## RECOMMENDATIONS

Few of the biodegradable and organic means include using of cups, plates, bowls and glasses made of sugarcane fibre and birch wood. They get decomposed within 4 months. Other effective and healthy way may be using barley made edible cutlery. These are made from flour mix of sorghum, rice and wheat. After use either one can consume them or else it will naturally decompose. Also cutlery produced from corn starch can be used. Further they are available in sweet and salty flavours. The use of plastic can be minimized by transporting and delivering of liquid products in concentrated and viscous form.

Further the French government has provided a parameter for the usage of disposable tableware i.e. it must be 50% biologically sourced. So that they harm the nature less. This suggests that it will help in easy decomposition of the crockery without using much of the energy resources. Biodegradable plastics are costly to produce as they consume huge amount of resources in their production. So wooden spoons, forks and knifes can be seen as a potential. As they are obtained from biological source i.e. plant, production of this would not intervene with the environment. Mass production of wooden cutlery can be done and its production will not even cause pollution. Also each unit that would be produced will not be synthetically made but extracted and be eco-friendly. It would give a better eating experience and definitely be good for the planet. Also simultaneous plantation of trees can be done this will maintain the balance and beautify the Earth.

Further Polyethylene terephthalate (PET) packs can be used for serving and packaging purposes. It may be further used to make disposable plates and glasses. They are a good barrier to water vapour and gases. It is eco-friendly throughout its life cycle. So it offers high recyclability. Also PET is energy efficient as they are not made at high temperatures.

Besides this the government can charge environmental tax on the use of disposable plastics.

One should switch to various other means to fulfil the need of plastics. To bring about a change certain alternative resources must be looked upon. So that need is efficiently satisfied without degrading our mother Earth.

## LIMITATIONS OF THE STUDY

- Research is based on the data collected from Secondary sources.
- Possibility of ambiguity and biasness can take place as the meaning of the data can be interpreted differently on some parts.
- The sample for the study was limited. Therefore, it might not give true picture as it would have been if large number of resources was to be taken.
- Time for the study was limited.

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