APPLICATION OF SOCIAL-MARKETING STRATEGY IN ENVIRONMENTAL CONSERVATION CAMPAIGN BY ARABUKO-SOKOKE SCHOOLS AND ECO-TOURISM SCHEME

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DECLARATION

This Research Project report is my original work and has not been submitted any other University for award of a degree.

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This research project has been submitted for examination with my authority as University Supervisor

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DEDICATION

Dedicated to the whole of humanity.

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I would like to thank my supervisor Dr. Aranga for his expeditious guidance throughout the study; the University of Nairobi for according me the opportunity to learn in the best of conditions and my family for enduring my absences.

ABSTRACT

Social marketing is a valuable tool of behavior change. The current study sought to establish the social marketing strategies that have been applied by ASSETS, a community-based organization situated in Malindi, Kenya, in its conservation efforts of the Arabuko-Sokoke forest and the Mida Creek. The study was based on behavioral and social marketing theories notably the Exchange theory, the Theory of Reasoned Action, the Social Cognitive Theory, and the Community Organization Theory. This case study took a descriptive survey research design, resting within a qualitative investigative paradigm. The population of this study was the stakeholders of the ASSETS including the eco-bursaries beneficiaries of the scheme and the management team of the scheme which includes the Forest and Creek administration and the relevant government agencies and some participating non-governmental organizations. The target respondents were the head administrators of all the organizations in the management team and of 9 participating NGOs; and 30 individual eco-bursary beneficiaries. This study utilized primary data which was gathered using semi-structured questionnaires. Descriptive statistics was applied on the closed-ended questions (quantitative data) as content analysis was used to analyze data from open questions (qualitative data). Study findings indicate that ASSETS adopted several social marketing strategies in its environmental conservation campaign notably the application of the exchange concept; consumer research; audience segmentation and targeting; application of marketing mix; creating partnerships with governmental and non-governmental entities; and project monitoring and evaluation. The study also concludes that the application of social marketing strategies by the ASSETS environmental conservation campaign has yielded good results for both the project and its beneficiaries. The communities living adjacent to the Arabuko-Sokoke forest and the Mida creek have been very passionate in the efforts to conserve the two habitats. A number of cases have been reported of people arrested by members of the local community for attempting to fell trees from the forest or cut down the mangroves from the creek. Tree nursery tendering is an ongoing voluntary activity by the local community meant to rehabilitate parts of the forests and creek that have been destroyed by fire or cut down by people for firewood, to be used as building materials or just to sell to meet their subsistence needs. On the side of the beneficiaries, the scheme has changed the lives of many young people, and, consequently those of their families. Needy students, who would otherwise have had to drop out of school for lack of school fees (a cumulative number of 350 to date), have benefited from the scheme since its inception in 2001. This number is set to grow with the support of new partners. For policy and practice, the study makes the following recommendations: Firstly, organizations engaging in social marketing should be driven by market needs and should involve their audiences in devising and implementing solutions. Secondly, to be successful social marketing depends on the ability to develop partnerships and communicating to the target market. Lastly, this study recommends that any social marketing program should put the target individual at the centre of all adopted strategies. For future studies on social marketing strategies, it is recommended that more studies on community-based social marketing be conducted as a strategy that is progressively being adopted in implementing social programs so as to entrench it in theory.

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LIST OF ABBREVIATIONS AND ACCRONYMS

ASFGA   Arabuko- Sokoke Forest Guides Association

ASSETS   Arabuko-Sokoke Schools and Eco-Tourism Scheme

CBC   Community Based Conservation

CBOs   Community Based Organizations

CBP   Community Based Programmes

CBSM   Community-based Social Marketing

COT   Community Organization Theory

ET   Exchange Theory

FADA   Forest Adjacent Dwellers Association

FD   Forestry Department

KEFRI   Kenya Forestry Research Institute

KWS   Kenya Wildlife Service

NGOs   Non-Governmental Organizations

NMK   National Museums of Kenya

SCT   Social Cognitive Theory

TRA   Theory of Reasoned Action

CHAPTER ONE: INTRODUCTION

1.1Background of the Study

As contemporary societies continue to face social and economic challenges in the 21st century, stakeholders are seeking more efficient and effective strategies that can help communities and countries to minimize or eliminate these problems(Andreasen, 2015). Social marketing is one such strategy that is gaining popularity. It is widely understood that a lot of social problems are have underlying behavioral causes. Social marketing is said to be the application of marketing strategies in solving social problems. There is a growing trend towards a bottom-up in which the participatory approach to dealing with community problems (Berkes, 2004).

This study was anchored on behavioral and social marketing theories such as Exchange theory, Social Cognitive Theory, Community organization theory and theTheory of Reasoned Action. The fundamental idea of the Exchange Theory is that your target audience must be able to pay a price so as to "buy" or adopt the product you are promoting. For people to participate in the exchange, they must be sure that the benefits resulting from the exchange match the price. Behavioral and social marketing theories support the application of social marketing to tackle social problems. The Theory of Reasoned Action offers a model that links individual beliefs, attitudes, intentions and behavior. Social Cognitive Theory is viewed as a more comprehensive effort to explain human behavior while Community Organization Theory emphasizes social networks, social support, ecological factors and social systems as key considerations in program-design and further proposes that communities should be aided through community organization to detect common problems or goals, marshal resources, develop and execute strategies for achieving their goals (Rothman and Tropman, 2010).

ASSETS is a community-based social marketing (CBSM) program which provides secondary school fees to needy children community and concurrently undertakes the conservation of two of Kenya's important eco-systems-the Arabuko forest and the Mida Creek. People living around the Arabuko forest and the Mida creek willingly participate

in conservation efforts in exchange for eco-bursaries. The scheme is run by a management team consisting of the KWS, FD, KFRI, NMK, and the Forest and Creek Administration of ASSETS. The scheme also works closely with a number of non-governmental organizations which actively participate in the conservation of the Arabuko forest and the Mida creek through conservation activities or giving financial support. Such organizations include Kipepeo Butterfly project; Friends of Arabuko-Sokoke Forest; Forest Adjacent Dwellers Association (FADA); Birdwatching East Africa; NatureKenya; Spinetail Safaris; Watamu Turtle Watch; and Turtle Bay Beach Club.

1.1.1 Social Marketing Strategy

The term social marketing describes the use of marketing principles and techniques to advance a social good or behavior (Kotler and Zaltman, 2008). This can be applied across public health, safety, the environment and communities (Kotler and Rothschild, 2006). It is a systematic process and commonly done by non-governmental organizations or the public sector (French and Stevens, 2005; Andreasen, 1995; Smith, 2006). Emphasis is placed on understanding consumer needs, interests and motivations in order to develop a mutually beneficial exchange.

The academic origins of social marketing can be traced to Kotler and Levy (1969) who argued for a broader remit for marketing challenging detractors who believed that this would divert marketing attention away from critical issues. Although social marketing is no longer controversial and has found "its true nature" namely, changing behavior, there is still further to go the potential for doing so has been far from fully realized.

Social marketing strategy is an elaborate and systematic plan of action that seeks to influence social behavior meant to benefit the target audience and the general society. It emphasizes use of consumer-based research for planning; systematic segmentation and targeting; structuring and implementation; and building a community-wide network of partnerships and relationships as well as monitoring and evaluation for program effectiveness (Andreasen, 2015).

1.1.2   Environmental Conservation Campaign

Environmental conservation is an ethic of natural resource use, protection and allocation. Its main goal is sustaining the health of the natural world, its habitats and natural diversity. Those who support the conservation ethic are referred to as conservationists. Preservation and conservation are strongly linked and may seem to mean the same thing. Both terms involve a degree of protection. Conservation is generally linked to protection of natural resources, while preservation is associated to the protection of buildings, objects, and landscapes. In a nutshell, conservation aims at appropriate use of nature, whereas preservation protects nature from use (William and Little, 2001)

Environmental conservation campaigns refer to programs aimed at influencing people to utilize resources in a sustainably. Ecosystems and species are being ruined because people ignore the importance of not destroying them. Local community involvement and consultation in planning, and management are important ways of testing and integrating social, ecological and economic objectives. Additionally, they offer a protection against bad decisions and are vital ways of educating both the public in the significance and issues of conservation, and policy-makers, managers and planners in the public concerns (Allen, 2010).

1.1.3 The Arabuko-Sokoke Schools and Eco-tourism Scheme

To address the survival interests of the forest and the surrounding human communities, A Rocha Kenya founded the Arabuko-Sokoke Schools and Eco-tourism Scheme (ASSETS) in the year 2001 with financial support from the UNDP Global environmental facility, the KWS, Nature-Kenya and the ministry of education. The project provides eco-bursaries for high school students living next to Arabuko forest and Mida creek. The aim of the project is to protect the environment. All the beneficiaries agree to participate in conservation initiatives which include tree planting and environmental education. Funds are generated for the eco-bursaries through the local tourist industry, national and foreign donors and the eco-tourism facilities developed by A Rocha Kenya.

1.2 Research Problem

Stead, Gordon, Angus, & McDermott(2013) defined social marketing as the use of commercial marketing principles to the analysis, planning, implementation and monitoring of projects towards influencing voluntary behavior of target population segments so as to improve their individual welfare as well as that of society. This definition contains four features. The first is a focus on voluntary behavior change. The second is that social marketers stimulate change by using the principle of exchange. Thirdly, marketing principles such as consumer research and segmentation and targeting should be used. Lastly, the end result of social marketing is to improve individual welfare and the community, not the organization running the social marketing program (McFayden et al., 2002).

Environmental conservation is a way of ensuring proper utilization of resources as well as their allocation and protection. Its main focal point is upon maintaining the health of the natural world, its fisheries, habitats, and biological diversity (William and Little, 2001). Located in Malindi, Kenya, the Arabuko-Sokoke Schools and Eco-tourism Scheme is an environmental conservation program designed to provide school fees for needy secondary school children in exchange for the community's voluntary participation in the conservation of the Arabuko-Sokoke forest and the Mida creek.

Brooks, Waylen, & Mulder (2013) and Berkes (2004) in their reviews of community-based conservation found that long-term success in conservation efforts requires involving and providing benefits to local communities. Shiminzu (2011) focused on a common property approach in which institutional arrangements are motivated to support conservation. He found that people, through their collective action, would cooperate to use forest resources in a sustainable manner. Focusing of traditional approach to conservation, Odegi-Owuondo (1990) in his assessment of ecological sociology of Turkana nomads found that the Turkana pastoral economy was managed and sustained through a series of complex mechanisms which included selective exploitation of ecological niches in an ecologically-conservative way. Thomas (2013) in his assessment of participatory forest management and actor role dependency found that management of

government-controlled forests has moved away from strict centralized management. Studies in the area of social marketing and environmental conservation are scarce. The current study sought to address the following research question: What marketing strategies have been applied in the environmental conservation campaign of the Arabuko-Sokoke Schools and Eco-tourism Scheme in Malindi, Kenya?

1.3   Research Objective

To determine the application of social marketing strategy on environmental conservation in the Arabuko-Sokoke Schools and Eco-Tourism (ASSETS) community project.

1.4 Value of the Study

The study can be used by future researchers as a basis for further research, especially pertaining to the implementation of social programs such as in environmental conservation, poverty alleviation or in dealing with other social problems requiring behavior change. The limitations encountered in this research can be used as a learning point by future researchers.

Further, this study will be of value to government or some of its departments in refining strategies and informing policy in dealing with environmental conservation to protect forests and other habitats in the county. Such polices can also be replicated in other government departments in implementing programs especially one requiring behavior change of various target audiences.

This study is useful in highlighting to NGOs and other stakeholders supporting the conservation of forests and other habitats, the key strategies or elements in environmental conservation, especially in an era in which participatory approaches are continually being adopted in environmental conservation as well other social programs. The findings can also be used by students and professionals in marketing and environmental conservation to establish how social marketing can be used to influence environmental and other social outcomes.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews theoretical and empirical literature and reviews research gaps that address Social Marketing Strategy.

2.2 Theoretical Foundation of the Study

This study is anchored on behavioral and social marketing theories namely the Exchange theory; the Theory of Reasoned Action (TRA); the Social Cognitive Theory and the Community Organization Theory (COT).

2.2.1 Exchange Theory

Exchange theory is of the view that each consumer transaction is an exchange process with benefits and costs to both the marketer and the consumer. A transaction is accomplished when benefits of the transaction exceed the costs for both parties to the exchange. Further, both the costs and the benefits can be categorized into three broad categories: economic, psychological and social. This theory extends to cover social exchange which holds that any social projects result from voluntary exchange of resources (Lefebvre (2006).

Social marketers use this theory to assess what the audience desire and costs against benefits. This theory got a major impetus by marketing scholars who were trying to widen the concept of 'consumer behavior' and 'marketing' to include something as unconventional as selling brotherhood or donating blood. Promoting blood donations presented to be an opportunity for 'marketing,' yet there were no products offered and the consumer was not required to pay anything. In fact, when making the 'purchase' the consumer often voluntarily suffered. Conventional unidirectional views of consumer behavior could not embrace such a strange case. There was need for a new paradigm to embrace exchange theory (Andreasen, 2015).

2.2.2 Theory of Reasoned Action

The theory proposes a model that inter-relates individual intentions, beliefs, attitudes, and behavior (Fishbein, 1994). The variables of the theory according to Fishbein (1994) include behavior, intention and norms. It suggests that for high-involvement products, individuals will take time to devise attitudes towards a new product before purchasing it. In contradistinction to this, Ehrenberg and Goodhart (2000) found, based on a study of twenty-three newly launched brands, that loyalty to a brand occurred almost instantly right from launch. However, it could be claimed that Ehrenberg's study included many brands that normally would not be considered high-involvement.

Social marketers often use TRA though it is most often hidden and incomplete. Subjective norms and referents, for instance, are often the center of social marketing programmes such as teen narcotics use prevention, even when the theoretical model may not be well-known to the planners. While there is a lot of interest given to this half of the TRA "equation", one hardly ever notices the same attention given to how to alter the attitudes toward the behavior itself.

2.2.3 Social Cognitive Theory

SCT is a more comprehensive attempt to explain human character. It explains behavior in terms of mutual determinism in which behavior, interpersonal, cognition, and environmental factors operate as interacting causes of each other. SCT plainly recognizes that an individual is a product of their environment and so human behavior is not caused by intrinsic factors alone. It holds that people have control over what they do, how they react to their environment their personal characteristics. Changes in one or more of the three factors can cause changes in the others. SCT gives social marketers a well-built theoretical foundation from which to build environmental programs (Lefebvre. 2011).

SCT explains how people obtain and maintain certain behavioral tendencies and also provides the basis for program strategies. It stresses the relations between a person's cognitions and his/her behavior. This model is of the view that it is important to

appreciate the stage an individual is in before a winning change strategy can be planned (Stead, Gordon, Angus, & McDermott, 2013b).

2.2.4 Community Organization Theory

Like the Social Network Theory, the Community Organization Theory emphasizes social networks, social support, ecological factors and social systems as key considerations in program design. It further proposes that communities should be assisted through community organizations to identify universal problems or goals, assemble resources, develop and execute strategies for reaching their goals. The community acts corporately as both entrepreneur and enterprise in pursuing the common good. The community operates an enterprise entrenched in its existing social organization. Community-based enterprises pursue the social and economic goals in a manner aimed at producing sustainable individual and community benefits over the short and long-term (Peredo & Chrisman, 2006).

2.3   Social Marketing Strategies

As a field in marketing, social marketing has to apply certain strategies in the marketing conceptual framework. Some of these strategies are discussed below.

2.3.1 Consumer Research

The basis of a customer's focus is consumer research. It is conducted to gain a deeper appreciation of target audience's needs, values, and everyday lives. Of special interest are the consumers' perception of the products, costs, benefits, and other factors that motivate and prevent them from adopting needed behaviors. Research also provides insights on isolatable market segments as well as the cultural and social environments on which the people's behavioral decisions depend. This information is important in making strategic marketing decisions about the market segments in which to operate, the benefits to offer, and about how to price, place and promote the products (Balch, 1997).

2.3.2 Audience Segmentation and Targeting

One of the primary decisions in social marketing that guides the planning of programs is the decision whether to deliver messages to a general audiences or whether to subdivide it into target audiences. Marketing discriminates populations into subsets or segments who share needs, behavior, and values that produce similar responses to public programs. The reason for the segmentation is that a social marketer knows that it is not possible to offer everything to everyone. Segmentation and market targeting add to the program effectiveness by customizing activities to make suitable resource allocation decisions (Luck, 2010).

2.3.3 Marketing Mix

Like for-profit marketing, the main focus in social marketing is on the consumers and learning to persuade them to buy what they are marketing. Marketing talks to the buyer, not about the product. Social marketing programs planning process considers this objective by addressing the elements of the marketing mix. The marketing mix is made up of the "four Ps": product, price, promotion and place. Social marketing adds a "few more Ps". They include publics, policy, partnership, and purse strings/financial resources (Andreasen, 1995)

Product means to the bundle of benefits linked to the targeted behavior or services usage (Kotler, et al 2002) and the prices refer to the cost or sacrifice that are exchanged for the offered benefits. This cost is at all times considered from the customer's point of view. Price therefore usually includes intangible costs, such as reduced pleasure, embarrassments, and emotional irritation that often accompany change. Place refers to the location of sales and service encounter and distribution of goods. In social marketing, it may be considered as where and when the target market will perform the intended behavior and acquire any associated tangible objects or services (Kotler, et al 2002).

Promotion consists of the harmonized use of media advocacy, advertising public relations, media events editorials etc. Through research the marketer can be able to tell what method to use and to who it should be targeted. Publics refer to the many audiences

to be addressed by the program in order to be successful. External publics include the target audience, secondary audiences, policy makers, and gatekeepers, whereas internal publics are those who are involved somehow with either approval or implementation of the program. Partnership refers to team players. Social and health matters are often so complex that one agency cannot make a dent by itself. You need to team-up with other organizations in the community to be effective. You need to find out which organizations have matching goals to yours and see how you can support each other (Bryant, 1998).

Policy refers to the rules and regulations that create a favorable environment to operate in. Social marketing programs excel in motivating individual behavior change, but that is difficult to sustain unless the environment they are in supports that change for the long run. Purse strings are quite important in social marketing. Most organizations that develop social marketing interventions are funded by sources such as foundations, government grants or aid. The marketing's theoretical model demands an understanding of consumers whose behavior we hope to transform (Andreasan, 1995).

2.3.4 Providing Consumer Benefits

The idea of exchange in marketing attempts to cause voluntary behavior by emphasizing on the incentives and/or consequences while encouraging voluntary exchange (Rothchild, 1999). Exchange theory looks at consumers as acting voluntarily as they seek to maximize value by participating in what gives them higher benefit for the slightest cost (Bagozzi, 1978). The theory tells social marketers that they must always offer benefits that are important to the customers and recognize that customers often pay intangible costs linked to behavior change (Donovan, 2003).

2.3.5 Monitoring and Evaluation

Plans for monitoring and evaluation of social marketing start at the beginning of the program planning process. Each program activity is monitored as it is implemented to assess its effectiveness so as to establish if it sustainable, and discover activities that require to be revised. Social marketers on a continuous basis check target audience to measure their responses to all elements of an intervention, from the broad organization-wide marketing strategy to the specific messages and tools (Balch, 1997).

2.4   Empirical Review

In his study 'Rethinking community-based conservation' Berkes (2004) states that CBC aims at the concurrent achievement of conservation and development and in the process achieve the interests of both. This has not been easy to achieve as community development goals are not always compatible with conservation goals. He looked at CBC from two sides. First, that CBC can be seen in the perspective of paradigm shifts in environmental science. Second, he investigated the viability of CBC, as informed by a number of arising inter-disciplinary areas that have been pursuing various aspects of systems of nature. These areas— environmental ethics, traditional environmental knowledge common property, and environmental history—give insights for CBC

Shimizu (2011) in assessing access to forest resources for improving livelihoods in Asian countries asserts that policies, institutions and activities play a critical part in influencing the conditions for use of forest resources. This influence is comes in various ways. For instance, institutions and policies shape contextual factors. They are important in determining access to capital assets and they affect livelihoods. This Livelihood Framework gives central importance to institutions, processes, policies and therefore draws attention to how they shape access to resources across a range of scales.

Franklin and Dyrness (2012) observe that while a few years back much of the Pacific Northwest was blanketed with forest today only fragments of this are found. Many management strategies are therefore concerned with the degree to which the altered

landscape structure and forest fragmentation influence wildlife, hydrology, susceptibility of forest to catastrophic disturbance by agents such as wind, fire and pest. This argument is based on the grounds that ecological stability and resilience depend much on the biological diversity. They further note that the fragmentation of natural forests affect ecological characteristics of the landscape, such as species diversity, game populations and abundance of species requiring interior forest conditions.

In an assessment of CBC projects Brooks, Waylen, & Mulder (2013), the authors hold that CBC is built on the idea that success in long-range conservation needs participation of, and giving benefits to local people. It is important to have a better appreciation of whether CBC is a worthy conservation tool. They are also of the view that recent CBC reviews have concentrated on one resource domain, consider only one outcome. To correct these issues, they used a new global comparative database of CBC projects identified by systematic review to assess success in four outcome domains (attitudes, economic, behaviors, and ecological).

Sathya (2010) in a collective action common-pool resources study holds Common Property approach would be to reinforce the motivation of institutional arrangements that can help conservation and people through their collective action would cooperate to manage and use forest resources sustainably way. The communal ownership and the ineffective market and administrative initiatives in managing large natural resources has led to arousal of interest the part of local people in the management of natural resources. The transfer of rights and responsibilities to local user groupings is now being encouraged in many countries but the success of this strategy relies on the group's ability to work and overcome the free rider problem.

Dupriez and Leener (2013) in their study on indigenous dry zone cultivation in Africa found the farming areas around villages strewn with trees which have been preserved by the farmers in arable areas of Senegal. In South-East Nigeria, farmers protect woody perennials in their arable lands, particularly *Acacia Senegal. Acacia tortilis, Balanites aegyptica.* (L.) Del. and *Tamarindus indica*. These trees offer shade to crops and animals and also provide wood and forage.

Huntley (2012) in his study on Biotic Diversity in Southern Africa found out that indigenous plant resources have multiple uses in many parts of Southern Africa For instance, plants have been used as a source of fuelwood, medicine, building material, materials for craftwork, income and food supplements (e.g.. wild fruits, vegetables among others). He however observed that such uses are interlinked with vegetation changes leading to decreased habitat diversity. This has widely led to counterproductive effects by reducing options of resources that provide a buffer against rural poverty during climatic extremes.

Robertson and Luke (2013) investigating Kenya Coastal Forest Status, Conservation and Management observe that the Pokomo and the MijiKenda have traditions linked to some small patches of thick forests in the Tana River. Kilifi and Kwale districts. The patches were protected by customs and used for ceremonies. These Kava forests were more extensive in the past, but today fragmented relics which still retain sacred significance are found.

Odegi-Owuondo (2011) in 'Life in the Balance. Ecological Sociology of Turkana Nomads' notes that the Turkana pastoral economy was managed and sustained through a series of complex mechanisms. These included selective exploitation of ecological niches in an ecologically-conservative way. The diversification of domestic stock and splitting of the herds are some of these. Placement of herds in different ecological zones served to spread risks over a wider geographical area. Customary' conservation practices have important implications for the maintenance or creation of habitat diversity in Southern Africa. From the early nineteenth century, the Zulu King (Shaka) established exclusive hunting rights over the Dwesa-Manubi forest in the Transkei and the Mfolozi areas of Natal/Kwazulu and both of these areas are reserves today. Finally, the protection of vegetation at grave sites for religious and possibly aesthetic reasons is well known in Southern Africa. All these practices play a major role in maintaining diversity in a landscape greatly changed by man.

In his study on participatory forest management and actor role dependency, Thomas(2013) posits that conservation effort of government-controlled forests has moved from, centralized administration by introducing community co-management strategies. Often termed participatory management, the efforts include local people in planning, execution, and management. The study investigated two case studies located at the Arabuko forest in Malindi, Kenya. These case studies show how disequlibriums of power create participant roles through the introduction of policies by governments and NGOs. Understanding of roles is crucial to participatory efforts in conservation that are of benefit to comunity advancement. Reflection on how roles determine perceptions may decrease failures of conservation efforts.

2.5   Summary of Literature Review and Knowledge Gap

The empirical review of studies has revealed that a study on Social Marketing strategy in environmental conservation in Kenya is justifiable. It is evident from the review that the world is increasingly inclining towards participatory, inclusive approaches to conserving forests and other habitats. Brooks, Waylen, & Mulder (2013) Berkes (2004) and other similar studies reviewed focused on the concept of community-based conservation but are based on other models of environmental conservation other than social marketing. Most Africa-based studies reviewed, notably Huntley (2012) ' Biotic Diversity in Southern Africa'; Odegi-Owuondo (2011) in 'Life in the Balance: Ecological Sociology of Turkana Nomads'; Robertson and Luke (2013) investigating Kenya Coastal Forest Status, Conservation and Management; Dupriez and Leener (2013) in their study on indigenous dry zone cultivation in Africa, among others, focused mainly on indigenous approaches in conserving forests. Thomas (2013) focused on the change of conservation administration of government-controlled forests from strict centralized administration by incorporating community co-management efforts, enjoining government to community in the conservation of Arabuko-Sokoke forest.

The researcher finds that a study to investigate the application of social marketing principles in the environmental conservation in Kenya, and specifically in Malindi, Kilifi

County, justifiable. This study seeks to investigate the application of social-marketing strategy in environmental conservation campaign by Arabuko-Sokoke schools and eco-tourism scheme in Malindi, Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the methods of data collection and analysis. It highlights the research design, study population, data collection and data analysis.

3.2 Research Design

The design used in this study was a descriptive survey research design, resting within a qualitative investigative paradigm. This research design was chosen because the study aimed at collecting information from the various stakeholders of the Arabuko-Sokoke Schools and Eco-tourism Scheme (ASSETS) regarding how social marketing principles were applied in the conservation the Arabuko-Sokoke forest and the Mida Creek.

A qualitative design is chosen when the investigation seeks to explore a social or human problem and to study things in their natural settings. Qualitative studies explain the diversity of cognitions or behaviors in a population through semi-structured interviews with a small sample of population members.

3.3 Population of the Study

The population of this study was made up of the stakeholders of ASSETS including five organizations making up the management team of the scheme; NGOs participating in the scheme; and the beneficiaries of the scheme. The target respondents were all the five organizational members of the scheme management team, all the nine NGOs and 30 of the 49 current beneficiaries of the scheme representing above 60% of the group which is considered an adequate size (Babbie 2011).

3.4 Data Collection

Data was collected from the stakeholders of the ASSETS conservation project including the management team of the scheme consisting of: the Kenya Worldlife Service (KWS), Forestry Department (FD), Kenya Forestry Research Institute (KEFRI), the National Museums of Kenya(NMK), the Forest and Creek administration of ASSET; non-governmental organizations participating in the conservation of Arabuko-Sokoke forest and Mida Creek; and the current eco-bursaries beneficiaries of the project (sponsored students in the year 2016). The beneficiaries of scheme were targeted as individuals while for the organizations the administrators were targeted.

The questionnaire was designed to respond to the research question as well as to reach objectives of the investigation. This study used primary data which was collected using semi-structured questionnaire. Close-ended questions included likert type questions that were intended at weighing perceptions of respondents on the factors under study, while the open-ended questions were used to generate detailed, non-guided responses from the respondents. Questionnaires obtain comprehensive information, including the elements that are inherent in the personal characteristics of the respondents.

The respondents provided basic personal or demographic information and also choose or completed answers to questions. The self-administered questionnaires were sent by line. Online questionnaires are far less expensive than mailed surveys, and offer the advantage of being convenient to complete and return. All organizational respondents were served with one questionnaire to be filled by respective administrators while 30 beneficiaries of the scheme were emailed through the Forest and Creek administration since they come from villages adjacent to the forest and creek and their current email addresses can easily be accessed.

The questionnaire had two main sections. Section one was designed to obtain general information about the respondents while section two sought to obtain information regarding the marketing strategies that have been applied in the ASSETS project.

3.5 Data analysis

The data collected from the survey was edited for uniformity, completeness, accuracy and consistency. Then the data was also coded to classify responses into meaningful categories to enable data analysis and to facilitate comparison. This offered a systematic and qualitative description of the objective of the investigation. The likert scale was utilized to scale the responses on the respondents' level of disagreement or agreement with a number of statements. Descriptive statistics were utilized in analyzing the data further in order to identify trends in the responses. These included mean scores and standard deviation.

CHAPTER FOUR:

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of data, research findings, and discussion of the findings. The study sought to investigate social marketing strategies applied in the ASSETS project. The findings shown in this chapter show the results of the investigation of social marketing strategies adopted by ASSETS in its conservation efforts in Malindi, Kenya. The findings, interpretation and presentation are provided as per research objectives.

4.2 Response Rate

To attain the objective of the study, data was collected using a questionnaire issued to a total of 44 stakeholders of the Arabuko-Sokoke Schools and Eco-tourism Scheme in Malindi Sub-county in Kenya, including one administrator each from the organizations in ASSETS management team which are the Kenya Wildlife Service (KWS), National Museums of Kenya (NMK), Forestry Department (FD), Forestry Research Institute (KEFRI), and the Forest and Creek Administration of ASSETS; one administrator each from nine NGOs participating in the scheme; and 30 beneficiaries of the ASSETS program. Of the 44 stakeholders of the program who were issued with questionnaires 84% responded. This was adequate considering that Babbie (2011) indicates that a response rate of more than 60% is considered adequate in research.

Table 4.1 Response Rate

Respondents	Questionnaires issued	Questionnaires Returned	% Achieved
Scheme Administration	1	1	2.27
Other organizational members of the Scheme Management Team e.g. KWS,FD, etc.	4	4	9.10
Participating NGOs	9	9	20.45
Scheme beneficiaries	30	23	52.27
TOTAL	44	37	84.09

Source: Primary Data

4.3 General Information

The study attempted to find out the role or responsibility of the respondents in the program. Findings contained in Table 4.2 revealed that 55.9% of the respondents were scheme beneficiaries (the students that have benefited from the eco-bursaries); 24.3% were NGOs participating in the scheme; 10.8% were representatives of management team other than the Forest and Creek administration; and 2.7% represented the scheme administration.

Table 4.2 Respondent role in the ASSETS

Role	Frequency	Percent
Scheme Administration	1	2.7
Other members of the Scheme Management Team e.g. KWS,FD, etc.	4	10.8
Participating NGOs	9	24.3
Scheme beneficiaries	23	55.9
TOTAL	37	100

Source: Primary Data

4.4 Respondents' Duration of Association with ASSETS

The study sought to find out for how long the respondents, both organizational and individual, had associated with the ASSETS project. Findings contained in Table 4.3 revealed that 24.32% have associated with the ASSETS project for up to 5 years; 48.65% for up to 10 years; and 27.02% for over 10 years.

Table 4.3 Respondents' Duration of Association with ASSETS

Duration of Association	Number	Percent
1-5	9	24.32
6-10	18	48.65
11-15	10	27.02
TOTAL	37	

Source: Primary Data

4.5 Number of Beneficiaries of ASSETS

The study sought to find out the number of students who have benefited from the eco-bursaries offered by ASSETS from time of inception of the program in 2001 to date. The Forest and Creek administer was asked to give the cumulative figures of eco-bursary beneficiaries since the inception of the project. Results in table 4.4 show that the number of beneficiaries has been increasing in successive years as amounts of funds from partners continue to increase in each succeeding year.

Table 4.4 Number of Beneficiaries of ASSETS

Year	Number of Beneficiaries	Cumulative Number of Beneficiaries
2004	20	20
2006	30	50
2008	30	80
2010	35	115
2012	40	155
2014	42	196
2016	49	245

Source: Primary Data

4.6 Aspects of ASSETS that need to be redesigned

In evaluating the project, the study attempted to find out from the respondents whether there was any aspect of the ASSETS project that needed to be redesigned. The respondents indicated that a more effective method of identifying and awarding bursaries needs to be found as the current one that relies on assessment reports from local administers tends to leave out deserving cases or to underassessment of needs.

4.7 Application of Social marketing Strategies

The study inquired about the social marketing strategies applied by ASSETS in the conservation of the Arabuko-Sokoke forest and the Mida Creek. Several strategies were listed and respondents were asked to indicate their level of agreement or disagreement to the statements. Rating was on a scale of 1 – 5 (1- Strongly disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 - Strongly agree). Mean scores (MS) and standard deviations (SD) were used to analyze the responses with results being as shown in the Table 4.5.

Table 4.5 Social Marketing Strategies applied by ASSETS in environmental conservation

Strategy	MS	SD
Conducting regular surveys to get feedback from scheme beneficiaries	2.14	0.946
Actively involving individual members as a tool of behavior change	4.14	1.067
Issuing Eco-bursaries in exchange for participation in the scheme	4.17	1.291
Providing ongoing community feedback to help members to act sustainably	4.17	1.102
Use of targeted media campaigns	3.37	0.917
Targeting needy students as a priority group	3.90	0.928
Creating partnerships with governmental, NGOs and other entities	4.79	1.152
Conducting regular program evaluation by scheme management team	3.87	1.556

Source: Primary Data

The study findings indicate that strategies mostly used included Creating partnerships with governmental, NGOs and other entities (MS = 4.79; SD = 1.152); Issuing Eco-bursaries in exchange for participation in the scheme (MS = 4.17; SD = 1.291); Providing ongoing community feedback to help members to act sustainably (MS = 4.17; SD = 1.102); Actively involving individual members as a tool of behavior change (MS = 4.14; SD = 1.067); Targeting needy students as a priority group (MS = 3.90; 0.928) and Conducting regular program evaluation by scheme management team (MS = 3.87; SD = 1.556). The standard deviations indicate that respondents were much in agreement (not dispersed) in relation to use of targeted media campaigns (SD = 0.917) and in actively

involving individual members as a tool of behavior change (1.067). However, responses in relation to providing ongoing community feedback to help members to act sustainably (SD = = 1.102) and Issuing Eco-bursaries in exchange for participation in the scheme (SD = 1.291) seemed to be much dispersed.

Respondents were further asked an open question to identify other strategies apart from the ones identified by the researcher that may have been applied in ASSETS project. The respondents indicated that that continuous recruitment of villages living next to the Arabuko forest and the Mida Creek into the scheme has expanded the network of participants thereby accelerating conservation efforts.

The study also established that the scheme follows an operational procedure proscribed by the management team which consists of all stakeholders of the ASSETS project with the Forest and Creek administration charged with the day-to-day running of the scheme.

Additionally, the study established from the respondents that a baseline survey was conducted in the area to establish the need for such a project. It was established that traditional top-down strategies used in the conservation of forests which were basically prescribed by the state had failed and that there was need for more participatory approaches in which conservation solutions are identified at the community level. Key to this approach is that the members of the community should be able to benefit either as individuals or as a group while participating in the conservation initiative. This is how the idea to provide school fees to needy students in exchange for cooperation and participation in the conservation of the two habitats was mooted. The lack of school fees had been a perennial problem that had led to many school dropout cases. The local community had relied on cutting of trees from the forest and mangroves from the Mida Creek to meet school fees needs and their daily subsistence needs.

4.8 Discussion of Findings

The project sought to establish the social marketing strategies applied by ASSETS in conservation of the Arabuko forest and the Mida Creek in Malindi Sub County. The study results indicated that creating partnerships with governmental, NGOs and other entities (MS = 4.79) was one of the most applied strategies. Most social marketing campaigns rely of funding from such parties in order to meet its objectives which in turn impose some 'purse strings'. Purse strings refer to demands and expectations of stakeholders such as those defined by funding agencies on social marketing programs they support (Weinreich, 2011). Without such support it would have been difficult for the local community, which is basically poor, to achieve any level of conservation and the forest and creek would have been in state of near depletion.

Further, the study established that issuing of eco-bursaries in exchange for participation in the scheme (MS = 4.17) was another approach applied by ASSETS in environmental conservation Malindi Sub-county. The notion of exchange in marketing attempts to influence voluntary behavior by reinforcing benefits and/or consequences in an environment that encourages voluntary exchange. The Exchange Theory views consumers participating in the program voluntarily in seeking to maximize value for the least cost (Bagozzi, 1978). social marketers are reminded that they must offer benefits that the consumer truly value, recognize that customers often pay intangible costs due to changing behavior, and acknowledge that everyone involved in the exchange ought to receive benefits in exchange for their efforts (Donovan, 2003).

Other strategies that were reported to be highly applied by ASSETS environmental conservation campaign were providing ongoing community feedback to help members to act sustainably (MS = 4.17) and actively involving individual members as a tool of behavior change (MS = 4.14). The Forest and Creek administration actively involves the members of the community in setting up nurseries for indigenous trees and mangroves as well as setting up places for turtles to lay and hatch their eggs. Conducting regular program evaluation by scheme management team (MS=3.87) was also relied on to a large

extent so as to ensure the program was on track and to institute corrective measures from time to time. (Balch, 1997).

Use of targeted media campaigns (MS=3.37) was also extensively applied. In its initial stages the campaign utilized mostly Pwani and Kaya FM, to ensure that the message on importance of conservation of Arabuko-Sokoke forest and the Mida forest reached the target population. This was done through having interactive programs where listeners would ask questions and get responses from the Forest and Creek administrators as well as from representatives of other management team members and environmental experts. Communication is meant to increase awareness, demand and consumer willingness to 'pay' for the product in question. In the case of the ASSETS environmental campaign, the communication targeted communities living next to the Arabuko-Sokoke forest and the Mida Creek to educate them on the importance of conserving the two habitats and also to explain the benefits of participating in the scheme. The benefits of participating in the scheme are the eco-bursaries while the price they have to pay is in forfeiting the immediate benefits they would have gotten from cutting the trees and mangroves or any other benefit from activities that tend to destroy the two habitats.

Similarly ASSETS highly utilized targeting needy students as a priority group in the sub county (MS = 3.90). This made A Rocha Kenya to partner with some local and international NGOs as well as private companies so as to gather the necessary finances. Smith (2009) indicated that to be applicable, the social marketing program should target the vulnerable and disadvantaged segment of the population.

The ASSETS project continues to attract members from the local community as well as partners from the NGO, government and private sectors with 48.65% indicating that they have associated with it for up to 10 years and 27.02% for over 10 years.

The number of beneficiaries continues to rise each year, now standing at 350 since the inception of the project in 2001. The capacity to accommodate more needy students increases as more and more partners come on board to provide the much needed funds.

A more effective method of identifying needy cases needs to be devised to ensure fairness in identifying needy cases and doing a proper assessment of the need levels of bursary applicants. The cooperation of the members of the community in the project depends on whether they are satisfied with the manner in which the bursaries are awarded to applicants.

4.9 Summary

This chapter has presented the data analysis, findings and discussion of the findings. In the chapter, the response rate, the general information of the respondents, respondents' duration of association with the ASSETS project, the number of beneficiaries of the scheme since the inception of the scheme in 2001 and the aspects of the scheme that need to be redesigned have been presented. Moreover, the chapter has presented findings on application of social marketing strategies by ASSET in Malindi Sub County. In the next chapter the summary, conclusions and recommendations from the study are presented.

CHAPTER FIVE:

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of findings, conclusions and recommendations. In section 5.2, summary of findings are presented while in section 5.3 conclusions are provided. Section 5.4 presents recommendations that are made in the study after considering the study findings.

5.2 Summary of Findings

The study established that strategies mostly applied by ASSETS in environmental conservation campaign covered many principles in the social marketing conceptual framework including consumer research, the principle of exchange, segmentation and targeting, marketing communication, program evaluation and customer feedback as well as getting financial support from stakeholders to help fund the campaign.

The need for the Arabuko-Sokoke Schools and Eco-tourism Scheme environmental conservation campaign was need-driven out of the rampant destruction of the Arabuko-Sokoke forest and the Mida Creek through cutting of trees. The program sought to convince the local community to forfeit the immediate benefits from cutting and selling the trees in exchange for school-fees bursaries ('ecological bursaries'). An appropriate audience segment of needy students was selected to benefit from the eco-bursaries. Providing ongoing community feedback ensures that members act sustainably while actively involving individual members acts as a tool of behavior change and conducting regular surveys to get feedback from scheme beneficiaries ensures that the program remains popular with the members. An appropriate marketing mix is utilized in the implementation of the program. The end result would be behavior-change leading to supporting the management of the two of Kenya's important habitats- the Arabuko-Sokoke forest and the Mida Creek.

5.3 Conclusion

The study concludes that ASSSETS adopted several social marketing strategies in conservation of the Arabuko-Sokoke forest and the Mida Creek in Malindi, Kenya. The major social marketing strategies applied include consumer research, the principle of exchange, audience segmentation and targeting, application of marketing mix, program funding and project monitoring and evaluation.

The study also concludes that the marketing strategies being applied by the ASSETS environmental conservation campaign have produced good results for both parties to the exchange process. Conservation efforts by communities living next to the Arabuko-Sokoke forest and the Mida Creek have sustainably contributed in the conservation of the two habitats. Many times people caught felling trees have been arrested by the community members. On the beneficiaries' side many needy students (a cumulative number of 350) have so far benefited from the scheme since its inception in 2001 and the number is set to grow with the support of new partners. The scheme has changed the lives of many young people- who could otherwise have dropped out- and those of their families along with their own.

5.4 Recommendations for Policy and Practice

First, public or any not for profit organization engaging in social marketing programs should first study its target market to enable it devise innovative marketing practices that will enable it penetrate the target market and institute the desired behavior change. Moreover, devising of innovative social marketing principles require the organizations to create partnerships with the local community and also other outside partners to implement the programs.

Moreover, it is recommended that any social marketing program should put the target individual at center of all adopted strategies. Social marketing should put the target audience individual at the center of the program and build a community-wide network of

partnerships and relationships so as to attain its goals using widespread research, evidence-based information and evaluation in decision making.

Lastly, social marketing should offer innovative views into communal and economic exchange process that on which marketing is based. These insights suggest that social marketing practitioners and scholars have to take the much needed attention to the marketplace view and the social environment of the transaction irrespective of whether it is a profit or non-profit organization engaging in the transaction.

5.5 Recommendations for Future Studies

This study aimed at establishing social marketing strategies adopted by ASSETS, a program aimed at conserving the Arabuko-Sokoke and the Mida Creek habitat. For future studies on social marketing strategies, it is recommended that more studies on community- based social marketing be conducted. This is due to the change from a top-down to a bottom-up model in implementing projects. Social campaigns are increasingly originating from the community level due to the growing realization that projects need to be audience targeted. There is, therefore, need to conduct more research in the area so that the concept of community-based social marketing is properly grounded in theory.

5.6 Limitations of the Study

As in the development of any social construct or theory, certain aspects may be emphasized regarding relationships while accidentally ignoring others. The mixed research approach that was used in this study carries an amount of constraints and limitations as a result of the subjective and interpretive inconsistency of dynamic, human systems. This research, too, has such limitations and exhibits subjectivity in numerous respects. However, the mixture of qualitative and quantitative data in the study minimizes bias or subjectivity and makes the data collected more objective.

Another limitation is in the generalizability of the findings to other geographical areas and social marketing programs other than environmental conservation campaigns. This is due to the fact that the study was conducted in Malindi Sub-county where the population

is predominantly poor and specifically regarding the conservation of coastal habitats. This makes the study findings to be limited in being generalized to other areas.

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APPENDICES

Appendix 1: Questionnaire

Questionnaire to stakeholders of the ASSETS project.

This research is designed to seek information about social marketing strategies applied by ASSETS in the conservation of the Arabuko-Sokoke forest and the Mida Creek in Malindi, Kenya. Please be informed that your completion of this questionnaire confirms your consent to participate in this research.

Please respond to the questions as directed:

1. What category do you belong to?

Beneficiary of ASSETS   [ ]

Parent of beneficiary of ASSETS   [ ]

Management of ASSETS   [ ]

Partner of ASSETS   [ ]

2. Gender

Male [ ]   Female   [ ]

3. For how long have you been associated to ASSETS?

1 – 5 years   [ ]

6 – 10 years   [ ]

11 – 15 years   [ ]

3. Indicate the level of agreement in relation to how ASSETS applies the following strategies in enhancing the conservation efforts of the ASSETS programme in Malindi, Kilifi County. Use the following rating (1 = 1- Strongly disagree; 2 – Disagree; 3 – Neutral; 4 – Agree; 5 - Strongly agree).

Strategy	1	2	3	4	5
Conducting regular surveys to get feedback from scheme beneficiaries					
Actively involving individual members as a tool of behavior change					
Providing ongoing community feedback to help members to act sustainably					
Issuing Eco-bursaries in exchange for participation in the scheme					
Use of targeted media campaigns					
Targeting needy students as a priority group					
Creating partnerships with governmental, NGOs and other entities					
Conducting regular program evaluation by scheme stakeholders					

4. Which strategies apart from the ones listed above do you think have contributed to the effectiveness of the ASSETS project.

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5. Indicate the cumulative numbers of ASSETS eco-bursary beneficiaries since its inception in 2001 in the years indicated (To be answered by ASSETS project Administrator)

2004 _____

2006 _____

2008 _____

2010 _____

2012 _____

2014 _____

2016 _____

6. List some other schemes you would participate in other than ASSETS scheme.

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7. In your own opinion, what aspects of ASSETS need to be redesigned?

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8. Thank you for completing this questionnaire. If you would like a summary of the findings from this survey, please indicate your name and address in the space provided below or attach your business card.

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Appendix 2: List of Arabuko-Sokoke Schools & Eco-tourism Scheme (ASSETS) stakeholders

Management Team:

1. Kenya Wildlife Service (KWS)
2. Forestry Department (FD)
3. Kenya Forestry Research Institute (KEFRI)
4. National Museums of Kenya (NMK)
5. Forest and Creek administration of ASSETS

Non-governmental Organizations:

1. Kipepeo Butterfly Project
2. Friends of Arabuko- Sokoke Forest
3. Forest Adjacent Dwellers Association(FADA)
4. Arabuko-Sokoke Forest Guides Association (ASFGA)
5. Birdwatching East Africa
6. NatureKenya
7. Spinetail Safaris
8. Watamu Turtle Watch
9. Turtle Bay Beach Club

Source: ASSETS Administration