

# Evaluation of Plastic Ban & Effectiveness of Alternatives in Thimphu Dzongkhag

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## **Introduction**

On 20<sup>th</sup> April 1999, when Bhutan banned the use of plastic bags it grabbed international headlines and garnered global attention and appreciation. However fast-forward to 2019, nearly twenty years on, Bhutan is still tackling about the need to outlaw the use or sale of plastic carry bags. The National Environment Commission (NEC) has resuscitated the 20-year old ban on plastic carry bags. The idea to ban plastic use in any form is novel (Brightkite, 2019).

There is simply no argument against it and given the increasing waste management issues we are currently confronted with, the second attempt at banning the use of plastic bag was in fact welcomed however the act was ineffective. After decades of notification and diligent efforts by relevant agencies, the implementation of the ban is still a challenge. After two decades, the Bhutanese government has once again decided to reinforce a ban on the use and sale of plastics on April 1, 2019 (Phuntsho, 2013).

National Environment Commission now claims that it will provide alternatives for plastic carry bags, i.e. biodegradable plastic bags and jute bags. To help implement the reinforcement of ban, the commission has sought co-operation of relevant agencies to conduct sensitization programs, explore the availability of alternatives and help prepare the monitoring plans. However, the question is, will the ban this time be effective or another failed story where people start using plastic bags again.

In 1915, the poet Margaret Postgate Cole wrote about brown leaves and a wind that “whirled them whistling to the sky” (Cole, 1915). Just less than a century later, the pop artist Katy Perry envisions another object caught in the wind. In her song, “Firework,” Perry croons, “do you ever feel like a plastic bag, drifting through the wind, wanting to start again?” (Perry, 2010). This contrast reflects the humanity’s growing reliance upon plastic, and in particular, the plastic bag.

Since its introduction in the 1970s, the plastic bag has become widespread, with four out of five bags used in grocery stores being plastic (Roach, 2003). Plastic bags are the leading visible signs of pollution that extends across our planet. It is actually a rare chance to ascertain a strip of road, watercourse bank or the mountain front that doesn't have a couple of plastic bags littering the locale. The creation of every new bag means that slightly a lot of addition of damage to the environment daily.

The plastic bags stay a profit to retailers and customers, but their impact on the environment was reconsidered as mentioned but, the ban has been mostly ineffective. The prohibition of using plastic bags has been challenged by the people (Zangmo, 2012). Bhutan government initially wasn't setting up a strong foundation because if they were than despite the ban people wouldn't dare to use it, the amendment of law and set of rules were weakly formed since the ban of Plastic bag rather than tributary to waste management, it created a lot more tension because individuals are still seen using the bag.

Another important factor to consider is the role plastic bags have come to occupy in daily life. Although plastic bags were originally unpopular when they were introduced, shopping without a plastic bag today is almost inconceivable (Li et al., 2017). There is agreement within the field that cultural norms present a major obstacle to banning plastic bags.

For now, the ban is only on the plastic carry bag and doma wrappers; National Environment Commission announced the decision in a public notification on January 14 that the use of transparent plastic for packaging of vegetables and homemade snacks and edibles will be

allowed (Tshering, 2019). The commission stated that with the reinforcement of the ban, any business establishment found selling or using the carry bags and plastic pouches for wrapping doma will be fined Nu.500 for the first offence, and Nu.1000 for the second offence. For those who were found violating the rule subsequently, their licenses would be cancelled (Tshomo, 2019).

Bhutan launched the initiative to ban plastic in 1999 and tried to reinforce the policy in 2005 and 2009 (Brightkite, 2019). However, both attempts failed due to lack of follow-ups after the notification, and implementation. The nationwide ban reinforcement is aimed at managing and addressing waste issue in the country. Despite various measures put in place to address the waste issue in the country like composting kitchen waste and recycling, there is still need for proper waste infrastructure and waste management system, including waste segregation at source.

In the past, the ban was not effective because the public continued using plastic, as there was no proper alternative for plastic carry bag. The former Director General of the Ministry of Trade and Industry, Mr. Achyut Bhandari also blamed the ineffectiveness of the policy on the lack of sufficient funds for proper monitoring and follow up (Phuntsho, 2013). National Environment Commission now claims that it will provide alternatives for plastic carry bags, i.e. biodegradable plastic bags and jute bags. To help implement the reinforcement of ban, the commission has sought cooperation of relevant agencies to conduct sensitization programs, explore the availability of alternatives and help prepare the monitoring plans. However, the question is will the ban this time be a success or another failed story with blame games?

## **Objectives**

1. Find out the perception of the people residing in Thimphu regarding the effectiveness of ban on plastic carry bags.
2. Explore & evaluate the effectiveness of the implemented alternatives. (cloth bag, jute bag, bioplastic)

## **Research Methodology**

### **Study Area**

The study area will be conducted in Thimphu about 10 minutes' drive from clock tower, near Wangchhu River and just north of Changlimithang Stadium is Thimphu's busiest domestic market. Centenary Farmers Market is a two storied building with about 400 stalls that provides farmers from around the country the opportunity to display their produce and people a chance to support the local agriculture. Vendors from throughout the region starts arriving on Thursday and Friday, and remain till Sunday night.

### **Survey**

During the process of carrying the survey, oral interview and questionnaire basis will employ to obtain my target. All groups of people are eligible for answering the question who are in the market and will ask both closed and open-ended questions to get their views regarding the plastic ban issue and review of the alternative that is implemented.

### **Data collection**

Primary data will be collected from the selected respondents to achieve the study objectives. A semi-structured questionnaire of two types will be made one for the customer and the other for the vendor where long answer type questions will be asked to the respondents about the effectiveness of alternatives such as biodegradable bags, jute bags, cloth bags, through face to face interview.

Relevant secondary data will be gathered from various published international and national literature, articles and journals.

### **Sampling methods and sampling size**

Considering the minimum sampling representation, 8 random samples from the 400 vegetable stalls will be selected for the survey. A total of 4 vendors selling fruits and vegetables from the Centenary Farmers Market and 4 fruits and vegetable buyers will be selected for the questionnaire.

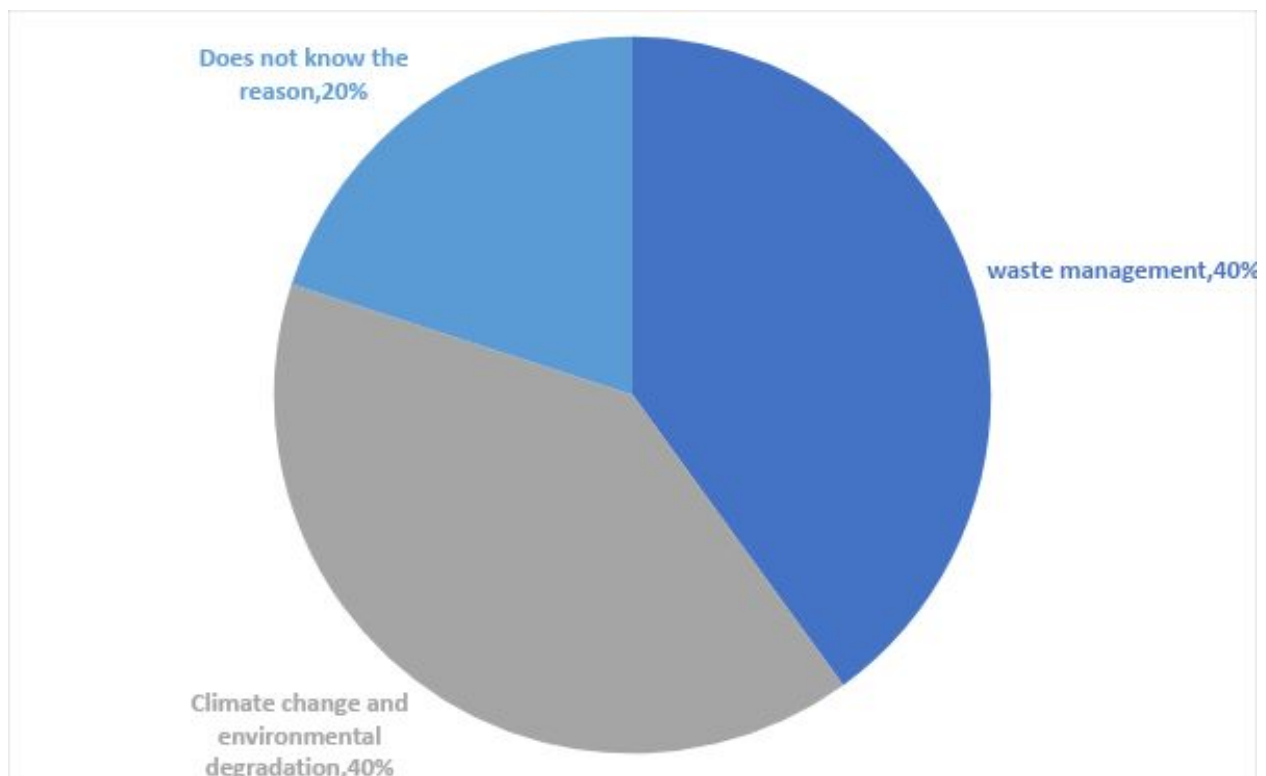
## Data analysis

Data analysis will be done through deploying of SPSS version 23.0 and Excel. Firstly, collected data will be punched into excel sheet and after entering the data, then it will import to the SPSS and analyzed with all necessary graphs and pie charts for illustration.

## Results

### 1. Awareness

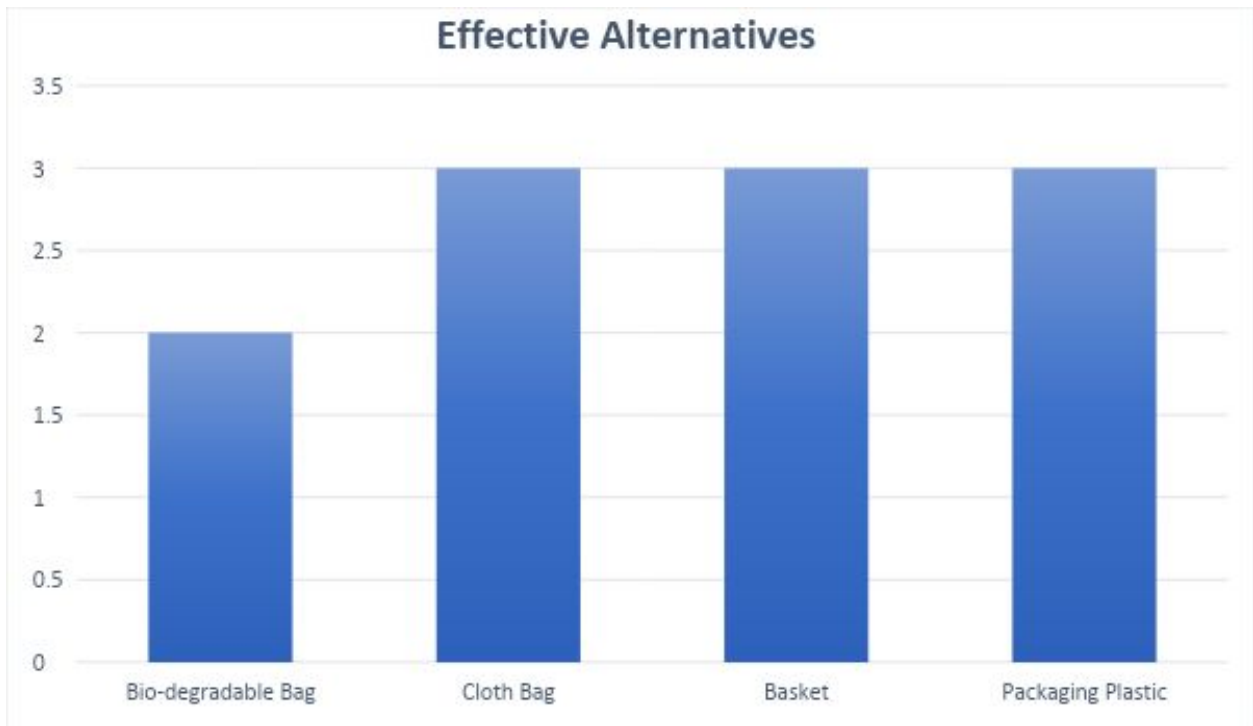
Why was the ban implemented? – Respondents reason.



**100%** of the respondents were aware of the Plastic Ban

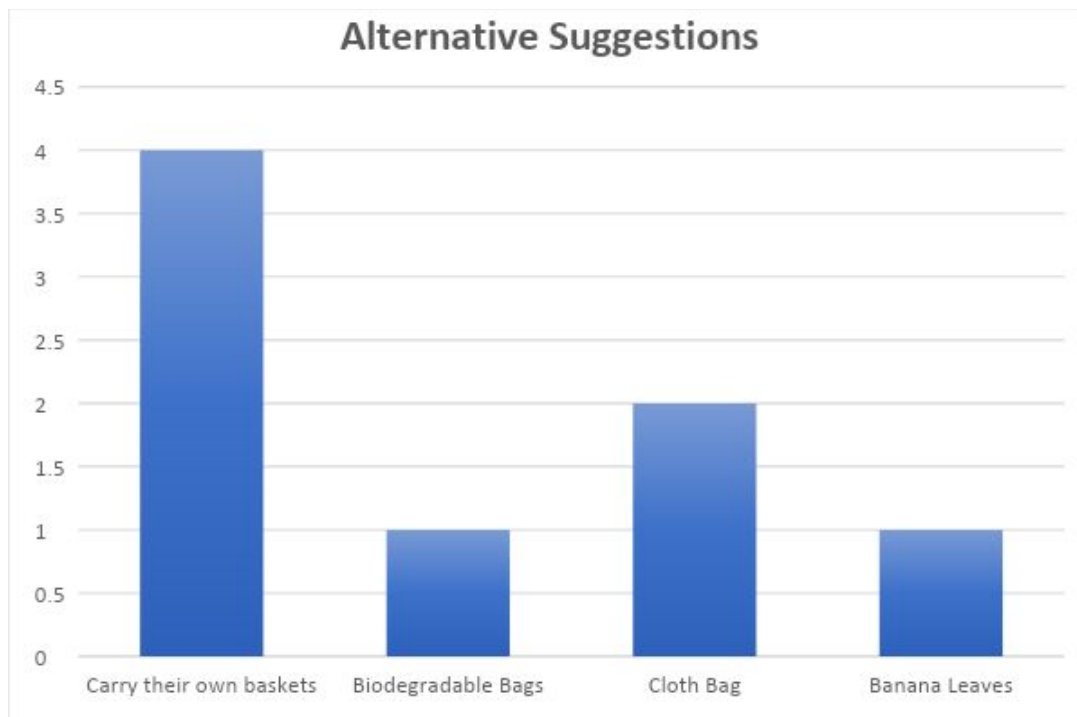
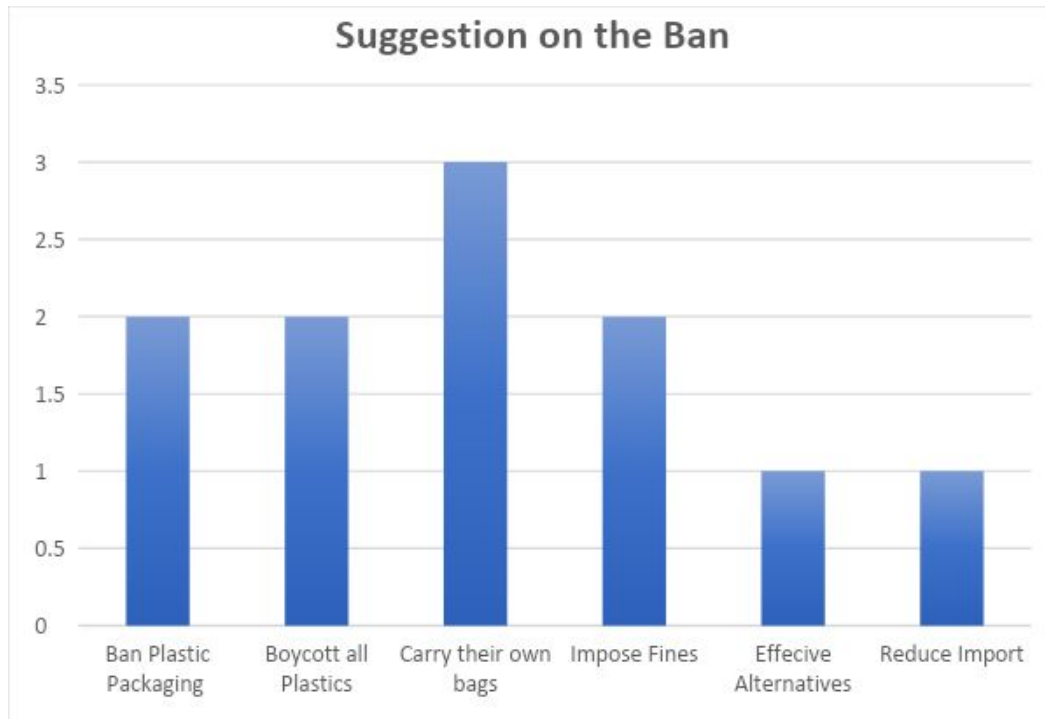
**50%** were aware about the ban through authoritative figures and the other **50%** were informed through mass media.

## 2. Effectiveness



**100%** of the respondents had claimed that the usage of plastic bags has reduced after the ban.

### 3. Suggestions



## 4. Findings

### Positive

- Mass media plays a major role in disseminating information to the public. Through this, it was found out that almost everyone was made aware of the ban.
- Introduction and use of alternatives. The vendors were producing with their own paper bags and woven shopping baskets.
- These initiatives proved that people were not only willing to adapt to the ban but also stop plastic usage altogether.
- Market availability for a brand of locally produced biodegradable plastic produced within Bhutan.
- The current packaging plastic was cheaper and lighter than the imported product so that vendors saved up on buying bags of 6-7 kg per week.

### Negative

- *“Alternative not an Alternative”*

Packaging plastic seems to be no different from the previously banned plastic.

- People still want plastic even if they have shopping bags

(Segregation/Habitual)

- -Limited knowledge on why the ban is being imposed
- -No proper follow up by concerned personnel
- -People are still seen using plastic bags



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## Estimated Budget Proposal

Sl. No.	Particulars	Amount
1	Questionnaire Printout	500
2	Logistics	1,100
3	Phone Internet Charge	450
4	Lunch during Survey	550
5	Refreshment for Stakeholder and Samples	300
	<b>Total</b>	<b>2,900</b>