

PROMOTING CLIMATE CHANGE ADAPTATION BEHAVIOR VIA SOCIAL MARKETING APPROACH AMONG THE VULNERABLE POPULATION IN NIGERIA

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ABSTRACT

This paper explicitly elaborates on the harsh aftermath that climate change poses on a targeted group of individuals that lack the adequate resource to actualize their adaptive capacity or are disadvantaged in adapting to climate change impact. This could be as a result of the uneven distribution of resources, gender, geographical location, physical wellbeing and other factors. These targeted groups are known as the vulnerable group and they include women, children, the poor, the elderly and ill persons. With reference to the identified vulnerable group, the researcher proposed the use of social marketing approach in fostering and encouraging the group to adopt the suggested climate change adaptation strategies in order to maximize their adaptive capacity. This paper also reviewed the threats climate change poses on some key sectors in Nigeria and appropriate recommendations were proffered by the researcher.

Keywords: Climate Change, Social Marketing Approach, Adaptation

INTRODUCTION

The effective management of threats posed by climate change involves adaptation and mitigation measures. Adaptation to climate change has to do with the responses undertaken by individuals, societies, countries in order to reduce their vulnerability to climate change phenomenon. According to Intergovernmental Panel on Climate Change IPCC (2014), it was proposed that in some natural system, human intervention may facilitate adjustment to expected climate and the benefits of adaptation tend to be noticed only after a period of years while mitigation addresses the causes of climate change now. Therefore, weak mitigation policies could raise the stakes for adaptation work down the road. An excerpt from the Nigeria vision 20:2020 statement gives a profound insight into the need for the recognition of climate change in the country. The paragraph in the vision 20:2020 statement where climate change is inferred is as follows “the potential for climate change to bring about damaging and irrecoverable effects on infrastructure, food production and water supplies, in addition to precipitating natural resources, conflict makes a critical challenge that must be responded to by any economy seeking sustainable growth in the years leading up to 2020” (Ijeoma, 2012). This statement also signifies the recognition of climate change as a threat to the development of the Nation. But the victims to the aftermath of climate change tend to concentrate on the vulnerable group in the society. Vulnerable here entails the section of the society that is most at risk to the threats posed by climate change. Among the countries in the world, developing countries such as Nigeria have a large number of her citizens that belong to this group. Therefore, the unfair aftermath of the developed nations industrial activities which creates dire consequences on the global climatic conditions threatens the existence of the less developed Nations which resulted in climate change been referred to as the greatest market failure.

According to Sir Nicholas Stern, “the problem of climate change involves a fundamental failure of market in which those who creates the damage which others suffer from by emitting green house gases generally do not pay (Benjamin, 2008 in the guardian newspaper). In this regard, developing nations especially among the vulnerable sections (women, children, elderly, minority and the poor) are much more prone to weather events that culminate due to a changing climate. This is as a result of insufficient resources needed to adapt and cope with extreme weather conditions (Climate change) by this vulnerable group (less developed countries). The vulnerable nature of various regions are identified based on the climate sensitive economic activities they major on, perceived degree of changing climatic conditions, available resources to cope, political orientation or willpower, awareness of the populace about climate change (IPCC, 2007). The Intergovernmental Panel of climate change, IPCC in 2007 reported that Africa was one of the regions especially affected by climate change due to its lack of adaptive capacity and great importance of agriculture for the population. Thereafter, Nigeria was recognized by the IPCC as a climate change “hot spot” likely to see major shift in weather in the twenty-first century (Boko, 2007).

Furthermore, Nigeria like most other African countries facing the impact of climate change lack the adaptive capacity to protect her populace from extreme climatic conditions. Although, the country is blessed with abundant wealth of natural and human resources but unfortunately, the country still has an estimated 70% of its populace living below the poverty line (Mundi index, 2014). Also, with regard to the unfortunate neglect or lack of political will to foster climate change adaptation and ameliorate the imminent dangers experienced by the vulnerable section of the population, this spurred the researcher embarking on this article. With reference to the above discussed scenario, the vulnerability of the country to climate change impact is magnified especially among marginalized vulnerable group. The vulnerable group include women, children, poor, elderly or ill individuals. According to the World Bank (2007), some conditions which warrants women identified or recognized as vulnerable to climate change are that they have access to limited natural resources, their overdependence on natural resources, their dependence on male family members, lack of educational opportunity which lead to limited or no power in decision making (common in extreme northern and southern part of Nigeria), lack of coping skills in case of extreme weather conditions. While children and disabled/chronically ill are very much reliant on others for care and decision making, they lack the strength to cope, lack of independence and personal assets to assist in adapting etc. Based on the stated problem and identification of the target group, the social marketing approach is proposed as a pertinent strategy to be employed for effective change in behavior towards adopting appropriate adaptation measures in ensuring an increase in their adaptive capacity of the vulnerable group in the society. Social marketing approach involves the use of marketing tools in changing people behavior for the benefit of the society. This social marketing campaign will provide adequate opportunity for the vulnerable group to acquire appropriate skills, knowledge, self-reliance, coping capability and ability to make their own decisions in terms of the adverse impact of climate change.

CONCEPT OF CLIMATE CHANGE IN AFRICA

The concept of climate change has been a focal point during debates on environmental issues for decades. The greatest discrepancies among individuals about climate change are on the actual reality of the phenomenon, the perceived impact of the phenomenon (manmade versus natural forces), and perceived mitigation and adaptation strategies. Fortunately due to glaring evidences and researches being observed in the world on the visible impact of climate change, the debate on the conflict about climate change scenario can be presumed to be over. The basic tenet now is to foster the proper dissemination of knowledge to the grassroots

which will encourage proper adaptation and mitigation against the adverse aftermath of climate change conditions.

The IPCC (2014) report, described “climate change as a change in the state of the climate that can be identified by changes in the mean and the variability of its properties, and that persists for an extended period, typically decades or longer”. It occurs as a result of either natural or manmade factors. Thus, as the population of the world increases, so also does the pressure on natural resources increases and thus greater emission of gases that influences climate change. Over the years, the world average temperature has increased by 0.74 degree centigrade and if no action is embarked upon to reduce human activities and the emissions, the concentration of green house gases in the atmosphere would increase (IPCC, 2007).

The global radical change in the climate condition affects all regions and sector in every country in the world. But the most vulnerable (poor countries with low adaptive capacity) will suffer greatest even when they contribute least to the cause of the climate change phenomenon. The cost of extreme weather conditions such as flood, drought, hurricane, heat wave, storm are also on the increase as a result of a change in global climate conditions (World Wild Life Foundation WWF, 2011). Reder and Schnoeder (2008) proposed that due to the geographical location of developing nations, they tend to be much more exposed to these extreme weather conditions. Reder and Schnoeder further elaborated that an estimated 80 percent of victims of weather catastrophes since 1980 lived in Asia, Africa and Latin America. This is said to be attributed to a lack of resources needed to cope with extreme weather event and to the changing climatic conditions. Watson (1977) statement corroborated with Reder and Schnoeder when he affirmed that African countries are particularly vulnerable to climate change because of their dependence on rain-fed agriculture, high levels of human and physical capital, unequal distribution of resources, lack of political will, unequal land distribution and infrastructural decay. The vulnerability state of Africa countries to climate change impact encourages the need for climate change adaptation to be integrated into the policy option during the development planning and implementation by the government in each country.

Threats Posed by Climate Change in Nigeria

On the global stage, threats posed by climate change have caused negative impact on the natural and human components. Some perceived evidences of climate change include changing precipitation pattern, melting snow/ice thereby altering the water quality and quantity, ecosystem shift, species extinction during the past million years, reduction in crop yield due to extreme weather conditions and unpredictable seasons, altered distribution or water-borne diseases, increase in the burden of ill-health, increased stressors attributed to poverty and other more glaring evidences. These scenarios highlights the evidences that shows the adverse impact of climate change has already been observed at the various sectors of the Nigeria society. For instance, the National Emergency Management Agency (NEMA) in 2010 declared that over 250,000 Nigerians where displaced as a result of the flood disaster that ravaged across the country during that year. (Building Nigeria's Response to Climate Change, BNRCC, 2011).

Climate change can therefore be ascertained to be evident in the country on a high scale. Based on findings by the Nigerian Meteorological Agency (NIMET) from the assessment of Nigeria climate over a period of 1941 to 2000, it was discovered that the annual rainfall decreased by 2-8mm across most of the country, but increased by 2-4mm in few places. The temperature increased significantly in the extreme North East, North West and extreme south west regions of the country, with an estimated increase of 1.4 to 1.9⁰c (BNRCC, 2011). The threats been posed by climate change is experienced in all the geographical locations as well

as sectors of the nations development (Ifeanyi-Obi, 2012). Some key sectors climate change impact conspicuously in the country includes;

Agriculture

A large sum of the workforce in the country depends on agriculture which is climate sensitive for livelihood. Temperature increase due to climate change leads to drought or heat wave which destroys crops (crop failure) through a high rate of evaporation of crop and soil moisture, shrinking of ground and surface water, and generally disrupting the conducive condition for crop growth. Rudolf and Hermann (2009), disclosed that even with the occurrence of rain, its irregularity tend to affect crop and livestock yield especially when rain fails to arrive during the crucial growing stage of crops. Extreme weather events also destroy farmland and crops. Pest and diseases migrates in response to climate changes thereby increasing their breeding ground which results in the invasion of crops and livestock that reduces their productivity (Ifeanyi-Obi, 2012).

Health

Climate change impact affects the health of the populace in Nigeria either directly or indirectly. Extreme weather conditions are highly capable of inflicting injury, illnesses or cause death to individuals. The Nigerian government and the world Health Organization estimated that at least 1,600 Nigerians died in 20,000 floods over a decade (Sayne, 2011). Indirectly, the health impacts of climate change are perceived to be presence of malnutrition due to food insecurity, high prevalence of malaria as result of increased mosquito breeding ground, skin cancer, presence of sleeping sickness, cataracts in the eyes and illnesses attributed to increased air pollutants in our breathing zone of the atmosphere (BNRCC, 2011).

Livelihood

Nigeria's economy relies heavily on climate sensitive occupations such as oil exploration, farming, fishing, and logging. Farming, fishing and logging alone account for 70% of its work force (Triechel, 2010). The crude oil found or explored in the Niger delta region makes up 97 percent of Nigeria foreign exchange and it is been threatened by sea level rise (Sayne, 2011). These threats tend to create added production cost or deferred production could be heavy in the oil sector as cited by Sayne in his research. Subsequently, other means of livelihood would be affected or already existence thereby leading to high poverty rate in the country.

Human settlement and housing

Climate change tend to increase the tendency for vulnerable individuals (group) whom lack the resources for planned migration as a result of extreme weather condition (flood) to become displaced and stranded. Sea level rise pose a serious threat to coastal lands from being inundated. For instance, some parts of Lagos and other regions such as Niger Delta which are located close to the sea face the threat or risk of the settlements being inundated due to sea level rise. High temperature tend to also cause deterioration of housing stock and bitumen roads, increased energy demands through increased use of air conditioning and other cooling systems (BNRCC, 2004). Wheeler (2011) ascertained that homes of 9.7 million Nigerians could be vulnerable to rising seas by 2050.

Vulnerable Group

The vulnerable groups in the society based on this context are women, children and the poor. The deterrence of public and private investment provision due to insecure land tenure or illegality of settlement; lack of economic assets; dearth of political power; lack of educational

opportunity needed to adopt effectively to the impact of climate change; concentration of vulnerable communities and their economic assets being exposed to extreme weather conditions; infrastructural weakness in housing; environmental degradation and inefficiency of public health system are some of the factors that weaken the adaptive capacity of the vulnerable group to climate change impact (Sida, 2007; world bank report, 2011). These groups are most prone to the climate change impact which threatens the sectors outlined earlier in this paper. More specific threats to the vulnerable group include high rate of illness and mortality as a result of crisis caused by extreme weather conditions; further loss of economic assets and livelihood (World Bank, 2011); exacerbated rate of disease (communicable) spread; high rate of malnutrition due to crop failure, inability for children to attend school due to flood, erosion, heat wave, wind storm occasion (Klenberg, 2002); elderly/disabled tend to be stranded in time of extreme weather condition and inability to undertake temporary mobility in time of crisis brought about by extreme weather conditions. This tend to occur due to the lack of resources for adjusting and adapting to the crisis scenario

CONCEPT OF SOCIAL MARKETING

Social marketing is a “process that applies marketing principles and techniques to create, communicate and deliver value in order to influence target audience behaviors that benefit society (public health, safety, the environment, and communities) as well as the target audience”. (Kotler, Lee, & Rothschild, 2006 cited in Kotler & Lee, 2008). According to Glanz, Lewis and Rimer (1997), this definition is composed of various key aspects of social marketing practices which include a key benefit to individuals and society and not focused on profit making; a focus on behavior and not awareness or attitude change; an approach centered on the target audience only. Hence most social marketing efforts are geared towards consumer satisfaction as emphasis is usually on starting with the patient, client, individual or community that make up the target group for this approach.

Social marketing approach is usually used in changing the behavior of an audience for the sake of social benefits such as improving health, preventing injuries, protecting the environment, or contributing to the community. It uses commercial marketing tools to “sell” products and ideas for the public good. However the key to a successful social marketing campaign is learning what will work with the target population. According to Mahesh (2007) this is far more effective than simply telling people what they “should do.” The target population is more likely to adopt a desired behavior if we assess and subsequently try to change their attitudes toward the behavior, their perceptions of benefits of the new behavior, and their perceptions of how they think their peers will view their behavior. Mahesh further stated that social marketing relies on commercial marketing's conceptual framework to guide program development and implementation. This framework places consumers at the center of an exchange process in which they act primarily out of self-interest attempting to maximize the ability to satisfy wants and needs and minimize the cost to do so. Social marketing identifies consumer wants and needs and then develops ways to satisfy them. Social marketing may be used to get people to adopt new protective behaviors such as healthful diets or exercise, or to stop practicing risky behaviors such as smoking. The product may also be a service such as prenatal care or immunization, with the objective being to increase people's utilization of the service. A commodity, such as a condom, may also be promoted, but again the focus is on the behavior associated with the commodity. Therefore the primary aim of social marketing can be said to be social good.

According to Glanz, Lewis and Rimer (1997), social marketing has had a beneficial impact on how the public health sector educates the public and persuades communities and individuals to adopt healthy practice and environmentally friendly behaviors. They further asserted that this approach emphasis on client make the approach more focused on the public. However, according to Mahesh (2007), this approach is different from other marketing approaches by six basic principles:(1)the marketing conceptual framework is used to design behavior change interventions; (2) there is recognition of competition; (3) there is a consumer orientation; (4) formative research is used to understand consumers' desires and needs; (5) there is a segmentation of populations and careful selection of target audiences; and (6) continuous monitoring and revision of program tactics help to achieve desired outcomes. Andreasen (2002) highlighted some scenarios where this approach has been practice and they include; Social marketing approaches have been adopted by a wide range of U.S. federal agencies, most prominently the U.S.

Department of Agriculture (5-a-Day program) and the Centers for Disease Control and Prevention, as well as state and local governments and a significant number of nonprofit organizations; UNAIDS has recently invoked social marketing as a primary tool in its fight against AIDS, and the World Bank is regularly conducting distance learning sessions using social marketing concepts.; Several major consulting organizations, most prominently Porter Novelli, Academy for Educational Development, and Prospect Center, have emerged as leading social marketing consultants and have been joined by a growing number of smaller consultancies such as Equals and Sutton Social Marketing; the National Cancer Institute Office of Cancer Communications (NCI/OCC) developed activities for the Breast cancer education program (BCEP) which was organized around the process model of social marketing program development and covered approximately a five year span of the program (Glanz, Lewis & Rimer, 1997) and several others.

Social marketing approach in enforcing climate change adaptation

A flexible and highly refined approach known as the social marketing approach is an effective tool in attaining, maintain and improving adaptation behavior and capacity towards climate change among the vulnerable group in the society. Therefore, social marketing is seen as an approach aimed at changing people's behavior for the benefit of the individuals and the society. It entails the use of commercial marketing technique (Product, price, promotion and place 4ps) in solving social problems. According to Kotler and Ice (2008) they gave a holistic definition of social marketing as a process that applies marketing principles and techniques to create, communicate and deliver value in order to influence target audience behaviors that benefits the society (Public health, safety, the environment and community). With reference to the above definition, it can be inferred that the approach is an important tool in ensuring adequate implementation, sustenance, management and actualizing the goals of adaptation towards climate change among the vulnerable group. Other reasons why social marketing is essential in diffusing climate change adaptation to the vulnerable group are due to the learnable and explicit nature of the approach, the proposed goods attainment is scalable, it ensures that the proposed aim reaches the target audience effectively; the message can be tailored to suit the target audience, and it enables the sustainability and long lasting behavior change in the target group. Meanwhile, Andreasen (2003) highlighted some instances where the approach was used. They include keeping girls in school in developing countries (Schwartz, Middlestadt, & Verzosa 1994), inducing parents to stop abusing their children (Stannard & Young 1998), and helping teens resist smoking (McKenna, Gutierrez, & McCall 2000; Pechmann & Reibling 2000).

In ensuring that the vulnerable group effectively adopt and have a change in behavior towards increasing their adaptive capacity to climate change consequences can be achieved using the following social marketing campaign steps (Mahesh, 2007). They include

Defining And Understanding The Problem Or Behavior.

In defining and making the individuals or society understand the problem to be resolved, this can be achieved by propagating the issues brought about by climate change to the general public. It will help to improve or increase the capability of combating the problem and also set appropriate goals to be attained. The problem is that there is a gap or lack of adaptive capacity among the vulnerable group. Therefore climate change adaptation behavior being promoted should contribute to the consumers and society wellbeing.

Identifying And Segmenting The Audience

According to Lander (2006), many marketing campaigns are kicked off without regard to who should be targeted or try to reach too many target audience with few resources. This tends to result in haphazard scenario in the marketing technique. But choosing an appropriate audience tend to ensure a high response rate and decrease cost per consumer (Martin, 2007). More research is also undertaken to understand the audience. Here the audiences are the women, children, elderly or disabled and the poor which make up the vulnerable group.

Social Marketing Mix.

Just as the commercial marketing mix, the 4ps (Product, price, place and promotion) the social marketing also employs same tools in achieving its goals. Product is the knowledge, attitude or behavior the target population should adopt or change. Such as constructing resilient houses on flood plain or not build on flood plains at all. Price in social marketing is the cost or barrier the audience faces in making desire change or adopting such behavior (turning point, 2011). These barriers could be financial, emotional, psychological, time etc.

A place in the marketing mix is where the audience will perform the desired behavior, where they will access the program, products and services or where they are thinking about the issue (turning point, 2007). Places where climate change adaptation messages can be propagated include church (bulletin, pulpit, postings), schools, health centers, community associations/meetings, internet etc. The promotion aspect involves advertising, communicating messages, materials and activities that will ensure that the messages effectively get to the target audience in an appropriate form for each group. Promotional efforts cannot succeed if the products' benefits price and placement wants and needs. Promotion creates, sustains the demand and may use a combination of advertising, public relations, promotion, media advocacy, personal selling etc. (Mehash, 2009). Other components acting as supplement to the 4ps include partnership, policy, politics participation and competition.

Develop And Pre-Test The Material To Be Used To Propagate Change.

This step entails assessing the audience's response to the strategy envisaged to change the behavior of the evidence. This is done through the following instruments; focus group, interviews, theatre testing, central-location intercept interviews, questionnaires and readability testing (Mehesh, 2009:)

Implementation, promotion and distribution of the strategies

Implementation, promotion and distribution of the strategies or ideas proposed to ensure the chosen behavior by the audience through all chosen channel.

Monitoring and Evaluation

Social marketing is a continuous process which requires constant monitoring in order to ensure effective sustainability of the goals to be achieved. Monitoring tend to ensure that the proposed behavior are in consonance with the actual behavior change noticed on the target audience. While evaluation is done to assess how the program affected the belief, attitude and behavior of the target population. It is due to ascertain if the proposed behavior is adopted adequately.

Feedback

This is the final step in the social marketing approach. It involves receiving feedback from the target audience of the proposed goal to be achieved. If the proposed goal is achieved, the social marketing campaign is continued.

CONCLUSION

In conclusion, the gaining and sharing of the unique impact of climate change on vulnerable group can be powerful, as many communities have long been abandoned and unrecognized in the scheme of development. Therefore, social marketing is an effect approach to aid in promoting a change of behavior of the vulnerable population toward climate change adaptation with reference to the resources they possess or through improvisation so as to increase their adaptive capacity to the consequences of climate change.

RECOMMENDATIONS

1. The government should provide adequate financial support to effectively implement the social marketing approach towards climate change adaptation responses for the general public.
2. There should be appropriate design and effective implementation of early warning systems for heat waves and other extreme weather conditions in order to reduce associated illnesses and deaths, particularly among the vulnerable population of the elderly and poor.
3. The vulnerable group should be incorporated or be given an opportunity to participate in decision making in creating policies or legislation aimed at climate change adaptation.
4. There should be a venue created to ensure partnership with various global aid groups such as UNESCO, WHO, UNAID.
5. Climate change should be inculcated as a compulsory topic into the environmental education curriculum in all levels of education in the country.

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