

DETERMINANTS OF IMPLEMENTATION OF THE BAN OF PLASTIC BAGS IN KENYA: A CASE OF NEMA, KISII COUNTY

¹ROBERT OBED NYACHOTI, ²MOSES M. M. OTIENO (Ph.D)

Abstract: The purpose of the study was to investigate the determinants for the implementation on ban plastic bags in Kenya, a case of NEMA, Kisii County. The objectives of the study include, to ascertain how public participation influences implementation of the ban of plastic bags, to investigate how governance influences the implementation of the ban of plastic bags, to establish how budget allocation influences the implementation of the ban of plastic bags in Kisii County and to assess how public policy influences implementation of the ban of plastic bags in Kisii County. The study adopted a descriptive research design. Using Morgan's table at 95% confidence level and error margin of 5%, sample of 63 respondents were chosen from NEMA, $10\% * 1200 = 120$ for businesses and Using random sampling to sample general public to get 17 respondents hence a total of 200 respondents were used for the study. This approach allowed the researcher to gather information, summarize, present and interpret it for the purpose of clarification. The study used questionnaires to collect data from the sample size. Each item in the questionnaire was developed to address a specific objective and research questions. The analysis was done as per questionnaires that were used to collect data and the results were presented in tables and figures to highlight the major findings. They are also presented sequentially according to the research questions of the study. On the finding of the study, 72.47% of the respondents strongly agreed that public participation is key towards the implementation of the ban of plastic bags. Concerning governance on the implementation of the ban of plastic bags, 50% of the respondents disagreed that the governance in NEMA cannot implement the ban of plastic bags. With budget constraints, 57.30% of the respondents strongly agreed that budget constraints have an influence in the implementation of the ban of plastic bags. On public policy, 95.51% of the respondents strongly agreed that ineffective implementation of public policies and over ambitious policies have an influence on the implementation of the ban of plastic bags. Based on the findings of the study the researcher concluded that public participation has an influence towards the implementation of the ban of plastic bags. On governance on the implementation of the ban of plastic bags, governance in NEMA cannot implement the ban of plastic bags. Budget constraint has a great influence in the implementation of the ban of plastic bags and ineffective implementations of public policies and over ambitious policies have a great influence on the implementation of the ban of plastic bags. On all government projects or initiatives the government should embrace public participation. The study concluded that the governance of NEMA should be reviewed for it to better their services, public policies need to be implemented effectively in order to achieve goals and there is need to have well budgeting plan that will see institutions like NEMA performing their duties without a hindrance of budget. the researcher recommends that research be done to find out why public policies are not followed to the lather thus hindering the effective implementation of government projects.

Keywords: Determinants of Implementation of the Ban of Plastic Bags in Kenya.

LIST OF ABBREVIATIONS AND ACRONYMS

NEMA-	National Environmental Management Authority.
EPA -	Environmental Protection Agency.
USD-	United States Dollars.
EACC-	Ethis and Anti-Corruption Commission.
KACC-	Kenya Anti-Corruption Commission.
NACOSTI -	National commission for Science, Technology & Innovation.

1. INTRODUCTION

Background of the study:

Since the mid-20th century, there has been a significant push in plastics technology to a point where the familiar question, “Paper or Plastic?” is no longer heard. What seemed like such a miraculous invention has turned into the dominant option and an environmental nightmare. While plastics may solve a lot of issues for human’s daily lives, it causes many more problems when they find their way into the environment, whether on land or in waterways. In 2007, San Francisco became the first city within the United States to enact a ban on single-use plastic shopping bags due to litter, damage to marine life, and greenhouse gas emissions related to the production of the bags. Not only did the city pass a ban, it also implemented a tax on most alternatives with the exception of reusable bags. Following San Francisco, California enacted a statewide ban in 2014. In 2010, the District of Columbia enacted a ban on disposable non-recyclable plastic carryout bags along with a fee on other disposable bags. Bans on these bags have also made their way to counties in Hawaii from 2011-2015 and other areas within the United States (Shultz 2016).

In the year 2010, municipalities in Nepal started banning plastic bags. The decisions were necessitated by two laws: the first being the Nepal Local Self Governance Act 1999 and Regulation 2000 by which local bodies were granted the right to ban goods and activities that damage the environment; the second being the Plastic Bag Regulation and Control Directive 2011, which prohibits the production, import, sale, distribution and use of plastic bags that are less than 20 micron in thickness (MOEST, 2011). The Kathmandu Metropolitan City was among to declare a ban on plastic bags in April 2013. But the ban resulted in a stay order by the Supreme Court of Nepal on ban implementation consequent to a writ application filed by the Plastic Material Production Association. Though the Court decided in favor of the Kathmandu Metropolitan City, a year or so later, the ban remained unimplemented. In April 2015, following a Parliament Environment Committee direction to ban plastic bags, the Government of Nepal re-imposed the ban. A strict ban was introduced in Bangladesh in 2002 after floods caused by littered plastic bags submerged two-thirds of the country in water between 1988 and 1998. Plastic bags remain a big problem for sewerage system and waterways (Bogart, 2012). On the other hand, Cambodia passed the legislation to impose plastic bag tax in October 2017. Supermarkets now are charging customers 400 Riels (10 US cents) per plastic bag should they need one. (Channel News Asia 2017).

Wales introduced a legal minimum charge of 5 pence for almost all single use bags in October 2011. Paper and biodegradable bags are included in the charge as well as plastic bags, with only a few specific exemptions – such as for unpackaged food or medicine supplied on an NHS prescription. VAT raised from the charge is collected by the government. Retailers are asked to pass the rest of the proceeds on to charities (Crown 2013). On July 2012 statistics released by the Welsh Government suggested that carrier bag use in Wales had reduced 96% since the introduction of the charge.

In Botswana the ban took effect in 2006 and charging for bags began in July 2007 with retailers charging different prices, ranging from 20 thebe to 35 thebe, (Dikgang and Visser (2010). The retailers had the liberty to charge for plastic bags depending on targeted consumers denoting their classes whether low income retailer, middle income retailer or high income retailer. The introduction of plastic bag levy led to a significant decline in consumption of plastic bags in Botswana with the high income retailer experiencing the sharpest decline. This was largely to do with different prices charged on plastic bags resulting in lower middle income classes experiencing the least decline price for bags (ibid, 2007).

In Rwanda, Vision 2020 was created by the Government of Rwanda in 2000 with the purpose of achieving many ambitious goals by 2020 (Kaberuka and al. 2000 ; “Vision 2020” 2015 ; Republic of Rwanda 2012). Among many other sectors, projects and objectives, Vision 2020 aims to create a bigger middle-class, enhance its education and health system whilst also fostering gender equality and encouraging the uptake of environmental projects such as the ban on plastic bags (Republic of Rwanda 2012). The initiative to ban polythene bags from Rwanda is a law that was promulgated in 2008 (Kohls 2011). It prohibits the manufacturing, importation, use and sale of polythene bags in Rwanda. The few exemptions to the use of plastic bags were provided to the military, hotel, medical and agricultural sector (REMA, interview). As a consequence, in just a couple of years, plastic bags have disappeared from Rwanda’s landscape. The disappearance has had a multitude of direct positive effects; such as the decreased visual pollution (Kohls 2011), the lowering of malaria cases and other health hazards (“What Rwanda Can Teach U.S. Cities About Getting Rid of Plastic Bags – Next City” 2015) as well as facilitating agricultural production (Kohls 2011).

The aim of this paper is to ascertain the determinants of the implementation of the ban on plastic bags. This is a crucial question if the world as a whole has a shot to cut down on the overall use of plastic that poisons the environment. The anti-plastic movements have gained speed in the last decade and a half as it has entered developed countries. Through use of different policy tools, such as taxes or bans, many areas have made an effort to reduce the consumption of plastic bags rather than complete ban. The ultimate question is which combination of tools and perhaps other factors may lead to the implementation of the total ban of plastic bags?

Statement of the problem:

Kenya tried to ban manufacture and import of plastic bags in the year 2007 and 2011 as a way to protect the environment. (Independent UK 2011) The 2007 and 2011 ban intended for plastics below 30 microns failed after manufacturers and retail outlets threatened to pass on the cost of using other materials to consumers (Africa Review Kenya 2011). In 2017 the cabinet secretary of Environment and Natural resources, Prof Judy Wakhungu banned use, manufacture and importation of all plastic bags used for commercial and household packaging under Gazette notice number 2356. On 28 August 2017 Kenya begun implementing a countrywide ban of single-use plastic bags. Primary packaging bags, hospital waste bags, and garbage bin liners having been exempted from the ban. The ban has been hailed to be amongst the most stringent in the world. This includes a decision to imprison anyone involved in the creation or import of plastic bags for upwards of four years or will be forced to pay a fine between \$19,000 and \$38,000 Tamura (2017). Kenya joins more than 40 other countries to ban plastic bags. The government has promised to ban disposable plastic items in the near future, (Reuters 2017).

However since that time the implementation has not been all that successful. The National Environment Management Authority (Nema) has said there is still a challenge in the eradication of plastic bags mainly in the border towns; five months after the ban took effect in Kenya. This is as most of the countries in the region are still manufacturing the plastic bags making it easy for people to access from across the borders. At some point there are some of the contributing factors that are necessitating this to happen. The ban has not become successful five months after the ban took effect in Kenya. That's why this study is sought to know the determinants of the implementation of the ban of plastic bags.

Purpose of the study:

The purpose of the study was to investigate the determinants of the implementation of the ban of plastic bags in Kenya a case of NEMA, Kisii County.

Objectives of the Study:

The study was guided by the following objectives.

- i. To ascertain how public participation influences the implementation of the ban of plastic bags in Kisii County.
- ii. To determine how governance influences the implementation of the ban of plastic bags in Kisii County.
- iii. To establish how budget allocation influences the implementation of the ban of plastic bags in Kisii County.
- iv. To assess how public policy influences the implementation of the ban of plastic bags in Kisii County.

Research Questions:

The study was guided by the following Research Questions.

- i. To what extent does public participation influence the implementation of the ban of plastic bags in Kisii County?
- ii. How does governance influence the implementation of the ban of plastic bags in Kisii
- iii. How does budget allocation influence the implementation of the ban of plastic bags in Kisii County?
- iv. How do public policy influence the implementation of the ban of plastic bags in Kisii County?

Research Hypothesis

H₀1: There is no significant relationship between public participation and the implementation of the ban of plastic bags.

H₀2: There is no significant relationship between governance and the implementation of the ban of plastic bags.

H₀₃: There is no significant relationship between budget allocation and the implementation of the ban of plastic bags.

H₀₄: There is no significant relationship between public policy and the implementation of the ban of plastic bags.

Definition of significant terms:

Determinants - A factor which decisively affects the nature or outcome of something. (<https://en.oxforddictionaries.com>)

Implementation - The process of putting a decision or plan into effect; execution. (Oxford dictionary)

Ban - To prohibit or forbid especially by legal means (as by statute or order) (<https://www.merriam-webster.com/dictionary>)

Plastic bags - is a type of container made of thin, flexible, plastic film, nonwoven fabric, or plastic textile. (<https://www.merriam-webster.com/dictionary>)

Organization of the study:

The study is organized into five chapters. Chapter one discusses the background of the study in which the contextual and conceptual issues are explored. The chapter gives direction for the study through stating of objectives, the significance of the study, its delimitation and limitations. Chapter two covers empirical and theoretical literature on the determinant factors and how they affect the implementation of the ban of plastic bags. The chapter provides a foundation upon which the findings of the study are discussed and conclusions drawn. The chapter finally identifies the knowledge gap from the literature studied. Chapter three covers research methodology used in the study, research design, target population, sampling procedure, description of research instruments, validity and reliability of research instruments, methods of data collection, procedures for data analysis, operational definition of variables and ethical considerations. Chapter four covers the data analysis, data presentation and interpretation of study findings while chapter five summarises the study findings, discusses the research findings, draw conclusions and recommendations and suggests areas of further research.

2. LITERATURE REVIEW

Introduction:

This section will focus what different writers have said about the ban of plastic bags and the factors hindering the implementation of the ban. The review will focus regional, national, international and global review. The aspect of factors hindering the implementation of the ban of plastic bags is the same globally and in one way or the other research has been done the same. This section is subdivided into the following sub-headings; overview to ban of plastic bags, public participation and implementation of the ban of plastic bags, corruption and implementation of the ban of plastic bags, budget constraints and implementation of the ban of plastic bags, public policy and implementation of the ban of plastic bags and conceptual framework.

Overview on the ban of plastic bags:

Governments around the world are taking actions against the use of plastic bags in an attempt to reduce consumption, protect the environment, and raise consumer awareness. Policies regarding PSB (Plastic Shopping Bag) are found on all six populated continents (FDEP 2010); these policies use instruments (tools) that range from regulatory, to environmental taxation, to non-regulatory (voluntary).

Bangladesh banned bags in early 2002 becoming the first nation to regulate this product (Clapp and Swanston 2009). The main factor that pushed this legislation was the blame placed on the bags for extreme flooding experienced in 1998 by blocking drains, which had led to two months of persistent floodwaters (Clapp and Swanston 2009). Bangladesh was succeeded by different states in India who passed different versions of bans on plastic bag distribution, use and discard in the early 2000s (Down to Earth 2000). Some talked about increasing thickness while others outright banned the bag all together. The capital city of Delhi has introduced a ban on all forms of disposable plastic within the last couple of years. As stated before, different countries and cities have different reasons for regulating these thin plastic bags. For India, the danger that the bags have posed to their sacred cows through ingestion forced them to take action (Clapp and Swanston 2009). The extreme littering of these bags makes them easily accessible food to the free roaming cows. Taiwan is next on the list as their Environmental Protection Agency (EPA) introduced heavy fines for the distribution of free plastics by

stores and restaurants in 2002. These fines initially ranged between \$1,800 to \$9,000 but were later cut to just between \$35 to \$180 per offense (McLaughlin 2004). Taiwan's EPA took this course to reduce waste as a whole due to overwhelming landfills covering the island. Estimates show that the regulation as had more positive environmental effects than negative economic effects and has reduced usage of single-use plastic bags by around 69% (McLaughlin 2004).

The next country to join the movement was South Africa, a developing and impoverished nation. This nation introduced a ban and tax in late 2002. The ban was on thin plastic bags stipulating that bag thickness had to be at least 24 μ . Added to this regulation was a tax of 46 Rand cents later lowered to 17 Rand cents (0.013 USD) (Hasson, Lieman and Visser 2007). Reportedly, the regulation was a result of unsightly litter due to plastic bags which harmed their tourist business alongside the damage it caused to the local wildlife. The regulation has been noted as an overall environmental success with minimal harm to the plastics industry within the country.

Public participation and implementation on the ban of plastic bags:

Public participation refers to involvement of consumers and store in the program. Level of dependence of consumers on plastic bags reflects the level of consumer participation in the program. Environmental initiatives by the government will not be effective unless accompanied by public participation (Eden, 1996). Public participation in environmental management brings numerous benefits and people are aware of them (Lim, 2012). A number of studies have dealt with participation of the public in pro-environmental behavior. A large number has focused on recycling behavior (Asmuni, Khalili, & Zain, 2012; Singhirunnusorn et al., 2012). In order to allow for the development of pro-environmental behavior, a change of habit towards more environmental-friendly practices can be taught through incentive or disincentive through mechanisms such as levy on potentially-polluting products such as a levy on the use of plastic bags. The right exposure of consumers to these practices, they can easily change their habits of environmentally unsustainable purchasing practices with more sustainable ones. Consumers with prior experience to pro-environmental practices can easily adopt a lifestyle that is pro-environment than those without the experience (Azeem, Hassan, & Kouser, 2013).

A few studies try to analyze the participation level of the public on programs to reduce the use of plastic bags and the effectiveness of levy on plastic bags. One study investigated the correlation of attitude-behavior in supporting the use of plastic bag levy for Malaysia using survey questionnaire. They found that there were no significant correlations of certain attitude-behavior (Zen et al., 2013). The effectiveness of plastic bag charge usually associated with change in behavior of users. One study concluded that the plastic bag levy has not been effective as consumers continue to forget to bring their own plastic bags for shopping (Zen et al., 2013). Poortinga et al. (2013) described the effectiveness of the charge similarly, which is through the habit change of consumers towards consciously bringing their own carrier bags. The consideration of the use of a levy consequence of not bringing own bags and it is taking a utilitarian approach, which can be effective in promoting a change of habit (Chan, Wong, & Leung, 2007).

A study for South Africa measures the price elasticity of demand for plastic bags in order to determine the effectiveness of the levy on these bags (Dikgang, Leiman, & Visser, 2012). They found the elasticity value to be very low and can be positive. The conclusion of this study is the levy is not effective as consumers are unaware of changes in price of plastic bags and plastic bag substitutes are very few and do not serve all purposes.

Governance and implementation on the ban of plastic bags:

Corruption is defined as abuse or misuse of public office and funds for personal gain. In Kenya, the Anti – Corruption and Economic crime Act (2003) has defined corruption as: an offence under any of the provision of section 39 to 44, 46 and 47, bribery or fraud, embezzlement or misappropriation of public goods, abuse of office or breach of trust or an offence involving dishonesty in connection with any rate or imposed levy under any act or under any written law relating to the elevation of persons to public office. Corruption as envisaged in the act is multifaceted hence it impacts all sectors thus posing a major challenge to governments and individuals. Prevalence of corruption in the public sector is said to hamper efficient and effective service delivery (Lawal, 2007). Corruption is a predicament that has entrenched itself in all sectors, both in developed and developing countries. However, research carried out shows that it is more prevalent in the developing countries (Pellegrini & Gerlagh, 2008, Svensson, 2005). Corruption manifests itself in different forms under different environments and contexts and therefore it is impossible to have a universal definition that encompasses all. However, corruption has widely been defined as abuse or misuse of public office and funds for personal gain.

According to Kivoi (2012) corruption is motivated by the spirit of private gain at the expense of public interest. Lawal (2007) adds that where corrupt practices have become entrenched, large scale corruption co-exists with petty corruption by which officials at almost every level request payment to perform tasks or provide services. Nyaga and Theuri (2011) ascertain that corruption undermines government ability to provide basic services such as healthcare and education and leads to wastage of public resources. Further, corruption increases the cost of doing business, discourages foreign and local investments, distorts public expenditures, reduces economic efficiency and slows down administrative processes hence, undermining development and service delivery (Nyaga & Theuri, 2012, Chweya, Tatu & Akivaga, 2005).

The cross – national causes of corruption include: democracy, foreign trade, culture, religion, colonial heritage, levels of income and economic development, political system, wages, political instability, inequality, ethnicity, size of governments (Treisman, 2000, Rose – Ackerman, 1997a, Tanzi & Davoodi, 1997, Gray & Kaufmann, 1998, Mauro, 1995, 1997, Zimelis, 2011). Shrestha (2007) in his report on; Corruption in Infrastructure: provision and service delivery at municipal level in Nepal attribute corruption to: lack of public awareness, information disclosure and accountability, materialism, perverse use of authority, poor system of reward and punishment, acceptance of irregularities and low salaries. Corruption in the Kenyan public service has been attributed to: greed/selfishness, poor remuneration and culture, poverty, to fast track services, poor governance, inflation, impunity, ignorance and unemployment. Other reasons include unprofessionalism, ethnicity, lack of transparency/equity, inadequate opportunities/ resources, non – enforcement of law, corrupt leaders, laxity in combating corruption, lack of motivation, disunity, political patronage and red tape/bureaucracy (EACC, 2012). According to KACC/EACC annual surveys, greed is the leading cause of corruption in Kenya.

The organization factors that drive or aid in perpetrating corruption include: employee dissatisfaction, discretion and responsibility, nature of work, working condition, reporting mechanism, supervisor, colleagues, culture, work pressure, communication and salaries (Gorta, 1998). For example, discretion in work place allows the employee to make personal judgment in interpreting, administering and implementing the rules and regulation (Mynit, 2000). As much as those who are supposed to enforce the ban keep on engaging in corruption, the ban cannot be effected. On the other hand a public official can withhold the revenue, by undercharging the government services e.g. undercharging of fines for those caught with plastic bags, and not remitting the revenue to the government. Withholding revenue leads to revenue loss for the government but increases the demand for the services. Those who are also caught feel that they should give a bribe to law enforcers so that they may be freed or not face the law.

Budget Constraints and implementation on the ban of plastic bags:

The corner stone of management control process in most institution is budgeting. Budgeting is defined as the act of preparing budget (Garrison & Noreen, 2003). Budgeting is a central process of control in accounting control systems, activities that the various units will undertake. It is also a technique for setting the institution priorities by allocating scarce resources to those activities that officials deem to be the most important and rationing it to those areas deemed less vital. (Goldstein, 2005) It facilitates the effectiveness and implementation of management function. Budgetary process contributed to planning, control, communication and performance evaluation (Weetman, 2006). The preparation of budget forced management to implement formal planning procedures, which encouraged departments to participate in the formation of the overall budget. Budgetary constraints also affect the implementation of the ban of plastic bags. Expectations may always outpace the capabilities of government. Before any proposals is accepted and approved, decision-makers need to be convinced that it has the resource to do them. As observed by Kingdom (1984:145-6), “decision-maker need to be convinced that the budgetary cost of the programme is acceptable; that there is a reasonable chance that politicians will approve; that the public in its various facets both mass and activists will acquiesce”. There must, therefore, be sufficient fund to meet policy expectations, failure which policy analysis suffers.

Governments in developing countries, sometimes, do not budget adequately to enable the public bureaucracy properly implement formulated policies (Ikelegbe, 2006; Dick, 2003). Indeed, to effectively implement policies, the implementing agency needs resources in adequate and timely manner and such not being the case in Nigeria explains, in part, the failure of certain public policies to achieve desirable ends, (Nweke, 2006; Ikelegbe, 1996). Sometimes, though, government gives out sufficient fund but the corrupt activities within the public bureaucratic organizations do not allow for its judicious use to effectively execute policy programs. In any case, insufficient financial resources have resulted to situations where laws could not be enforced, services were not provided and reasonable regulation not developed and applied.

Public Policy and implementation on the ban of plastic bags:

A public policy is a government action or proposed action directed at achieving certain desired goals or objectives (Ikelegbe, 2006). In the light of a given societal problem, public policy guides and determines present and future public decisions as well as private individual or private business institutional actions, decisions or behavior. In essence, a public policy determines the activities of government and given private institutions in relation to providing services designed to solve a given problem. Ugwuanyi *et al.* (2013).

Effective policy implementation, entails implementing a policy in such a way as to produce, attain or realize the goals and objectives of the policy. In essence, if a policy is effectively implemented, the designed and planned development goals and objectives are realized. The basic end or focus of the bureaucratic activities should then be on how best to effectively implement policies. Policy implementation includes all the activities that result from the official adoption of a policy. Policy implementation is what happens after a law is passed. We should never assume that the passage of a law is the end of the policymaking process. Sometimes laws are passed and nothing happens. Sometimes laws are passed and executive agencies, presuming to act under these laws, do a great deal more than Congress ever intended. The pattern and nature of policy implementation is the major explanation for the failure or success of any given policy. In this vein, Nwankwo & Apeh (2008) observe that the implementation of a policy is the most vital phase in the policy process as it is at this stage that the success or failure of a policy is determined. Ikelegbe (2006) and Nweke (2006), in this respect too, note that many policy failures result from ineffective implementation.

The public bureaucracy plays through the effective implementation of government policies, projects and programmes aimed at achieving development goals and objectives. Most often in many developing countries, however, policies are well and brilliantly formulated but ineffectively implemented by the bureaucracy as cited in Nigeria (Obodoechi, 2009; Ikelegbe, 2006). This leads to the failure of public policies to achieve their target goals and objectives and to ultimately alleviate the problems for which they were designed. Indeed, there are usually wide gaps between formulated policy goals and the achievement of those goals as a result of ineffective implementation in almost all facets of public administration (Ozor, 2004; Mankinde, 2005).

The ineffective and corrupt political leadership contribute to poor policy implementation in developing countries. The leadership corruption, and ineptitude, for instance, affects the content and quality of policy at formulation stage. For instance, policies are, more often than not, made for purposes of the selfish and egoistic interest of the political leaders and sometimes only to attract public acclaim and attention with less regard to their appropriateness in addressing given problems or the possibility of their effective practical implementation by the public bureaucracy. It is perhaps for this that Okoli & Onah (2002) state that implementation of policies in Nigeria and other developing countries take the form of "learning process" or "trial and error". In this context, policies or programmes are haphazardly implemented and even sometimes abandoned or dismantled midway because the basis for formulating the policy was not, in the first instance, predicated on existing data, realities or need.

Some policies actually tend to be over ambitious, sweeping and overly fundamental in nature (Mankinde, 2005). In most cases, the formulation of such over ambitious policies is not even borne out of genuine or sincere effort to bring about rapid and radical development but just to boast the ego of the political leaders. Another critical factor inhibiting effective implementation of policies is that some agencies or institutions saddled with the responsibility of implementing given policies do not possess the requisite manpower and financial resources to effectively implement them.

3. RESEARCH METHODOLOGY

Introduction:

Research methodology is an approach and a set of supporting methods and guidelines to be used as a framework for carrying out the research Mugenda (1999). Mugenda (1999) explains that research methodology applies to ways the researcher comes close to problems and seeks answers to those problems. The author further argues that the success in the research depends on whether the researcher specifies what to find out and the best way to do it. According to Mugenda and Mugenda (1999), research methodology includes research design, population and sample, data collection procedures, data analysis procedures. Therefore this chapter will discuss the following: research design, target population, sample size and sampling procedure, data collection method / procedure, research instruments, data analysis and data presentation methods.

Research Design:

According to Kombo and Tromp (2006), a research design can be regarded as an arrangement of conditions for collection in a manner that aims at combining relevance with the research purpose. This study adopted a descriptive research design; Bogdom (1992) defines descriptive research as a process of collecting data in order to answer questions concerning the current status of the study subject. Descriptive research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret it for the purpose of clarification.

Target population:

The target population refers to the specific group relevant to a particular study. Mugenda and Mugenda (2003) explain that a population is a group of individuals or objects that have the same form of characteristics. They are the “totality of cases that conform to certain specifications, which defines the elements that are included or excluded in the target group”. The target population of this study was 75 employees NEMA who are in charge of environmental impact mitigations in the county who have operated in the area for over the last 5 years, approximately 1200 businesses who use the plastic bags plus the 17 general public.

Sample size and Sampling Procedure:

A sample is a smaller number or the population that is used to make conclusions regarding the whole population. Its purpose is to estimate unknown characteristics of the population. Sampling therefore is the systematic process of selecting a number of individuals for a study to represent the larger group from which they were selected (Marshall & Rossman, 1999, Mugenda and Mugenda, 1999). The process of sampling takes in to account various issues and will depend on the organization type, purpose, complexity, time constraints and previous research in the area.

To determine the sample size Morgan’s table was used with a 95% confidence level and error margin of 5% to choose sample from NEMA staff, use 10% of approximated businesses and used random sampling to choose a sample size from the population. The resulting sample was as follows.

Using Morgan’s table at 95% confidence level and error margin of 5%, sample from NEMA was 63.

$10\% * 1200 = 120$ for businesses

Using random sampling to sample general public to get 17 respondents

Total sample $63 + 120 + 17 = 200$ respondents

Data Collection Instruments:

The study used both primary and secondary data. Primary data was obtained through self-administered questionnaires with closed and open-ended questions. The researcher used the questionnaires since they were the most appropriate tool to gather information that can determine the factors hindering the implementation of the ban of plastics in Kenya. The questionnaires included structured and unstructured questions that were administered to the respondents. The closed ended questions enable the researcher to collect quantitative data while open-ended questions enable the researcher to collect qualitative data. Secondary data included data collected from relevant literature in libraries such as journals, annual reports, books, case records, workshop proceedings and periodicals. Observations helped to determine the unbearable levels of plastic disposal.

Pilot Study:

Initial testing of the instrument was done with respondents from the target population in NEMA, Kisii County to ensure that they understood the questions. The subjects of the pretest was encouraged to give suggestions concerning the instructions, clarity of the questions, and sensitivity of the questions and flow of the questionnaire.

4. DATA ANALYSIS, PRESENTATION AND INTERPRETATION**Public participation in the implementation of plastic bags:**

This question sought to determine if the respondents felt that there was need to engage the public in the plastic ban issue. Their responses were as follows.

Table 4.1: Public Participation in the implementation of plastic bags

	Frequency	Percentage
Strongly agree	129	72.47
Agree	41	23.03
Neutral	8	4.50
Total	178	100

From table 4.1 above, majority of the respondents at 72.47% strongly agree that public participation is key towards the implementation of the ban of plastic bags. 23.03% agree and 4.50% of the respondents remained neutral. This implies that public participation is key in the implementation of the ban of plastic bags.

Government’s commitment to conduct Public participation in the implementation of plastic bags

This question sought to get views on the government’s commitment to conduct public participation. Their responses were as follows.

Table 4.2: Government is committed to conduct Public participation

	Frequency	Percentage
Strongly agree	8	4.49
Agree	46	25.84
Neutral	31	17.41
Disagree	66	37.08
Strongly Disagree	27	15.18
Total	178	100

From table 4.2 above, majority of the respondents at 37.08% disagreed that the government is committed to conduct public participation. 25.84% agree that the government is committed to conduct public participation, 17.41% remained neutral, 15.18% strongly disagreed and 4.49% strongly agreed.

Inferential Statistics on public participation:

Spearman correlation analysis was conducted at 95% confidence interval and 5% significance level and was a 2-tailed test. Table indicates the correlation between the peace dividends and performance of community reconciliation programmes

Table 4.3: Inferential Statistics on public participation1

			Public participation	Implementation of the ban of plastic bags
Spearman’s rho	Public participation	Correlation Coefficient	1.000	0.135*
		Sig. (2-tailed)		0.0005
		N	178	178
	Implementation of the ban of plastic bags	Correlation Coefficient	0.135*	
		Sig. (2-tailed)	0.0005	
		N	178	178

* Correlation is significant at the 0.05 level (2-tailed)

Table 4.3 shows a positive correlation between public participation and the implementation of plastic bags with a Spearman’s rho value of 0.135. This finding shows that public participation is positively correlated with implementation of plastic bags . The value of 0.0.135 for a sample size of 178 at significance level of 0.05 is statistically significant. Based on these analyses, the hypothesis that;

H₀1: There is no significant relationship between public participation and the implementation of the ban of plastic bags is rejected.

Governance and implementation of the ban of plastic bags:

This question sought to get views on the system of governance within NEMA as an organization can be able to implement the ban of plastic bags. Their responses were as follows.

Table 4.4: Governance in the implementation of ban of plastic bag

	Frequency	Percentage
Strongly agree	23	12.92
Agree	35	19.66
Neutral	5	2.81
Disagree	89	50
Strongly Disagree	26	14.61
Total	178	100

From table 4.4 above, majority of the responds at 50% disagree that the governance in NEMA cannot implement the ban of plastic bags. 19.66% agree that governance in NEMA can implement the ban, 12.92% strongly agree, 14.61% strongly disagree while 2.81% of the respondents remained neutral.

Inferential Statistics on governance

Spearman correlation analysis was conducted at 95% confidence interval and 5% significance level and was a 2-tailed test. Table indicates the correlation between the governance and implementation of ban of plastic bags.

Table 4.5: Inferential Statistics on governance2

		Governance	Implementation of the ban of plastic bags
Spearman's rho	Governance	Correlation Coefficient 1.000	0.188*
		Sig. (2-tailed)	0.0002
	Implementation of the ban of plastic bags	N 178	178
		Correlation Coefficient 0.188*	
		Sig. (2-tailed)	0.0002
		N 178	178

* Correlation is significant at the 0.05 level (2-tailed)

The Spearman's rho value of 0.188 indicates a positive relationship between governance and the implementation of the ban of plastic bags. The value of 0.188 for a sample size of 178 at significance level of 0.05 is statistically significant. Thus, the hypothesis that;

H₀2: There is no significant relationship between governance and the implementation of the ban of plastic bags is rejected.

Policy awareness and employee dissatisfaction:

The researcher wanted to know if Policy awareness and employee dissatisfaction among NEMA staff may have an influence in the implementation of the ban of plastic bags. Their responses were as follows.

Table 4.6: Policy awareness and employee dissatisfaction

	Frequency	Percentage
Strongly agree	54	30.34
Agree	76	42.70
Neutral	11	6.18
Disagree	32	17.98
Strongly Disagree	5	2.80
Total	178	100

International Journal of Novel Research in Humanity and Social Sciences

Vol. 5, Issue 5, pp: (160-175), Month: September - October 2018, Available at: www.noveltyjournals.com

From table 4.6 above, majority of the respondents (42.70%) agree that policy awareness and employee dissatisfaction influence the implementation of the ban of plastic bags. 30.34% strongly agree while 17.98% disagree and 2.80% strongly disagree.

Enforcement of the law and corruption:

The researcher wanted to know if Enforcement of the law and corruption have an influence in the implementation of the ban of plastic bags. Their responses were as follows.

Table 4.7: Enforcement of the law and corruption

	Frequency	Percentage
Strongly agree	97	54.49
Agree	30	16.85
Disagree	46	25.84
Strongly Disagree	5	2.82
Total	178	100

From table 4.7 above, 54.49% of the respondents strongly agree that enforcement of the law and corruption have an influence in the implementation of the ban of plastic bags. 16.85% agree, 25.84% disagree and 2.82% strongly disagree.

Inferential Statistics on public policy:

Spearman correlation analysis was conducted at 95% confidence interval and 5% significance level and was a 2-tailed test. Table indicates the correlation between the public policy and implementation of the ban of plastic bags.

Table 4.8: Inferential Statistics on public policy3

		Public policy	Implementation of the ban of plastic bags
Spearman’s rho	Public policy	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.224*
		N	178
	Implementation of the ban of plastic bags	Correlation Coefficient	0.224*
		Sig. (2-tailed)	0.3
		N	178

* Correlation is significant at the 0.05 level (2-tailed)

The Spearman’s rho value of 0.224 indicates positive relationship public policy and the implementation of the ban of plastic bags. The value of 0.224 for a sample size of 178 at significance level of 0.05 is statistically significant. Thus, the hypothesis that;

H₀₃: There is no significant relationship between public policy and the implementation of the ban of plastic bags is rejected.

Budget constraints and implementation of the ban of plastic bags:

The researcher wanted to know if budget constraints have an influence in the implementation of the ban of plastic bags. Their responses were as follows.

Table 4.9: Budget constraints and implementation of the ban of plastic bags

	Frequency	Percentage
Strongly agree	102	57.30
Agree	58	32.58
Disagree	18	10.12
Total	178	100

From table 4.9 above, majority of the respondents at 57.30% strongly agree that budget constraints have an influence in the implementation of the ban of plastic bags. 32.58% agree and 10.12% disagree.

Budget for alternatives:

This question sought to seek opinion whether budget for alternatives has an influence in the implementation of the ban of plastic bags. The responses were as follows.

Table 4.10: Budget for alternatives

	Frequency	Percentage
Strongly agree	153	85.96
Agree	25	14.04
Total	178	100

From table 4.10 above, majority of the respondents at 85.96% strongly agree that budget for an alternative has an influence in the implementation of the ban of plastic bags. 14.04% agree that budget for an alternative has an influence in the implementation of the ban of plastic bags.

Inferential Statistics on Community Peace Agreements:

Spearman correlation analysis was conducted at 95% confidence interval and 5% significance level and was a 2-tailed test. Table indicates the correlation between budget and implementation of the ban of plastic bags.

Table 4.11: Inferential Statistics on budget

			budget	Implementation of the ban of plastic bags
Spearman's rho	budget	Correlation Coefficient	0.8	0.2*
		Sig. (2-tailed)		0.8
		N	178	178
	Implementation of the ban of plastic bags	Correlation Coefficient	0.2*	
		Sig. (2-tailed)	0.8	
		N	178	178

* Correlation is significant at the 0.05 level (2-tailed)

The Spearman's rho value of 0.2 indicates a positive relationship between budget and the implementation of the ban of plastic bags. The value of 0.2 for a sample size of 178 at significance level of 0.05 is statistically significant. Thus, the hypothesis that;

H₁₃: There is no significant relationship between budget and implementation of the ban of plastic bags is rejected.

Public policy and implementation of the ban of plastic bags:

This question sought to seek opinion whether public policy has an influence in the implementation of the ban of plastic bags.

Ineffective implementation of policies and over ambitious policies in the implementation of the ban of plastic bags

The researcher sought opinion on whether ineffective implementation policies and over ambitious policies have an influence on the implementation of the ban of plastic bags. The responses were as follows.

Table 4.12: Ineffective implementation of policies and over ambitious policie

	Frequency	Percentage
Strongly agree	170	95.51
Agree	8	4.49
Total	178	100

From table 4.12 above, 95.51% of the respondents strongly agree that ineffective implementation of policies and over ambitious policies have an influence on the implementation of the ban of plastic bags. 4.49% only agree that ineffective implementation of policies and over ambitious policies have an influence on the implementation of the ban of plastic bags.

Corrupt political leaders and implementation of the ban of plastic bags:

The researcher sought opinion on whether Corrupt political have an influence on the implementation of the ban of plastic bags. The responses were as follows.

Table 4.13 Corrupt political leaders and implementation of the ban of plastic bags

	Frequency	Percentage
Strongly agree	170	95.51
Agree	8	4.49
Total	178	100

From table 4.13 above, 95.51% of the respondents strongly agree that corrupt political leaders have an influence on the implementation of the ban of plastic bags. 4.49% only agree that that corrupt political leaders have an influence in the implementation of the ban of plastic bags.

5. SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Introduction:

This chapter presents a summary of the study findings, conclusions and recommendations. The findings are summarized in line with the objectives of the study which include public participation, governance, budget constraints and public policy. These independent variables were studied against the dependent variable which is implementation of the ban of plastic bags at NEMA.

Summary of Findings:

This section presents the findings from the study on the determinants of the implementation of the ban of plastic bags in Kenya. It was established that all the determinants discussed had an influence on the implementation of the ban of plastic bags.

Following the use of public participation as a tool to implement the ban, 72.47% of the respondents strongly agree that public participation is key towards the implementation of the ban of plastic bags. 23.03% agree and 4.50% of the respondents remained neutral. On whether the government is committed to conduct public participation, 37.08% disagreed that the government is committed to conduct public participation. 25.84% agree that the government is committed to conduct public participation, 17.41% remained neutral, 15.18% strongly disagreed and 4.49% strongly agreed.

Concerning governance on the implementation of the ban of plastic bags, 50% of the respondents disagree that the governance in NEMA cannot implement the ban of plastic bags. 19.66% agree that governance in NEMA can implement the ban, 12.92% strongly agree, 14.61% strongly disagree while 2.81% of the respondents remained neutral.

With budget constraints, 57.30% of the respondents strongly agree that budget constraints have an influence in the implementation of the ban of plastic bags. 32.58% agree and 10.12% disagree.

On public policy, 95.51% of the respondents strongly agree that ineffective implementation of public policies and over ambitious policies have an influence on the implementation of the ban of plastic bags. 4.49% only agree that ineffective implementation of policies and over ambitious policies have an influence on the implementation of the ban of plastic bags.

Discussion of Findings:

It was established that public participation has an influence towards the implementation of the ban of plastic bags. Even though the government did not embrace it fully it's a key determinant in the implementation of the ban of plastic bags in Kenya.

Concerning governance on the implementation of the ban of plastic bags, governance in NEMA cannot implement the ban of plastic bags. The system of governance cannot be trusted in the implementation of the ban of plastic bags in Kenya.

International Journal of Novel Research in Humanity and Social Sciences

Vol. 5, Issue 5, pp: (160-175), Month: September - October 2018, Available at: www.noveltyjournals.com

On budget constraints, the issue has a great influence in the implementation of the ban of plastic bags. Budget plays a great role in the implementation of any project hence its vital

Ineffective implementations of public policies and over ambitious policies have a great influence on the implementation of the ban of plastic bags. Policies contribute greatly to the success of any project.

Conclusion:

Based on the findings of the study, the following conclusions are made on the determinants of the implementation of the ban of plastic bags in Kenya.

Public participation has an influence towards the implementation of the ban of plastic bags. The government needs to embrace it fully since contributes greatly to the success in the implementation of the ban of plastic bags in Kenya. It gives the public information thus reducing resistance to change.

On governance on the implementation of the ban of plastic bags, governance in NEMA cannot implement the ban of plastic bags. The system of governance cannot be trusted in the implementation of the ban of plastic bags in Kenya. Good structure of governance is not in place to implement the ban.

A budget constraint has a great influence in the implementation of the ban of plastic bags. Budget plays a great role in the implementation of any project hence its vital

Ineffective implementations of public policies and over ambitious policies have a great influence on the implementation of the ban of plastic bags. Policies contribute greatly to the success of any project.

Recommendations:

On the basis of the findings from the study, it is recommended that:

1. On all government projects or initiatives the government should embrace public participation. This will inform the public the importance of the project to them hence reduce resistance to change.
2. The governance of NEMA should be reviewed for it to better their services. The public needs to have trust in NEMA so that they can work together. And this trust can be built by reviewing the governance of NEMA.
3. A budget constraint is vital in every sector. There is need to have well budgeting plan that will see institutions like NEMA performing their duties without a hindrance of budget.
4. Public policies need to be implemented effectively in order to achieve goals. Their structure is well organized but their implementation needs to be adhered to strictly.

Suggestions for Further Research:

On the basis of what has been found out from this study, the researcher recommends that research be done to find out why public policies are not followed to the latter thus hindering the effective implementation of government projects.

REFERENCES

- [1] Asmuni, S., Khalili, J. M., & Zain, Z. M. (2012). Sustainable consumption practices of university students in Selangor. *Journal of ASIAN Behavioural Studies*, 2 (6).
- [2] Ayalon, O., Goldrath, T., Rosenthal, G., & Grossman, M. (2009). Reduction of plastic carrier bag use: An analysis of alternatives in Israel. *Waste management (New York, N.Y.)*, 29(7), 2025–32. doi:10.1016/j.wasman.2009.02.016.
- [3] Azeem, M., Hassan, M., & Kouser, R. (2013). What causes pro-environmental action: Case of business graduates, Pakistan. *World Applied Sciences Journal*, 24(12), 1642–1650. doi:10.5829/idosi.wasj.2013.24.12.13296.
- [4] "Cambodia to charge customers for plastic bags". *Channel News Asia*. 19 October 2017. Retrieved 22 March 2018.
- [5] Campbell-Arvai, V, Arvai, J.; Kalof, L. (2014). "Motivating sustainable food choices: the role of nudges, value orientation, and information provision". *Environment and Behavior*. 46 (4): 453-475.

International Journal of Novel Research in Humanity and Social Sciences

 Vol. 5, Issue 5, pp: (160-175), Month: September - October 2018, Available at: www.noveltyjournals.com

- [6] Chan, R. Y. K., Wong, Y. H., & Leung, T. K. P. (2007). Applying ethical concepts to the study of “green” consumer behavior: *An analysis of Chinese consumers’ intentions to bring their own shopping bags*. *Journal of Business Ethics*, 79(4), 469–481. doi:10.1007/s10551-007-9410-8.
- [7] Chweya, L., Tuta, J. K and Akivaga, S. K (2005). Control of Corruption in Kenya. *Legal - political Dimension (2001 – 2004)*. Nairobi: Clari press.
- [8] Clapp, J., & Swanston, L. (2009). Doing away with plastic shopping bags: international patterns of norm emergence and policy implementation. *Environmental Politics*, 18(3), 315-332. doi:10.1080/09644010902823717.
- [9] Dikgang, J., Leiman, A., & Visser, M. (2012). Elasticity of demand, price and time: Lessons from EACC (2010 - 2012). *National corruption perception survey*. www.kacc.go.ke
- [10] EACC (2010 - 2012). *National corruption perception survey*. www.kacc.go.ke
- [11] EACC (2010). *Sectoral Perspective on Corruption in Kenya: The case of the Public health*
- [12] EACC (2013). *Sectoral Perspective on Corruption in Kenya: The case of the Land sector in Kenya*. www.kacc.go.ke
- [13] Eden, S. (1996). Public participation in environmental policy: Considering scientific, counter-scientific and non-scientific contributions. *Public Understanding of Science*, 5, 183–204.
- [14] Feltman, R. (2015, September 15). *More than half the world’s sea turtles have eaten plastic, newstudy claims*. The Washington Post.
- [15] Freytas-Tamura, Kimiko de (2017-08-28). "In Kenya, Selling or Importing Plastic Bags Will Cost You \$19,000 — or Jail". *The New York Times*. ISSN 0362-4331. Retrieved 2017-11-28.
- [16] Godman, G. D. (2013). Countering single-use bag consumption with state legislation: The old dominion considers a new trend. *William & Mary Environmental Law and Policy Review*, 37(2), 568–592.
- [17] Gupta, S, Davoodi, H and Tiongson, E (2000a). Corruption and provision of health care and education services. *Journal of Public Economics* 69, no. 2 (June): 263-279.
- [18] Hasson, R. Leiman, A. Visser, M. (2007). The Economics of Plastic Bag Legislation in South Africa. *South African Journal of Economics* Vol. 75:1.
- [19] Jalil, M. A., Mian, M. N., & Rahman, M. K. (2013). Using plastic bags and its damaging impact on environment and agriculture: An alternative proposal. *International Journal of Learning & Development*, 3(4), 1–14. doi:10.5296/ijld.v3i4.4137.
- [20] Kaberuka, Donald, and al. (2000). Rwanda Vision 2020. Kigali: *Ministry of Finance and Economic Planning*. <http://repositories.lib.utexas.edu/handle/2152/5071>.
- [21] KACC (2006 - 2007). *National corruption perception survey*. www.kacc.go.ke
- [22] Kingdon, J.W. (1984). *Agendas, Alternatives and Public Policies*. USA: HarperCollins Publishers.
- [23] Kivoi, D (2012). Corruption and Traditional African Morality: A case of the Kibra community of Western Kenya. *Unpublished PHD thesis (p.18)*.
- [24] Kohls, Ryan. 2011. “The Plastic Bag Debate.” *The Dominion*. Accessed April 20. <http://www.dominionpaper.ca/articles/4010>.
- [25] Lawal, G (2007). Corruption and Development in Africa: Challenges for Political and Economic change. *Humanity & Social Sciences Journal* 2 (1): 01-07. "List by country; 'bag charges, taxes and bans'. – *Big Fat Bags*". *Big Fat Bags*. Retrieved 2016-11-15.
- [26] McLaughlin, K. (2004, June 15). *Wrap that in plastic? Not in Taiwan, unless you pay*. Retrieved From <http://www.csmonitor.com/2004/0615/p07s02-woap.html>
- [27] MOEST, (2011). Plastic Bag (Regulation and Reduction) Directive, Kathmandu: *Ministry of Environment, Science and Technology*, Government of Nepal.

International Journal of Novel Research in Humanity and Social Sciences

 Vol. 5, Issue 5, pp: (160-175), Month: September - October 2018, Available at: www.noveltyjournals.com

- [28] Myint, (2000). Corruption: causes, consequences and cures. *Asia –Pacific Development Journal*, 7 (2) 33 -58. "Nairobi city to ban use of plastic bags". *Africa Review Kenya*. 3 April 2014. Retrieved 5 May 2015.
- [29] Nicole Bogart (2012). "Top 5 places with plastic bag bans". Global News. Retrieved 2 July 2012.
- [30] Nyaga, I, G and Theuri, M. M (2011). Corruption: Is it an elusive war in Kenya? Nairobi: Rob Tech enterprises.
- [31] Pellegrini, L and Gerlagh, R (2008). Causes of corruption: A survey of cross – country analysis and extended results. *Econ, Gov.* 9, 245 – 263.
- [32] Pichert, D.; Katsikopoulos, K.V. (2008). "Green defaults: information presentation and pro-environmental behavior". *Journal of Environmental Psychology*. 28: 63-73.
- [33] Poortinga, W., Whitmarsh, L., & Suffolk, C. (2013). The introduction of a single-use carrier bag charge in Wales: Attitude change and behavioural spillover effects. *Journal of Environmental Psychology*, 36, 240–247. doi:10.1016/j.jenvp.2013.09.001.
- [34] Reuters (28 August 2017). "Kenya brings in world's toughest plastic bag ban: four years jail or \$40,000 fine". Retrieved 27 November 2017 – via www.theguardian.com.
- [35] Singhirunnusorn, W., Donlakorn, K., Kaewhanin, W., Kpxgukicvgu, U., Kpbwgpekpi, H., Tge, J., & Dgjcckqwt, E. (2012). Household recycling behaviours and attitudes toward waste bank project: *Mahasarakham Municipality*. *Journal of ASIAN Behavioural Studies*, 2(6).
- [36] Svensson, J. (2005). Eight questions about corruption. *Journal of Economic Perspectives*, 19(3) 19–42.
- [37] Wilk, J. (1999), "Mind, nature and the emerging science of change: An introduction to metamorphology.", in G. Cornelis; S. Smets; J. Van Bendegem, *EINSTEIN MEETS MAGRITTE: An Interdisciplinary Reflection on Science, Nature, Art, Human Action and Society: Metadebates on science*, 6, Springer Netherlands, pp. 71–87.
- [38] Xiufeng Xing (2009), Ban on Free Plastic Bags in China; Shandong Social Science Planning Programme China.
- [39] Zen, I. S., Ahamad, R., & Omar, W. (2013). No plastic bag campaign day in Malaysia and the policy implication. *Environment, Development and Sustainability*, 15(5), 1259–1269. doi:10.1007/s10668-013-9437-1.