

# The Ban on Plastic Shopping Bags in Cameroon

## An Exploratory Study of Resilience Strategies of Subsistence Marketplaces

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**Abstract:- The effects of environmental degradation have stimulated steady growth in policies and measures to protect the environment by national governments worldwide. In Africa, studies have shown that most governments institute measures to protect the environment with little or no consideration of the socio-ecological impacts on the population. In this study, the author has conducted semi structured interviews with 55 subsistence consumers in rural Cameroon exploring the impacts of the ban on plastic shopping bags on the population as well resilience strategies adopted by rural Cameroonians to mitigate the challenges imposed by the ban. The findings provide new insights into how subsistence marketplaces device strategies to overcome stressful situations.**

perturbations caused by the ban has compelled subsistence marketplaces in Cameroon to create coping mechanisms. So far, policies in place have failed to match the urgency of the challenges faced by the subsistence economy.

It is important to highlight that environmental policies and their linkages with both social and economic policies are generally less well understood by most African Governments, including Cameroon. These linkages need to be strengthened to support sustainable development. Studies have predominately focused on setting and not implementing policies to protect the climate system against human induced change. In addition, the impact of sustainable development policies on the subsistence economy has largely been ignored (Putri et al., 2013)

### I. INTRODUCTION

Since the 1992 Earth Summit in Rio, the notion of environmental protection has gained prominence in most national debates. The importance of sustainable development and its relationship to climate change have long been recognized. Policies to mitigate climate change and enhance sustainable development have received wide scholarly attention over the years (Nozaki et al., 2017). Nevertheless, the concept lends itself to many interpretations, making the creation and implementation of policies fraught with challenges. Worst of all, governments are not always well-equipped to deal with the cross-cutting and long term nature of many of these challenges. A case in point is the Republic of Cameroon. Cameroon, like many countries in the world has placed a ban on non-biodegradable plastic shopping bags due to its adverse environmental impacts. Plastic bags are said to make streets and roads untidy and clog rivers and seas. Thus, besides being an eyesore, it is a serious threat to wildlife. In addition, plastic bags are made using energy and non-renewable resources such as oil which are said to be relatively unfriendly to the environment (Salifou, 2012). The ban on non-biodegradable plastic shopping bags has taken a heavy toll on the subsistence economy of Cameroon. Consumers and sellers of non-biodegradable plastic shopping bags are expected to comply with the new regulation prohibiting the use of non-biodegradable plastic shopping bags and encouraging the use of thicker, more durable recyclable bags (Nforngua, 2014). The degree of the

The current study was conducted in Ekondo Titi, a subsistence community in the South West Region of Cameroon. The work was guided by three fundamental research questions: *Firstly, what are the impacts of the ban on plastic shopping bags on the subsistence economy of Ekondo Titi? Secondly, how do the people of Ekondo Titi cope with the ban on plastic shopping bags? Thirdly, what lessons does this offer for the formulation and implementation of effective public policy in subsistence marketplaces?* The goal of the study was not only to enhance the conceptual understanding of how subsistence marketplaces cope with perturbations but also to provide new practical directions for creation and implementation of sustainable development policies in subsistence marketplaces.

After conducting and analyzing the content of 55 in-depth interviews of buyers and sellers the study concludes that

- Despite emphasis on sustainable development, transition to sustainable living in subsistence marketplaces remains a major challenge faced by Governments.
- The changes imposed by sustainable development policies are largely ignored by Governments during creation and implementation of the policies.
- Policy makers must integrate resilience in sustainable development. This requires that policymakers shouldn't only understand the nature of subsistence marketplaces

but should equally possess the skills required to navigate subsistence marketplaces.

- Failure to integrate resilience measures in sustainable development policies in subsistence marketplaces compels subsistence consumers and entrepreneurs to adopt mechanisms to manage the disruptions caused by sustainable development.
- Marketers are yet to acknowledge and understand that marketing exchanges in subsistence marketplaces are out of the settings of the formal economy, hence marketers require a deeper understanding of the characteristics of subsistence marketplaces

The discussion presented in this report highlights the importance of a number of cross-cutting elements to guide policies towards sustainable development. These include: the key role played by national governments in establishing and promoting strategies for sustainable development, the challenges faced by governments in implementing sustainable development policies, the importance of the subsistence economy in sustainable development, the role of education and community participation in enforcing sustainable development, the advancements in resilience thinking (particularly related to the risk of abrupt changes and transformations) and the advantages of applying resilience thinking in governance and management.

The paper is organized in the following manner. First, the author presents a review of subsistence marketplaces, sustainable development and other relevant literature useful in building the platform of the study. Next the researcher presents the methodology of the research and the presentation of the findings of the study which consists of insights of interviews with people living in subsistence. The study concludes with a discussion of the findings and the implications of the findings for public policy pertaining to sustainable development and marketing in subsistence marketplaces.

## II. LITERATURE REVIEW

### A. *The Subsistence Marketplaces*

Before defining subsistence marketplaces, it is imperative to have an understanding of the two words separately “The term ‘subsistence’ emphasizes the qualitative nature of life circumstances wherein the ability to meet basic needs is chronologically under threat”. The term ‘marketplaces’ is defined from the perspective of individuals and communities in subsistence contexts (Venugopal and Viswanathan, 2016). A subsistence marketplace refers to individuals and entrepreneurs or buyers and sellers who struggle on a daily basis to fulfill their basic needs. This individuals and households in subsistence settings are faced with different levels of resources constraints which impose individual shortcomings in marketplace proficiency. Consequently, most constituents of subsistence marketplaces

live in substandard houses with little or no education, earning very low incomes and lacking basic necessities like water, electricity, sanitation and health care (Gau et al., 2012). In the subsistence economy, most purchases are unplanned. Goods are bought in small quantities mostly from people with existing favourable relationships. Most people in the economy are also involved in small businesses on a daily basis as a means to sustain themselves and family. They are called subsistence entrepreneurs. They do business for the sole purpose of economic survival. They mobilize all the resources at their disposal such as family, social networks, local knowledge and prior informal business experience to create ventures to meet their survival needs. Most businesses involve selling surplus produce from farms, food and other items purchased in bulk and resold through door-to-door sales, in-front of homes or in an open market setting. Daily earnings are used to care for basic family needs such as food, shelter, education, medication, payment of small loans and more items to sell (Viswanathan & Rosa, 2007). Thus, in the subsistence economy, consumption and entrepreneurship are fundamentally intertwined. A key characteristic of subsistence marketplaces is the interactions that exist between consumers and small business owners. According to Venugopal and Viswanathan (2016) there is the existence of a pervasive and highly social one-to-one relationship among interdependent consumers and sellers in subsistence settings. Contrary to developed economies, buyers and sellers in subsistence marketplaces are bound by trust, interdependence and shared norms and empathy. They rely on preexisting social ties (ie., transaction with someone they know or someone referred to by someone they know). As a result they enjoy benefits such as information acquisition, credit approval, customer retention, security and a sense of community (Viswanathan et al., 2012). Interactions in subsistence marketplaces are exchange oriented. Exchanges are not only limited to buying and selling. Studies (Viswanathan et al., 2014; Viswanathan et Rosa, 2017) have reported that exchange of goods also take place in the resolution of conflicts. According to Viswanathan et al. (2014) the one-to-one interactional styles of subsistence marketplaces play a very important role in helping members of the community to cope with the consumption challenges imposed by the severe economic and socio-cognitive constraints. A study by Viswanathan et al. (2016) examined the role of leadership in subsistence marketplaces. Leaders play an intermediary role between the community and outside entities. They have a broad knowledge of how the community would react to issues that fit their lifestyle and those that do not. Subsistence marketplaces trust their leaders. They strongly believe in their ability to lead them. Weidner et al., (2010) maintain that regardless of their low level literacy and numeracy and absence of economic, physical and technological resources, subsistence marketplaces are best characterized as thriving environments rich in emotional, social and cognitive capabilities. Weidner et al., equally maintain that despite the material and psychological challenges suffered by the subsistence

economy, they often employ intricate coping strategies to cater to their limitations. This is contrary to current business thinking that buyers and sellers who lack literary and numeracy skills cannot function in the marketplace or must function inefficiently (Viswanathan et al. 2009). Research (Viswanathan et al., 2014; Viswanathan et al 2012; Chrishnamacharyulu & Ramakrishma, 2011) shows that subsistence marketplaces are poised to become a driving force in the 21<sup>st</sup> century economic business. Not only are the world's poor an important market in their own right, but some two billion subsistence consumers are transiting from rural subsistence to urban consumer lifestyles in the span of a generation.

### *B. Product packaging in subsistence marketplaces*

Product packaging is an incredible feature in subsistence marketplaces. The packaging sector is very dynamic. It has undergone immense transformations over the years with the technologies better than before, taking the place of old ones. Agricultural products account for over 75% of packaging in subsistence markets (Nerlita et al., 2014). In developed marketplaces most products are processed and packaged at the point of origin. There is also an increasing concern for goods to be packaged in retail friendly forms. On the contrary, in subsistence marketplaces, packaging is predominantly done at the point of purchase since most products are sold in their original forms or in very small quantities. Packaging in subsistence markets is relatively flexible offering ready-to-eat packages for cereals, tubers, snack foods, fish, vegetables and meats (Carin, 2013).

It is important to note that less than two decades ago packaging materials in subsistence marketplaces in Cameroon and most parts of Africa were relatively friendly to the environment. Biodegradable materials such as leaves and papers were mostly used. However challenges such as insufficient supply due to high demand, fragility, scarcity, and small sizes (inability to carry large quantities of goods) opened doors for the introduction of plastic shopping bags. Plastic shopping bags have incredibly facilitated transactions in subsistence marketplaces in Cameroon. Apart from being readily available in various sizes, they are also durable and convenient. In addition, the packaging industry has experienced tremendous growth employing thousands of people trading in plastic shopping bags either as wholesalers or retailers (Mulango 2014).

### *C. Sustainable Development in Subsistence Marketplaces*

#### *➤ Overview of the concept of Sustainable Development*

The topic of sustainable development has become increasingly important, considered a solution for global poverty eradication. As a general concept, sustainable development encompasses three fundamental approaches: economic, environmental, and social developments, which are interrelated and complementary (Otiman et al., 2013). Although the essence of the concept of sustainable

development is clear enough, the exact interpretation and definition have caused strong discussions. There is no single unanimous approach to “sustainable development”. Numerous interpretations of the concept have surfaced in literature due to a variety of scopes and characteristic of different protection programs and different types of communities and institutions (Cai et al., 2009). Nevertheless, it is not within the scope of this paper to discuss the different interpretations of the concept of sustainable development. For the purpose of this study, the researcher adopts the Brundtland commission's (1987) definition of sustainable development. It postulates that sustainable development is the kind of development, which satisfies the current needs without endangering the future generations to satisfy their own. This definition of sustainable development is the most frequently cited and seems to be more exhaustive than the majority of others. The essence of Brundtland's statement is fair distribution of natural resources both among different generations and among the present generation of people from the first, the second, and the third world and finding a positive consensus between the environmental, social and economic dimensions of the environment (Hellen, 1999). Thus, according to Dantong (2015) sustainable development is not about a choice between environmental protection and social progress, but rather more than striving for economic and social development that would be compatible with environmental protection. An important element in this definition is the focus on the satisfaction of human needs. Though majority of scholars accept the Brundtland Commission's definition of sustainable development, Strange and Barley (2008) maintain that it does not provide any more detailed explanations of what sustainable development may require in practice and what actions should be taken. According to Strange and Barley, it has been formulated more as a universally agreed moral principle and in many cases it is more imagined than practically applicable. In the opinion of Amiolemen et al. (2012) sustainable development needs technical, organizational and institutional change and innovation to become a reality.

#### *➤ Policy creation and implementation in Subsistence Marketplaces*

Just as there are numerous interpretations of the concept of sustainable development so too many policies have been created and implemented to enhance sustainable development in subsistence marketplaces. Development policy refers to all political, economic and social measures taken by a donor country to achieve sustainable improvements in living conditions in developing and transition countries. Policies specifically aimed at securing sustained economic growth, a healthy environment or inclusive social developments are important in their own right for sustainable development (Misilu et al., 1999). Governments have important responsibilities in promoting sustainable development. However most sustainable development policies especially in developing countries have so far failed to match the urgency for sustainable living conditions. This gap reflects both

knowledge and implementation problems. Lack of knowledge often accounts for the difficulties in valuing external effects, or in decisions about the supply of public goods. In many areas enough information is already available to serve as the basis for policies but action remains inadequate (Weston et al., 2014). Policies and measures to protect the climate against human induced change should be appropriate to the specific conditions of each country and should be integrated with national development programs taking into account that economic development is essential for adopting measures to address climate change (Young, 2005). Concerns about the short-term consequences of policies to protect the environment on the distribution of household income (i.e. the possibility they may disproportionately affect those with lower income), on employment (in particular when employment losses are locally concentrated), and on the competitiveness of individual firms and sectors, have surfaced in many studies. According to Dehkordy et al., (2013) Governments are not always well-equipped to deal with the cross-cutting and long term nature of many of the changes caused by sustainable development policies. Abioro & Adefeso (2016) maintain that one of the main development policy challenges is how to coordinate all sub-policy areas into a coherent whole. The ability to detect problems and emergencies, identify risks and reduce uncertainties on the possible impacts of policies are among the key challenges facing the policymaking process (Hussien et al., 2017). According to Hussien et al., (2017) development policy interventions only make sense if they satisfy the criterion of sustainability. Hussien et al. have argued that sustainable development policies should specifically aim at securing sustained economic growth, a healthy environment or an inclusive social development. Kamakia et al. (2017) remarked that a comprehensive strategy is needed to overcome the policy challenges of sustainable development. Those responsible for creating, implementing and enforcing policies are required to make a decision about ill-defined problems occurring in rapidly changing and complex environments characterized by uncertainty and conflicting strategic interests among multiple involved parties. According to Osama & Aron (2017) Governments need to create a policy environment that provides the right signals to its citizens to support national and private initiatives in an appropriate manner. Such policies testify to an on-going concern about current needs and future prospects, even if this concern is not always phrased in sustainable development terms. Kamakia et al. (2017) have reported that implementing policies in practice that promote sustainable development requires the strong involvement of both economic and other policy communities, as well as ongoing efforts to build bridges among communities. They equally argue that Governments need to show leadership. In particular, they need to make their policy tool-kit more market-oriented, more integrative, and more inclusive. Progress also requires a focused agenda, with special priority given to areas where the risks of non-sustainable patterns of development are highest – such as

climate change and the management of other natural resources. Viswanathan et al. (2012) have argued that most policies aimed to enhance consumer welfare and economic development in subsistence marketplaces largely do not consider the everyday realities that the people face. The authors recommend that policy makers should carry out an investigation of direct exchange settings and their implications for business settings. A study by Nozaki et al (2017) revealed that policies and measures to protect the climate against human induced change should aim at minimizing their economic cost. This will require ensuring that the costs of each extra resource spent are equal across the range of possible interventions. Cost-effectiveness allows the minimization of aggregate costs and the setting of more ambitious targets in the future. Similarly, Negin's (2017) study argues that policies should secure regeneration – i.e. renewable resources should be used efficiently and their use should not be permitted to exceed their long term rates of natural regeneration. Negin equally argues that the differing levels of resilience of the population and their carrying capacity should be considered. Thus policies need to adapt to changing circumstances and should be continuously under review. The Swedish Government Commission on Sustainable Development (2017) has explored the fundamental role played by nature as the life support base for human well-being and societal development. The Commission maintains that nature provides individual households, communities, societies and the global community with resilience to deal with social and environmental shocks, including securing a sustained flow of critical ecosystem services. Hence, it is in the self-interest of people to account for and nurture this capacity thereby enhancing the likelihood of a continued prosperous social and economic development. A study by Uphoff, (2013) has reported that development programmes should be based on an analysis of the vulnerabilities and capacities of the people involved. This approach helps people help themselves by building upon their existing resources, strengths and skills. Cohen and Garette's (2015) study looked at the participation of the community in development programmes. Cohen and Garette argue that the participation of people at the local level in meeting the challenge of sustainable development has the great merit of providing a mechanism for taking into consideration local conditions and social issues at every stage of the planning process. According to Cohen and Garette (2015) development plans that do not have the support of those affected rarely succeed. Similarly, Jamal et al. (2014) maintain that a participatory community development approach to sustainable development starts with an assessment of the level of rural sustainable development of specific areas in the community and finding explanations for different levels. This will enable effective and efficient allocation of resources. Burton (2006) argues that organized groups in civil society can also play a role in identifying key challenges and in facilitating adaptation. According to Burton organized groups provide consumers with information about the environmental characteristics of the goods and services

they buy, they make them aware of the consequences of their decisions, and facilitate change in consumption patterns. According to Cochran & Malone (2005) Governments need to create a policy environment that provides the right signals to innovators and users of technology processes, both domestically and internationally; to fund basic research; to support private initiatives in an appropriate manner; to provide permanent incentives to innovate and diffuse technologies that support sustainable development objectives; and to raise awareness of climate change, its impacts, costs and the benefits of policy actions, through information and dialogue with the communities and sectors most affected, so as to facilitate the transition to new forms of work and consumption. Thus according to Cochran and Malone Governments have an important responsibility in setting up the conditions necessary to encourage changes in behaviour that favour sustainable development, and in providing access to the information needed for effective participation. More generally, Anderson, (2003) argues that environmental sustainability can only be achieved within a broad development strategy, encompassing sustained economic growth, financial solvency, institutional development, improved governance, effective investment in education and health, and poverty reduction. Alessandro's (2010) study has explored the importance of economic growth to sustainable development. Alessandro argues that the interaction between economic growth and the natural environment that supports it lies at the core of sustainable development. According to Alessandro, economic growth contributes to higher levels of human well-being, and provides the resources to address a range of environmental objectives. In addition, businesses can play an important role in adopting and diffusing sustainable practices and in many instances appears to be ahead of governments in implementation. On the other hand, Singh (2018) argues that social considerations are equally very important in the pursuit of sustainable development. Singh reports that social policy should be motivated by concerns about equity and the social externalities of poverty, unemployment, inadequate skills and ill health. Thus the role played by Government to set the conditions necessary for sustainable behaviour cannot be overemphasized. Not only should policies consider the social and economic conditions of subsistence marketplaces, policy makers and practitioners should be equipped with the knowledge and skills to navigate subsistence marketplaces. In addition policies should be reviewed constantly and integrated into the national development plan. Finally the participation of the community in the design and implementation should be given utmost consideration.

#### ➤ *Resilience in Sustainable Development*

The theory of resilience dates back to the 17<sup>th</sup> century. Resilience was first introduced in ecological research by Holling (1973). Today the concept has quickly become a fundamental notion in ecology and one of the most debated concepts across disciplines. According to Holling (1973) resilience determines the persistence of relationships within a

system and is a measure of the ability of these systems to absorb changes of state variable, driving variables, and parameters and still persist. Similarly, Bonano (2005) maintains that resilience of an ecosystem is a measure of “the speed of which the variables return towards their equilibrium from a perturbation”. According to the Australian Multilateral Assessment (AMA) (2012) the United Nations International Strategy for Disaster Reduction (UN/ISDR) has recognized the pertinence of resilience in dealing with natural hazards and disaster management. AMA uncovers that, to the United Nations, resilience means the capacity of a system, community or society to resist or to change in order that it may obtain an acceptable level in functioning and structure. This is determined by the degree to which the social system is capable of organizing itself and the ability to increase its capacity for learning and adaptation, including the capacity to recover from a disaster. In their study ‘A typology of Resilience: Rethinking Institutions for Sustainable Development’ Handmer and Dovers (1996) devised a typology of resilience based on the institutions that govern the interaction of systems. Handmer and Dovers argue that at the core of sustainability is the ability of systems both human and natural to cope with the uncertainty surrounding change - a characteristic of a system known as resilience. Handmer and Dovers remark that in essence, resilience as it pertains to sustainability relates to how a system copes with major perturbations to its operating environment. In Folke's (2006) opinion, these perturbations are adverse circumstances that threaten the well-being or functioning of an individual, community or society or organization. They may include external environmental perturbations such as earthquake, flood, fire and extreme heat. In the context of this study, perturbations refer to the negative impacts of sustainable development policies. Alliance (2000) argues that negative impacts of development are stressful not only for individuals experiencing personal loss but also for the community at large. Masten (2001) remarks that the impacts of stressors are not necessarily limited to physical environmental changes but may also involve loss of significant relationships, financial stress, negative neighbourhood characteristics or social threats.

Development literature argues that a system needs adaptive capacities to engender resilience or counteract a stress. Adaptive capacities are the characteristics communities have that affect their ability to identify, mobilize and address stresses or shocks. It also includes acquisition and use of transferable knowledge, skills, systems and resources that affect community and individual level changes (Luthar, 2006). According to Luthar adaptive capacity includes the ability of a system to adjust to challenges of development, to moderate potential damages, to take advantage of opportunities or cope with the consequences. In Daniel and Ortmann's (2011) opinion, a coping strategy focuses on individuals' taking control of the relationship between them and the stressor by evaluating options, seeking information and taking control of the

situation. In the opinion of Handmer and Dovers (1996) a system that develops a reactive approach to resilience does this by strengthening its status quo and making the current system resistant to change whereas a system that establish a proactive method to resilience accepts the inevitability of change and attempts to create a system that is capable of adapting to new conditions and imperatives. A study by Boyd et al., (2011) brought into focus anticipation as another salient feature of sustainable resilience. Wildavsky argues that resilience should equally require efforts to predict and prevent potential damages before damage is done. Anticipation attempts to avoid hypothesized hazards. Adger's (2000) study on resilience focused on coping strategies. According to Adger coping strategies are central to resilience. In his evaluation of resilience use cases, coping strategies were viewed as tactics taken in face of a perturbation. In Ekondo Titi, people enacted strategies to cope with the perturbations of the ban on plastic shopping bags. The repertoire of strategies includes: Violation of the ban; use of locally sourced materials for parceling; use of biodegradable shopping bags when it is convenient; limiting purchases; interdependence; reuse of plastic shopping bags; patronizing retailers and dealers and using market bags for shopping.

### III. RESEARCH METHODOLOGY

#### A. The Research Setting

The study is qualitative in nature. A qualitative methodological design was adopted because traditional quantitative methodologies such as surveys and experiments are practically difficult to conduct in subsistence settings owing to lack of literacy and numeracy skills. In addition, qualitative methodologies are more suitable in subsistence contexts due to the fact that they provide deep insights and understanding on phenomena such as social networks, family systems, gender differences, the effect of empowerment and the ingenuity of subsistence marketplaces. The study took place in EkondoTiti, the economic capital of N'dian Division, in the South West Region. The sample comprised of 55 respondents randomly selected to capture the diversity in subsistence marketplaces in Cameroon. EkondoTiti was relatively ideal for the study. Not only because its population is predominantly rural, the researcher was familiar with the local culture and language (pidgin English) which significantly contributed to developing a good working relationship with the respondents.

#### B. Data Collection

Data was captured by semi-structured interviews conducted in local markets, roadside stalls, *boutiques* (small stores) and respondents' homes. Interviews were conducted in Pidgin English language, widely spoken in Anglophone Cameroon. Interviews began with an explanation of the purpose of the study. Respondents were informed that the purpose of the study was to examine the impacts and coping strategies of the ban on plastic shopping bags. The participation was incredibly overwhelming demonstrating the fact that the ban on plastic shopping bags imposes enormous stresses on the living conditions of subsistence consumers. Respondents answered questions in their own words and pace for a duration of about 20 minutes. The informants were recruited from both sides of the marketing exchange relationship (i.e., they were either consumers or owners of microenterprises), Absolute care was taken by the researcher not to allow his personal values and opinions to influence the interviews or analysis.

#### C. Data Analysis

Interviews were transcribed verbatim from digital recordings. The author adopted the grounded theory approach to analyze the data. The grounded theory method was very suitable for the study. It enabled the researcher to develop a theory which offers an explanation about the main concerns of the population of the area of study and how that concern is resolved. After the data collection process, the key points were extracted from the data, coded and grouped into themes.

Name	Sex	Age	Family status	Current employment
Agbor	Male	35	Married, father of three	Farmer
Joshua	Male	40	Married, father of three	Petrol attendant
Peter	Male	38	Single, father of two	Barber
Agnes	Female	32	Married, mother of four	Trader
Okole	Male	40	Married, father of three	Farmer
Temba	Male	36	Married, father of three	Motorcycle taxi rider
Ayumta	Female	34	Married, mother of two	Teacher
Christina	Female	55	Married, mother of 3	Food vendor
Ngoe	Male	28	Single, father of one	Carpenter
Ebolo	Male	42	Single, father of two	Clerical worker
Michael	Male	35	Single, father of one	General worker
Stanley	Male	59	Married, father five	Trader
Ignatius	Male	25	Single, no child	Waiter
Felicia	Female	26	Single, no child	Trader
Augusta	Female	41	Married, mother four	Trader
Oponde	Male	40	Married, father of three	Local Electrician
Ngwa	Male	38	Married, father of three	Local Electrician
Hortensia	Female	35	Married, mother of four	Farmer
Suzan	Female	48	Married, mother of three	Storekeeper
Udeme	Male	45	Married, father of two	Retailer
Christopher	Male	38	Married, father of four	Builder
Margie	Female	28	Single, mother one	Guest house receptionist
Jeremiah	Male	27	Single, no child	Cybercafé attendant
Romanus	Male	39	Married, father four	Artist
Igwe	Male	39	Married, father of three	Retailer
Uche	Male	42	Married, father of two	Retailer
Patience	Female	35	Married, mother of three	Restaurant owner
Therese	Female	41	Married, mother of five	Farmer
Brenda	Female	38	Married, mother of four	Farmer
Rose	Female	50	Married, mother of five	Trader
Julius	Male	52	Married, father of six	Security guard
Nelson	Male	43	Single, father of two	Construction worker
Thompson	Male	27	Single, no child	Construction worker
Fomba	Male	52	Married, father of four	Primary school Teacher
Benedicta	Female	42	Married, mother of five	Secretary
Frida	Female	39	Single, mother of three	Trader
Bessem	Female	29	Single, no child	Petrol attendant
Charity	Female	37	Married, mother of two	Storekeeper
Jessica	Female	39	Single, mother of two	Hairdresser
Enoch	Male	31	Single, father of two	General worker
Quinta	Female	45	Married, mother of three	Farmer
Francisca	Female	42	Married, mother of four	Cleaner
Soro	Female	23	Married, mother of one	Housewife
Masungu	Female	39	Married, mother of four	Farmer
Shirley	Female	47	Married, mother of four	Trader
Princess	Female	35	Married, mother of two	Bar attendant
Anita	Female	38	Single, mother of one	Domestic worker
Spencer	Male	38	Married, father of two	Auto-mechanic
Joy	Female	39	Married, mother of three	Storekeeper
Catherine	Female	28	Single, no child	Security guard
Kelly	Female	22	Single, no child	Security guard
Isaac	Male	29	Single, father of one	Butcher
Nashon	Male	39	Married, father of three	Bar owner

Kennedy	Male	35	Married, father of two	Trader
Jacob	Male	27	Single, father of one	Taxi driver

Table 1:- Demographic profiles of the respondents

*D. Presentation and interpretation of findings*

In this section the author has described the findings of the study. The author adopted a narrative approach. In the presentation, a selection of quotes from the respondents has been grouped into themes. The analysis is supported by relevant pieces of literature. This aligns with the basic principle of grounded theory construction that treats existing theories as if they were another source of information. The section is structured as follows. First the author has presented and analyzed the impact of the ban of plastic shopping bags on the respondents followed by a presentation and analysis of the coping strategies adopted by the respondents.

*E. The impact of the ban on plastic shopping bags on the respondents*

The overwhelming impact of the ban on plastic shopping bags on the subsistence marketplace of Ekondo Titi justifies inquiry into their coping strategies considering their weak economic conditions. Respondents reported numerous negative effects of the ban on their living conditions. However, for the majority of the respondents buying plastic shopping bags meant a substantial reduction in their disposable income. In the analyses of the findings, the author has suggested seven themes that characterized the impact of the ban of plastic shopping bags on the respondents. The themes include: strain on disposable income; unavailability of plastic shopping bags, deprivation of the luxury of free shopping bags; drop in volume of sales; postponement of purchases; unemployment; confusion and trade-off of some household needs.

*1) Strain on disposable income.*

In this study the research found that the ban on plastic shopping bags had a tremendous strain on the disposable income of the respondents thereby worsening their already deplorable living conditions. This acknowledges the centrality of marketplaces in poverty. It provides important insights on how subsistence consumers struggle to meet basic needs (Venugopal & Viswanathan, 2017). The study found that before the ban, plastic shopping bags were freely given to consumers by retailers. Adherence to the ban implied spending between 50 to 100 francs (depending on the size) for a biodegradable plastic shopping bag. For example when the researcher asked Agbor how he feels about the purchase of bio-degradable plastic shopping bags. He responded by saying that they never used to buy plastic shopping bags. The ban has imposed a 50 to 100 Francs cost on shopping bags – a huge reduction of money used to cater to basic family needs. Most of the respondents shared Agbor’s view.

*2) Scarcity of biodegradable plastic shopping bags:*

The challenge of not finding bio-degradable shopping bags in most of the retail out-lets in the village was a huge concern reported by some of the respondents. Different conditions of severe scarcity have been systematically examined in the subsistence marketplaces literature. Studies (Wiswanathan et al, 2012; Wiswanathan et 2014) have reported that in addition to resource constrains scarcity of basic goods is also one of the main challenges faced by subsistence marketplaces. The findings uncovered that at times retailers found themselves not finding either non bio-degradable or bio- degradable plastic shopping bags during purchase. For example Christina reported that not finding shopping bags in the local market is one of the biggest problems faced by her and most of the villagers. Christina reported that sellers complain that the bags were very expensive, hence they cannot stock them. It explains why Khalid (2017) suggests an analogous change in supply chain orientation in subsistence marketplaces. According to Khalid, subsistence marketplaces should be considered a platform to ‘learn from’ instead of places ‘to sell to’ for creating workable solutions for the challenges in subsistence marketplaces thus enabling sustainability in its broadest sense. Thus, for supply chains in subsistence marketplaces to be sustainable they must have a clear social mission.



Fig 1:- Notice in a shop informing customers that there are no plastic bags

*3) Deprivation of the luxury of free plastic shopping bags:*

Prior to the ban on plastic shopping bags in Cameroon sellers provided shopping bags to their customers without any charge. The number of plastic shopping bags given to a customer was determined by the number and quantity of items purchased. The researcher’s conversation with Fomba, a primary school teacher helped in understanding the extent of the impact on consumers. Fomba reported that consumers



never used to pay for plastic bags. He added that in addition to the fact that biodegradable shopping bags are costly, they are very scarce. Research has documented the impacts of deprivation on subsistence marketplaces which resonates with the researcher's findings in this context. An element of deprivation identified in past research (Viswanathan et al., 2009) as the researcher found is that the multifaceted nature of deprivation often causes psychological effects that trap people in a cycle of subsistence living.

#### 4) *Drop in the volume of sales:*

Also important to this research was the need to understand the complex relationship between consumption and entrepreneurship in subsistence contexts. The study found that the ban on plastic shopping bags led to a significant drop in sales experienced by retailers and sellers. When the researcher asked Kennedy, a trader, how the ban affects his business, he reported that the ability to provide plastic shopping bags drives customers to retailers who provide the bags leading to a decrease in sales. This confirms the findings of past studies that consumption and entrepreneurship are fundamentally intertwined in the fabric of economic life in subsistence contexts (Viswanathan, 2010). As noted by Viswanathan et al., (2009) consumption and entrepreneurship are inseparable marketplace activities with consumers and sellers sharing adverse circumstances and learning from each other. This resonates with what the study found.

#### 5) *Postponement of purchases:*

Among the insights gained by the study is that the inability to purchase as well as the scarcity of biodegradable shopping bags at times compelled consumers to postpone certain purchases until when they will find something to carry them. Joy, one of the storekeepers interviewed, remarked that at times she shifted the purchase of some items to a later date due to absence or inability to purchase shopping bags. Postponement of purchases meant that consumers couldn't satisfy certain basic needs when need be. Subsistence marketplaces research has explored aspects in marketplaces that aid or deter in process of satisfying basic consumption need (Viswanathan et al., 2008). Thus the author can ascertain that inability as well unavailability of plastic shopping bags significantly deterred the respondents' ability to satisfy their basic needs.

#### 6) *Unemployment:*

Unemployment in subsistence marketplaces has been examined by numerous studies. It is argued that it is a fundamental threat to the living conditions of people living in subsistence conditions. This exacerbated by low literacy. Thus most subsistence dwellers either rely on farming or engage petty business activities (Viswanathan et Rosa, 2017). The study found that the ban on plastic shopping bags heightened the level of unemployment in the village. Many who traded in plastic shopping bags reported staying out of

business as a result of the ban. For example, Rosa, a trader reported that the ban has sent her out of business. Importing plastic shopping bags and selling to retailers and sellers was her only means of survival. As result her family suffers. Rosa explained that in order not to stay out of business some dealers took the risk to smuggle shopping bags into the village but if apprehended, the consequences were quite huge and painful.

#### 7) *Confusion about the ban on plastic shopping bags:*

Little systematic research has been conducted to specify how confusion affects commitment and participation in subsistence marketplaces. Subsistence marketplaces express confusion when they are confronted with an anomaly or an impasse and are uncertain about how to proceed (Yang et al., 2015). One of the primary findings of this research is the confusion faced by the respondents about the ban on plastic shopping bags. An often cited concern by most of the respondents was that they did not understand the purpose of the ban. When the researcher asked Jessica a hair dresser whether she understood the purpose of the ban, she reported that "I don't know why plastic shopping bags have been banned". This confirms findings of previous studies (Viswanathan et al., 2012) on subsistence marketplaces that very low levels of literacy coupled with lack of immediate feedback, interactive communication and timely support increases the likelihood of subsistence marketplaces to struggle with confusion.

#### 8) *Trading-off some household needs:*

The subsistence marketplaces research has emphasized that the ability to meet basic needs is often under threat. Individuals and households across different levels of resource constraints continue to experience threats in meeting their basic needs but in varying degrees (Venugopal & Viswanathan, 2017). The findings in this study very much confirms the assertions by previous studies. Given that respondents had to pay between 50 and 100 Francs for biodegradable shopping bags implies that the ability to meet some basic consumption needs was often compromised. For example when Spencer, a mechanic, was asked by the researcher about his views on the cost of biodegradable shopping bags, he remarked that it was a huge reduction of money meant for food and other basic family needs. This implies that the cost of biodegradable shopping bags was a significant threat to the basic consumption needs of the respondents.

Themes	Illustrative quote
Strain on disposable income	“We are not used to buying wrappings (plastic bags). Sellers provide them for free. Today I don’t understand why we should buy wrappings. Imagine how much you will spend if you have to buy 10 ‘wrappings’ for ten different items in the market at the cost of 50 francs each. It is a huge reduction from money meant for food and other very basic family needs” - Agbor is a farmer, married and a father of 3 children
Scarcity of plastic shopping bags	“The ban on plastic bags is really a big problem for everyone. Yes, according to the government we must use government ‘wrappings’ (sustainable plastic bags) but you hardly find the bags in the market. Sellers say the bags are expensive hence they can’t afford. This means that in order for you to buy something you have to look for what to carry it. It is a very frustrating”- Christina is a single mother of 3 children. She is a food vendor
Deprivation of the luxury of free shopping bags	“We are not used to buy wrappings (plastic bags). Sellers provided them for free. Today I don’t understand why we should buy wrappings.....” Agbor is a farmer, married and a father of 3 children
Drop in the volume of sales	“Sales have dropped quite low. The reason is because customers no longer benefit from free shopping bags. The government ‘wrappings’ (sustainable plastic bags) are very costly to small traders like us. Very often customers without something to carry their purchase don’t buy from you”- Kennedy is a trader, married with 2 children
Unemployment	I import plastic shopping bags from Nigeria and selling to retailers and sellers. Since the Government placed the ban on plastic bags I have been out of business. My only means of survival has been very badly affected. My family is suffering- Rose is a trader, married and mother of 5 children
Postponement of purchases:	“I feel sad to see a customer who can’t buy an item or items because he/she does not have something to carry his/her purchase.....”- Joy, a storekeeper, married with three children
Confusion about the ban on plastic shopping bags	“We are not used to buy wrappings (plastic bags). Sellers provided them for free. Today I don’t understand why we should buy wrappings”- Agbor is a farmer, married and a father of 3 children. I don’t know why plastic shopping bags have been banned. Whatever the reasons, the cost of 50 francs a bag is too much. I don’t think people like me will ever use the recommended bags - Jessica, a hairdresser and a single mother of two children
Trading off some household needs	:-..... <i>Imagine how much you will spend if you have to buy 10 ‘wrappings’ for ten different items in the market at the cost of 50 francs each. It is a huge reduction from money meant for food and other very basic family needs-</i> Agbor is a farmer, married and a father of 3 children.

Table 2: Illustration of impact of the ban and coping strategies

#### F. Coping strategies adopted by the respondents

Life in subsistence conditions imposes numerous constraints (Viswanathan et al.2009). The ban on plastic shopping bags imposed not only material resource constraints but also informational constraints to the respondents. In the data, the researcher observed numerous coping mechanisms (behavioural and psychological) created by the people to master, tolerate, reduce or minimize the constraints imposed by the ban. The coping strategies have been grouped into seven themes. These include: violation of the ban; the use of locally sourced material for parceling; the use of biodegradable plastic shopping bags when it is convenient; patronizing retailers and dealers who clandestinely provide plastic shopping bags and reusing plastic shopping bags.

##### ➤ Violation of the ban:

In Cameroon, the ban on plastic shopping bags stands out as a shining example to the country’s larger efforts to align with international priorities. However, despite measures put in place to enforce the ban such as arrests and fines, this study uncovered that some respondents did not respect the ban. In other words, they still made use of non-biodegradable plastic shopping bags. When the researcher asked Okole whether he still used the banned plastic shopping bags for shopping, he admitted using it when he was fortunate to find it. The study also found that retailers secretly made the bags available to their customers to attract sales. Some community members complained that the biodegradable shopping bags were very costly hence they can’t afford. In addition, the bags are largely unavailable in most retail outlets. These, in combination with the lack of awareness of the purpose of the ban compelled some community members to continue using

the banned plastic shopping bags if they found it possible. This implies that the main causes of violation of the ban were poverty, scarcity and lack of information.

➤ *Use of locally sourced material for parceling:*

When the real material or equipment is not available, improvisation becomes the next option as improvisation takes their place (Sawyer, 2001). The fact that life in subsistence conditions is endowed by hardships, everyday subsistence marketplaces are challenged to act in accordance with the situational needs and requirements arising from different situations. They make the most of what they have to get the most of what they make. In Ekondo Titi, the ban on plastic shopping bags largely ignited the improvisatory qualities or characteristics of the people. This study observed that in most households, locally sourced materials replaced plastic shopping bags for purchases. For example, Brenda remarked that she used different types of plant leaves (Cocoyam, Plantain and Ngongo) and paper from cement bags, newspapers and pages from used books to carry her purchases. The same materials were made available to customers by retailers and sellers. Thus it is an underlying fact that improvisation is an integral part of the living conditions of subsistence marketplaces. This is influenced by knowledge, culture, environment dependent and interactions within the community.

➤ *Using biodegradable plastic shopping bags when it is convenient:*

Convenience has increasingly become an integral part in the consumption of goods and services in subsistence marketplaces. The desire to consume goods and services when and where it is suitable or favourable forms an integral part in the study of the changing subsistence household (Berry et al., 2002). In this study convenience is conceptualized as consumers time and effort perceptions related to buying biodegradable plastic shopping bags. Aspects of the convenience construct in the context of this research include: time, place, availability and cost. For example, when the researcher asked Spencer how often he uses biodegradable shopping bags, he remarked that he used the bags only when it is suitable. In other words when he can afford, when it is available and most especially when there is no other means to carry his purchases. Subsistence consumer convenience in buying and using products and service has not been given attention in the study of subsistence marketplaces. The increasing demand for convenience in subsistence marketplaces requires that marketers must develop a more precise and complete understanding of the concept.

➤ *Setting purchase limit:*

Consumer behavior focuses on how consumers make the decisions to spend their available resources (time, money, effort) on consumption related items. Understanding the decision making process that subsistence marketplaces go

through when choosing which products to buy is often challenging to marketers. Subsistence literature has explained several different factors that affect purchase decision in subsistence marketplaces (Chikweche & Fletcher, 2010; Wiswanathan & Srinivas, 2014). The findings from this study indicate that one of the factors that influenced purchase decisions of the respondents was the ability to carry products to their home. From the data, the researcher observed that factors such as cost and scarcity of biodegradable shopping bags compelled most respondents to often set limits when carrying out purchases. In other words, they are more specific about the minimum and maximum quantity of products to purchase at a time. For example Okole recounted that he limits his purchases to what he can conveniently carry home. He adds that at times he buys only what he can carry in his hands. This confirms Chikweche & Fletcher's (2010) argument that subsistence marketplaces are quite unique in their characteristics. According to Chikweche & Fletcher (2010) in order to understand what motivates consumers in subsistence markets to make purchases, marketers are obliged to deeply understand the unique characteristics of these marketplaces.

➤ *Patronizing retailers and dealers who provide shopping bags:*

A central feature of subsistence marketplaces is the interdependence of buyers and sellers. As noted by Viswanathan et al. (2012), consumption and entrepreneurship are inseparable marketplace activities, with consumers and sellers sharing adverse circumstances and learning from each other. The study uncovered that respondents demonstrated a very high degree of interdependence in both their economic and non-economic dealings. The drive to establish long term relationships largely underscored the purpose of the one-to-interactions in the subsistence setting. As a result, sellers became more acquainted with the preferences of their buyers. For example Jeremiah told the researcher that he buys only from retailers who still provide plastic bags despite the ban. Also, Agnes, a retailer reported that she takes the risk of making plastic shopping bags available to her customers. This makes her customers to keep coming back to her shop to buy goods. Interdependence was so widespread that it was not only limited to buyers and retailers, retailers and wholesalers equally worked closely to satisfy their needs. Such interpersonal reliance had the potential to not only yield a more productive shopping experience but also shaped the overall livelihood of the community members (Viswanathan et al., 2012)

➤ *Reusing plastic shopping bags:*

Reusability refers to the use of materials more than once in their original form instead of throwing away after each use. This does not only ensure the maximum use of the material lifespan but also reduces waste. Reusability is an integral feature in the living condition of subsistence marketplaces. This is largely influenced by poverty. Never

has the concept of reuse and its benefits been important to the respondents as it was after the ban on plastic shopping bags. Reuse has increasingly been accepted as playing a vital part in addressing a wide range of social challenges related to poverty, health and well-being. To the respondents, reuse is not specifically a waste issue. It is an opportunity for goods to have a second life. Nevertheless, to some extent, it reduced the amount of non-biodegradable bags used. For example Jeremiah reported that he always took along used plastic bags

to the market to carry his purchases. In addition, buyers and sellers used cement paper bags, old newspapers and books to make paper bags used to carry purchases. This gave rise to cost savings for both buyers and sellers as a reusable product is often cheaper than many single use products (Beck, 2014). Thus the study suggests a stronger policy framework, and a legislative and fiscal landscape that is more conducive to investment in, and development of, reuse.

Theme	Illustrative quote
Violation of the ban	“.....At times I use the banned bag when I am fortunate to find it.....” Okole, a motorcycle taxi worker, married with a child ..... “At times I secretly provide the illegal bags if available.....” Ngwa, aged 28, single, father of 2, retailer
Use of locally sourced materials:	“.....When available, I provide used paper (from cement bags and newspapers) to help customers carry items like bread, banana and many other smaller products.....” - Joy, a storekeeper, married with three children “I have gone back to the old ways of parceling and carrying purchases. I use leaves (cocoyam, plantain and ngongo) market bag and paper (cement bags, used newspapers and pages from my children’s used books) to carry my purchases”- Brenda, a farmer, married and a mother of four At times I use the banned bag when I am fortunate to find it. If not..... I use market bag..... to carry my item- Okole, a motorcycle taxi worker, married with a child
Use of biodegradable bags when it is convenient	I very much understand the purpose of the ban on plastic shopping bags and I feel it is necessary for environmental protection..... At times I use them for my purchases.....” Spencer, an auto mechanic aged 38 I have some stock of ‘government wrappings’. Only very few customers buy them to parcel their purchases.....” Ngwa, aged 28, single, father of 2
Setting purchase limits	..... “I use my hands to carry my items. This time I limit purchases to what I can conveniently carry home”- Okole, a motorcycle taxi worker, married with a child
Patronizing retailers and dealers that clandestinely provide banned plastic bags	“I do not a problem not finding a bag to carry my purchases. Often I get plastic shopping bags from the people I buy from. Of course I will not buy from a seller who can’t offer me a free bag to carry my purchase.....”- Jeremiah, a cybercafé attendant, aged 27, single with no child “.....Today customers go to where they are given free plastic bags for their purchases. In order to attract and keep customers I take the risk of buying non-biodegradable bags secretly from dealers”- Agnes, aged 32, a retailer, single and mother of 2 Plastic shopping bags have become extremely scarce these days due to the ban. I always make sure I reserve some for my purchases whenever I buy from smugglers to serve my customers. So I don’t have a problem looking for a bag to carry my buys- Agnes, a 32 year old female trader, married with 4 children- Jeremiah, a cybercafé attendant, aged 27, single with no child
Reusing plastic shopping bags	..... “So I always carry with me used plastic bags to the market or store just in case I don’t get one from the sellers”

Table 3:- Coping strategies adopted by the respondents

**IV. DISCUSSION**

Environmental degradation has become an increasingly important concern for modern society, the extent to which if sustainable preventive measures are not taken, our future and that of generations to come will be seriously threatened. Insights into policy creation and implementation to enhance sustainable development in subsistence marketplaces are quite important for the contributions they make to understanding sustainable development in subsistence marketplaces. This is because subsistence consumers are

remarkably different from traditional consumers hence; they do not fit neatly into most of the existing categories used by organizations and policy makers to classify markets. The extent of the impact of the ban on plastic shopping bags makes it imperative to ask what this research indicates about (1) What can be done to improve policy creation and implementation in subsistence marketplaces (2) How can the marketing of new products in subsistence marketplaces be enhanced?

*A. Implications for the Government*

➤ *Understanding the nature of subsistence marketplaces:*

Subsistence consumers are remarkably different from traditional consumers (non-subsistent). Traditional or non-subsistence consumers are to a large extent knowledgeable about environmental degradation, its effects and the need to make the environment friendly. In addition they can afford sustainable lifestyles such as paying for bio-degradable plastic bags due to their economic viability (Janicke, 2008). Subsistence living conditions means that the ability of individuals to meet their basic needs is constantly under threat. Despite the large size and vibrancy of the subsistence economy subsistence marketplaces often experience severe resource constraints. In addition to material resource constraints, life in subsistence marketplaces equally imposes informational constraints. Subsistence markets are located in low and middle income countries, primarily in rural and periurban areas. Their shopping behaviours, knowledge and understanding of environmental degradation and protection are relatively peripheral (Wiswanathan et al, 2014). These are very important considerations in the design and implementation of sustainable development policies. Considering the degree of the challenges faced by respondents coupled with the coping mechanisms adopted, it is clear that the policy makers and practitioners lacked understanding of the functioning of subsistence marketplaces. It is also clear that the design and implementation of the policy was framed in the context of developed markets. It explains why the ban on plastic shopping bags in Cameroon has been largely unsuccessful.

From the stand point of the policy maker, this research suggests that future policies in subsistence marketplaces does not only require that policy practitioners sacrifice time and efforts to study and understand the nature and functioning of subsistence marketplaces, it equally requires that they should be equipped with skills required to successfully navigate subsistence environments such as negotiating; recalling obligations, making meaningful promises and asking for and accepting concessions. Thus, public policy must largely be inspired by what subsistence marketplaces actually do rather than from perceived notion of what they should do and engage in meaningful trust building with the players.

➤ *Community involvement:*

Undoubtedly, Governments are servants of the people. One of their primary responsibilities is to create and implement policies for the well-being of its people. Most especially people living in subsistence conditions. However, successfully policy creation and implementation requires that all the stakeholders in the community play a very important role in the process. That is, to support the efforts of Government by helping implement policy in the field. This will enable effective and efficient allocation of resources.

Also, organized groups in civil society can also play a role in identifying key challenges and facilitating adaptation (Burton, 2006; Alessandro, 2010). The findings of this research reveal that the community was not part of the design and implementation process of the ban on plastic shopping bags. Consequently adherence to the ban was extremely challenging. The findings equally reveal that almost all the respondents were against the ban on plastic shopping bags. This research suggests that sustainable development policies in subsistence marketplaces should be more democratic. That is involving businesses, communities, and nongovernmental organizations in the design and implementation process. Doing so will require policy makers and practitioners to be empathetic listeners and could culminate in a collaborative relationship between policy practitioners and the community. This is capable of enlisting a high degree of engagement and support from the community.

➤ *Engaging the informal economy:*

Like most developing countries, the highest proportion of Cameroon's entrepreneurs is in the micro or informal economy. Most micro-entrepreneurs also called survivalist entrepreneurs are people who can't access other work options. Their number grows in conditions in which governments fail to emphasize economic security (Wiswanathan et Rosa 2017). The subsistence marketplace described in this study is an informal economy. Most respondents were established individuals who carried out activities (not regulated by the state) primarily to generate survival income. They lacked the resources and scale to undertake activities that would bring about enhanced economic outcomes. This explains why they couldn't afford to stock biodegradable shopping bags. Nevertheless because consumers and entrepreneurs in subsistence marketplaces are inseparable, they interact and depend on one another, they share the same adverse conditions and emphasis that buyers and sellers place on cultivating long term relationships, the study uncovered that most entrepreneurs did their best to satisfy their customers by making available other means to carry their buys home such as used papers. Others even took the risk of providing non-biodegradable plastic shopping bags to their customers. Businesses can play an important role in adopting and diffusing sustainable practices and in many instances appears to be ahead of Governments in implementation. From the stand point of policy making, this study suggests that policy makers and practitioners should link the informal economy with formal sector entities. Such linkages should strive to empower micro-entrepreneurs rather than impose what is predetermined to be good for them or society. The United Nations maintains that sustainable development should be based on local-level solutions derived from community knowledge and initiatives. This implies that Governments need to create a policy environment that encourages innovation by supporting research and private initiatives in an appropriate manner and to provide permanent incentives to innovate and diffuse technologies that support sustainable development objectives.

➤ *Minimizing information constraints in subsistence marketplaces:*

In addition to material constraints, information constraints impose severe challenges to the living conditions of subsistence marketplaces. It is indeed difficult to talk about subsistence marketplaces without actively considering it within the context of information dissemination and processing (Venugopal and Wiswanathan, 2017). An important finding of this study is that most respondents did not understand the purpose for the ban on plastic shopping bags. Equally they lacked the understanding of the difference between degradable and non-degradable shopping bags. Thus one can conveniently conclude that to the Government of Cameroon, in sustainable development, people figure as actors that need to be governed (with the use of police officers) rather than getting them involved in the management practices. The Government did not recognize the essence of educating the public on the importance of the ban especially considering the high level of illiteracy in subsistence marketplaces. In addition the Government did not see the essence of involving communities to find local level solutions derived from local knowledge. This study encourages the Government of Cameroon to invest in minimizing constraints of information faced by subsistence marketplaces. Doing so would require making use of leadership (as spokes persons) in subsistence places. Subsistence literature (Wiswanathan et al, 2014) has revealed that subsistence marketplaces trust and believe in their leaders. In addition, a central feature of subsistence marketplaces is its social interdependence characterized by one-to one interaction, the strive to cultivate long term relationships, trust, networks and altruism. Support and investments in nourishing these elements and inhibiting destructive ones such as deception and abuse can improve the effectiveness of communication in subsistence marketplaces. This suggests that public policy practitioners should employ an interactive process of communication monitoring to ensure information quality and minimize information distortion. This is because in an oral verbal marketplace it could be more difficult to ensure completeness and consistency of information presented by policy makers.

➤ *Adapting policies to changing circumstances:*

Sustainable development was propounded by the United Nations as an alternative development strategy for improving the living conditions of the human population without degrading the quality of the environment. The approach embodies the notion and ideal of a development process that is equitable and socially responsive, recognizing the extensive nature of poverty, deprivation, and inequality between and within nations, classes and communities (Mathie & Cunningham, 2011). Like Dantong (2015) puts it, sustainable development is not about a choice between environmental protection and social progress, but rather more than striving for economic and social development that would be compatible with environmental protection. The

Cameroon Government's approach (evident in the ban on plastic shopping bags) like that of most African Governments, to a large extent ignores the objective of ensuring decent living conditions for the population and maintaining a high level of environmental quality. Not only were subsistence consumers not aware of the purpose of the ban and why it is necessary that they adhere to the ban, little or no consideration was given to the impacts of the ban on the deplorable living conditions of subsistence consumers who constitute the bulk of Cameroon's population. One can therefore not hesitate to assume that the ban on plastic shopping bags in Cameroon is another example of a development strategy embraced to satisfy the international community. Studies have argued that inasmuch as getting rid of non-biodegradable plastic bags is good for environmental protection, it is the least of problems faced by developing countries like Cameroon. Development researchers maintain that poverty is the greatest challenge faced by most sub-Saharan African countries including Cameroon, hence; policies should be geared toward uplifting the living standards of the people. The approach adopted in the eradication of non-biodegradable plastic shopping bags in Cameroon contradicts the goals of economic development. It has unleashed enormous strain on the living conditions of the poor. Despite very little incomes to survive on, subsistence consumers are compelled to pay for plastic shopping bags. In addition, many people in the industry have become unemployed and sales of some retail stores have declined since they cannot provide free plastic bags to customers.

*B. Implications for marketers of biodegradable plastic bags*

➤ *Market Research:*

It is evident that conditions in subsistence marketplaces and what is needed to reach their constituents are different from what typically exists in developed markets. Challenges such as high cost, inability to understand the need to use biodegradable plastic shopping bags and unavailability of the bags indicate that marketers did not carry out a study to understand the functioning of subsistence marketplaces in Cameroon. It makes it imperative for marketers to identify and acknowledge the living conditions of subsistence marketplaces especially in the context of resources and capabilities in every attempt to serve their needs. The implication is that firms must develop a thorough understanding of the unique characteristics of the subsistence marketplaces they serve or attempt to serve. Thus market research is critical in developing solutions for subsistence marketplaces (Wiswanathan & Srinivas, 2014).

➤ *Affordability:*

The study finds that high levels of poverty experienced by subsistence consumers largely limits their ability to consume biodegradable plastic shopping bags. The struggle to survive or meet increasing family needs with minimal resources is quite prevalent in these communities. As a result, most people still secretly use the banned plastic bags

alongside locally sourced environmentally friendly materials for shopping. This implies that marketers of biodegradable plastic shopping bags in subsistence marketplaces can only achieve success if they make their products affordable. Thus according Wiswanathan & Srinivas (2014) products must achieve a significant price reduction in an economy such as subsistence marketplaces where reliable employment and income security are almost non-existent.

➤ *Value proposition:*

The notion of value is a very important factor in the purchase decision making process of subsistence consumers. Due to severe resource constraints, subsistence consumers go for very less costly products and services. However they are very much willing to pay higher prices for products and services that deliver higher value to their life needs. This implies that the consumption of these costly products and services is central (absolutely necessary) to their daily life (Wiswanathan et al. 2012). To the majority of the respondents, biodegradable plastic shopping bag was not a necessary product. In other words it did not occupy a central place in their daily life. It explains why most respondents found it difficult to pay 50 or 100 Frs (depending on the size) for a bag. Thus, to present a value proposition in subsistence marketplaces, organizations must challenge industry conventions in areas such as product and packaging design, sizing and price markups and rethink how they traditionally conduct business. Also, successful marketing practice suggests that marketers commit time and resources to understand the needs of the target market. The inability by subsistence consumers to consume biodegradable plastic bags is a justification that the needs of the market were not taken into consideration prior to manufacturing the product.

*C. Acceptability*

The notion of customer acceptance of a product or service prior to its diffusion has largely been neglected in marketing in subsistence marketplaces. The fact that most of the respondents did not use bio-degradable plastic shopping is an indication that they did not accept the product. It implies that prior to launching the product a test marketing exercise was not carried out to measure the level of customer acceptance. According Wiswanathan et al. (2009) marketing personnel and the entire business community need to understand the reasons behind customer acceptance or rejection in order to become more efficient in research and development and to contribute to the competitiveness and profitability of the firm. This study suggests that businesses should involve local consumers in their production process if they have to be successful. Including consumers as co-producers suggests that companies need help to understand the needs of subsistence consumers and yield some control over how products are used and their value defined in ways that go beyond the market defining power of consumers in developed markets. Also organizations seeking to serve subsistence marketplaces should carefully consider sourcing raw materials and equipment locally. Organizations can

practice sustainable marketing by using locally sourced and environmentally compatible raw materials and local labour. When marketers use local content they provide livelihood opportunities for members of the local community, and increase awareness of the company and its products, which in turn provides an expanded informal network through which to enhance product familiarity and acceptability

*D. Awareness*

To some extent, the study found that resistance to use biodegradable plastic shopping bags in the community was a result of lack of awareness. Many of the respondents did not understand the purpose of the ban. Many questioned why the Government should force them to pay for bags which hitherto were provided by retailers at no cost. It is important that marketers in subsistence markets use informal media platforms to educate consumers about their products especially considering the fact that illiteracy is the second major challenge after poverty in subsistence marketplaces (Wiswanathan, et al 2009). Brands should encourage word of mouth marketing, selection of local partners and reliance on local members of the community to share product experiences and offer demonstrations to members of their peer group. The use of spokes persons and other members of the community can create interactions rather than just one – way communication.

*E. Availability*

More so, failure of the ban to realize its goals can also be attributed to unavailability of the product. The study finds that some respondents were concerned that the bags were often unavailable when needed. Marketers should ensure access to biodegradable plastic shopping bags by encouraging local business (especially those who previously traded in non-biodegradable plastic bags) to distribute the product.

➤ *Partnering with local enterprise:*

Consumers and entrepreneurs in subsistence marketplaces are inseparable, they interact and depend on one another, they share the same adverse conditions, they trust each other and strive to establish long term relationships. Partnering with local enterprise can be an effective means of not only reaching consumers in subsistence marketplaces but also making them consume the product. This is because of the trust and relationship that exists between consumers and entrepreneurs in subsistence marketplaces.

*F. Conclusions and implications for theory development*

At the level of theory this study has two key contributions. 1) The study helps to bring to light the importance of integrating resilience in sustainable development especially in subsistence marketplaces. 2) It helps to bring out the core marketing tenets that can facilitate the introduction of a new product in subsistence marketplaces.

### *G. Integrating resilience in sustainable development*

Sustainable development has been a hot topic for decades now. The world needs to deal with the environmental and social issues such as resource scarcity, air and water pollution, climate change, a growing ageing population and the demands of an increasingly affluent middle class. Many scientists, policymakers and business leaders argue that sustainable challenges require innovations. It requires that people stop engaging in activities that have negative environmental consequences. That is, activities that are neither realistic economically nor likely to drive us toward sustainability. This study confirms the literature on sustainable development that emphasizes that though sustainable development improves lives in all sorts of ways, however its impacts can be profound often in ways that are quite unexpected. It has been one of the main drivers for disruption today. In this study most respondents reported that the ban on plastic shopping bags had profound negative impacts on their living conditions such as a strain on disposable income, unavailability of plastic shopping bags, deprivation of the luxury of free shopping bags, drop in sales, trading off basic needs, confusion, postponement of purchases and unemployment. Increasing disruptions of lifestyles, livelihoods and economies are inevitable in the shift toward sustainable development. The disruptions should be an enabler for sustainable growth. These disruptions and the short-term crises they may cause can serve a valuable purpose, providing policymakers with a powerful incentive to guide the shift toward a more sustainable inclusive future. Disruptions should be able to drive, not distract the sustainability agenda. This brings to focus the concept of resilience. There is a clear need to integrate resilience in sustainable development; however there is lack of clarity on how this integration could be achieved, lack of awareness and motivation among key decision makers and technical financial and legislative resources to guarantee that the minimum requirements are met. The absence of resilience measures to guide the transition to a more sustainable inclusive future results to the adoption of coping mechanisms in order to overcome, understand and tolerate the disruptions caused by sustainable development policies. The degree of the disruptions caused by the ban on plastic shopping bags to the respondents coupled with the absence of resilience measures put in place by the Government compelled the respondents to adopt coping mechanisms to overcome the disruptions. The study found that respondents violated the ban, used locally sourced materials to carry purchases, used biodegradable shopping bags when it was convenient, patronized retailers and dealers that made available shopping bags, reused plastic shopping and used market bags for shopping. Thus it is timely to ensure that future policies on sustainable development should be 'balanced' by following the requirements of sustainability and resilience. This is because treating them as separate issues is a major concern as it fails in meeting the recommendations of sustainable development and increases the chances of ineffective and

inefficient sustainable development projects. Thus resilience measures in sustainable development should be resilient enough to cope with the disruptions of sustainable development.

This study also confirms reports that despite the emphasis on sustainable development in some of the contemporary planning and policy rhetoric, transition to sustainable development still remains a major challenge faced by many countries especially in the developing economies. The impediments to a successful transition to sustainable living are varied and complex; however, though attempts have been made by scholarship to understand and categorize these impediments not much has been made to overcome them especially in subsistence marketplaces. Most policies aimed at sustainable development are removed from the everyday realities that the people face. Thus for a successful creation and implementation of sustainable development policies in subsistence marketplaces, this study urges the policymakers and practitioners to understand the nature of subsistence marketplaces. More-so they should be equipped with the skills necessary to work in subsistence marketplaces. In relation to accepting and supporting sustainable development policies in subsistence marketplaces, this study suggests that policy makers and practitioners should involve the community in the design and implementation. Not only will this facilitate effective and efficient allocation of resources, it equally plays a role in identifying key challenges and facilitating adaptation to the disruptions of sustainable development. It is true that consumers and entrepreneurs in subsistence marketplaces are inseparable. The informal economy is entrenched in the existence of the people in subsistence marketplace. Thus the author suggests that policymakers should exploit this relationship (bounded by trust and interdependence) by also involving the informal economy in policy design and implementation. The informal economy can play an important role in adopting and diffusing sustainable practices. Consistent with findings in previous studies, is the fact that one of the major constraints faced by subsistence marketplaces is lack of information. This study urges policymakers to ensure that the right information is made available at the right time and place. This can be done by making use of local leaders, social networks and spokespersons. Finally sustainable development policies should strive to enhance social and economic development. In this regard, this study urges policymakers to adapt policies to changing circumstance in subsistence marketplaces.

### *H. The core marketing tenets in subsistence marketplaces*

Not only are subsistence consumers and entrepreneurs quite different from those of the formal economy, marketing exchanges are equally quite unique. In other words, they fall outside the formal economy and beyond the current forms of policy regulation. This implies that marketers must treat subsistence marketplaces with a lot of caution if they must successfully market their products in these markets. However



failure of the introduction of biodegradable plastic shopping bags in subsistence marketplace showcases the fact that marketers are yet to understand marketing in subsistence marketplaces. Drawing from the findings and supported by literature in marketing in subsistence marketplaces this study has proposed a framework consisting of seven variables for marketing interaction that is more effective in subsistence marketplaces. The first factor considered by this study to facilitate marketing of products in subsistence marketplaces is market research. By so doing firms will have deeper understanding of the unique characteristics of subsistence marketplaces. Secondly, most respondents reported that biodegradable shopping bags were expensive thereby putting a strain their disposable income. This author suggests that products sold in subsistence marketplaces should be affordable. Furthermore, though people in subsistence marketplaces predominantly go for less expensive products, they will go for expensive ones if they deliver higher value to their life needs. Therefore marketers should demonstrate the value of their products to the life needs of the people in subsistence marketplaces if they must carry out marketing activities successfully in this economy. In addition, marketing in subsistence marketplaces requires that the product is accepted. The fact most respondents detested the biodegradable shopping plastic bags implies that the product was not accepted. In order words the product was tested to measure consumers' degree of acceptance or rejection. A very salient finding of this study is the fact that most respondents were not aware of the need to use biodegradable plastic shopping bags. This study urges marketers to endeavor to educate consumers in subsistence marketplaces on the need to buy their products. Marketers can exploit the one-to-one interactions that take place in subsistence marketplaces by making use of leaders, social networks and spokes persons. This study found that one of challenges faced by respondents was the absence of biodegradable shopping bags in retail outlets. Thus, product availability is imperative for marketing success in subsistence marketplaces. Finally for effective marketing in subsistence marketplaces marketers should partner with micro-enterprises in subsistence marketplaces if they must be successful in this market. This is because subsistence consumers and entrepreneurs have a very strong relationship bounded by trust and interdependence. Thus partnering with entrepreneurs will enable markets to have access to subsistence consumers.

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