

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

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### ABSTRACT

*The paper is part of the findings of a Masters research by Robert Nyiro. The paper makes an application of social-marketing strategy in environmental conservation campaign by Arabuko-Sokoke schools and eco-tourism scheme. Social marketing is a valuable tool for behaviour 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 behavioural 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 analyse 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 due to the benefits accrued from the project as indicated by the number of cases that 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. 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.*

**Keywords:** Environmental Conservation, Social-Marketing Strategy, Arabuko-Sokoke Schools, Eco-Tourism, Documentation, Community Based Natural Resource Management (CBNRM) projects

## INTRODUCTION

### Background of the Study

As contemporary societies continue to face social and economic challenges in the 21<sup>st</sup> 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 have underlying behavioural 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 behavioural and social marketing theories such as Exchange theory, Social Cognitive Theory, Community organization theory and the Theory 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. Behavioural 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); Bird watching East Africa; Nature Kenya; Spinetail Safaris; Watamu Turtle Watch; and Turtle Bay Beach Club.

### Social Marketing Strategy

The term social marketing describes the use of marketing principles and techniques to advance a social good or behaviour (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 behaviour 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).

### **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 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).

### **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.

### **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 behaviour 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 behaviour 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?

### **Research Objective**

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

### **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 behaviour 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 policies can also be replicated in other government departments in implementing programs especially one requiring behaviour 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.

### **MATERIALS AND METHODS**

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

#### **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 of 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 behaviours in a population through semi-structured interviews with a small sample of population members.

#### **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).

### **Data Collection**

Data was collected from the stakeholders of the ASSETS conservation project including the management team of the scheme consisting of: the Kenya Wildlife 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-tourism beneficiaries of the project (sponsored students in the year 2016). The beneficiaries of the 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 could 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.

### **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 analysing the data further in order to identify trends in the responses. These included mean scores and standard deviation.



## RESULTS

This section 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.

### 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 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
<b>TOTAL</b>	<b>44</b>	<b>37</b>	<b>84.09</b>

*Source: Primary Data*

### General Information

The study attempted to find out the role or responsibility of the respondents in the program. Findings contained in Table 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 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*

### 3.3 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 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 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*

### 3.4 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 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: 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
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*Source: Primary Data*

### 3.5 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 administrators tends to leave out deserving cases or to underassessment of needs.

### 3.6 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 analyse the responses with results being as shown in the Table 5.

**Table 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 behaviour 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 behaviour change (MS = 4.14; SD = 1.067); Targeting needy students as a priority group (MS = 3.90; SD = 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 behaviour 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.

## **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 on 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

behaviour 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 behaviour, 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 behaviour 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.

## **CONCLUSION AND RECOMMENDATIONS**

### **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 member acts as a tool of behaviour 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 behaviour-change leading to supporting the management of the two of Kenya's important habitats- the Arabuko-Sokoke forest and the Mida Creek.

### **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.

### **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 behaviour 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 centre of all adopted strategies. Social marketing should put the target audience individual at the centre 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.

### **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.

### **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.

## ABBREVIATIONS

<b>ASFGA</b>	Arabuko- Sokoke Forest Guides Association
<b>ASSETS</b>	Arabuko-Sokoke Schools and Eco-Tourism Scheme
<b>CBC</b>	Community Based Conservation
<b>CBOs</b>	Community Based Organizations
<b>CBP</b>	Community Based Programmes
<b>CBNRM</b>	Community Based Natural Resource Management
<b>CBSM</b>	Community-based Social Marketing
<b>COT</b>	Community Organization Theory
<b>ET</b>	Exchange Theory
<b>FADA</b>	Forest Adjacent Dwellers Association
<b>FD</b>	Forestry Department
<b>KEFRI</b>	Kenya Forestry Research Institute
<b>KWS</b>	Kenya Wildlife Service
<b>NGOs</b>	Non-Governmental Organizations
<b>NMK</b>	National Museums of Kenya
<b>SCT</b>	Social Cognitive Theory
<b>TRA</b>	Theory of Reasoned Action



## REFERENCES

- Allen, S. (2010). *How to Save the World: Strategy for World Conservation*. London, Kogan Page.
- Andreasen A. (1995). *Marketing social change*. San Francisco, CA: Jossey-Bass.
- Andreasen, A. R. (2015). *Social Marketing : Its definition and Domain*. *Journal of Public Policy and Marketing*, 13(1), 108–114.
- Babbie, E. (2011). *The Practice of Social Research (13th ed)*. Belmont: Wadsworth Thomson.
- Bagozzi, R.P. (1978). Marketing as Exchange: Theory of Transactions in the Marketplace. *Am, Behavioral Science*, pp 535-556
- Balch, G.I. (1997). Keep Me Posted: A Plea for Practical Evaluation. In *Social Marketing Theoretical and Practical Perspectives*. Mahwah, NJ: Erlbaum, pp 61-74.
- Berkes, F. (2004a). *Rethinking community-based conservation*. *Conservation Biology*, 18(3), 621–630.
- Berkes, F. (2004b). Rethinking Community-Based Conservation. *Repensando la Conservación Basada en Comunidades*. *Conservation Biology*, 18(3), 621–630.
- Borden N. *The concept of the marketing mix*. *J Advertis Res* 2000; 4: 2-7.
- Brooks, J., Waylen, K. A., & Mulder, M. B. (2013). Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environmental Evidence*, 2(1), 2.
- Bryant C. (1998). Social marketing: a tool for excellence. Presentation at the eighth annual Conference on Social Marketing in Public Health, Clearwater Beach, Fla
- Donovan, R.J., & Henley, N. (2003). *Social Marketing: Principles and practices*. Melbourne: IP Dupriez and Leencer (2013). *Traditional Dry Zone Cultivation in Africa*. Oxford University press, New York.
- Ehrenberg, A. and Goodhart, P. (2000). *New brands: near-instant loyalty*, *Journal of Marketing Management*, 16, pp. 607–17
- Fishbein, M. (1994). *Understanding Attitudes and Predicting Social Behaviour*. New Jersey, Prentice-Hall.
- Fox, K. F. Kotler, P., & Fox, F. A. (2012). Application of Social Marketing in Social Entrepreneurship: Evidence from India. *Social Marketing Quarterly*, 44(4), 24–33.
- Franklin, J.F. and Dyrness, C.T. 2012. *Natural Vegetation of Oregon and Washington*. Gen. Tech. Rep. PNW-8. U.S.Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, Portland, Oregon.
- Huntley, B.J (2012). *Biotic Diversity in Southern Africa: Concepts and Conservation*. Oxford University Press. Cape Town.
- Hornik R.C. (2002). *Public health communication: evidence for behavior change*. Mahwah, NJ: Erlbaum
- Kennedy, A. L. (2010). Using community-based social marketing techniques to enhance environmental regulation. *Sustainability*, 2(4), 1138–1160.
- Kinyua-njuguna, J. W. (2013a). *Strategic social Marketing, Operating Environment and Performance of Community based HIV and AIDS Organizations in Nairobi County, Kenya*. Ph. D Thesis, School of Business, University of Nairobi.
- Kinyua-njuguna, J. W. (2013b). *Strategic social Marketing, Operating Environment and Performance of Community based HIV and AIDS Organizations in Nairobi County, Kenya*. Ph. D Thesis, School of Business, University of Nairobi.

- Kippax, S., & Crawford, J. (1993). *Flaws in the Theory of Reasoned Action*. Oxford University Press. Cape Town.
- Kotler, P. and Levy, S.J. (1969), *Broadening the concept of marketing*. Journal of Marketing, Vol. 33 No. 1, pp. 10-15.
- Lefebvre, R. C. (2011). *An Integrative Model for Social Marketing*. Journal of Social Marketing, 1(1), 54-72.
- Luck, J. (2010). *Social Marketing*. Journal of Social Marketing, American Marketing Association, 38(4), pp 70-72.
- MacFadyen, L., Stead, M. and Hastings, G.B. (2002). Social marketing, in Baker, M.J. (Ed.), *The Marketing Book, 5th ed.*, Chapter 27, Butterworth-Heinemann, Oxford.
- Mckenzie-mohr, D. (2013). Community-based Social Marketing. Unpublished Journal Article.
- Odegi-Awuondo (2011). Life in the Balance. Ecological Sociology of Turkana Nomads. ACTS Press. Nairobi.
- Peredo, A. M., & Chrisman, J. J. (2006). *Toward a theory of community-based enterprise*. Academy of Management Review, 31(2), 309–328.
- Prochaska J.O. (1992). *Stages of change in the modification of problem behaviors*. Newbury Park, CA: Sage, 1992.
- Robertson. S.A. and Luke W.R. (2013). *Kenya Coastal Forest Status, Conservation and Management*. The Report of the World Wide Fund. Coastal Forest Survey. WWF Project 3256:
- Rothman, and J. E. Tropman. (pp. 387-397). *Strategies of Community Intervention: Macro Practice*. (4th ed.). Itasca, IL: F. E. Peacock Publishers, Inc. 2010
- Sathya, G. 2010. Collective action in the management of common-pool resources: Is there an alternative to the rational choice model. MI. Michigan University Press.
- Shimizu, T. 2011. Assessing the access to forest resources for improving livelihoods in West and Central Asia countries. Italy, Rome.
- Smith, W. A. (2009). *Social marketing in developing countries*. In Social Marketing and Public Health: Theory and Practice, French J, Stevens CB, McVey D (eds). New York: Oxford University Press
- Stead, M., Gordon, R., Angus, K., & McDermott (2013). *A systematic review of social marketing effectiveness*. Emerald Insight.
- Stone, M. A., & Desmond, J. (2007). *Fundamentals of Marketing*. Taylor & Francis e- Library, 2006.
- Thomas, C.M. (2013). *Participatory Forest Management and Practice and Actor Role Dependency*. Master of Arts Thesis, Graduate School, Oregon University.
- Weinrich, N. K. (2011). *What is Social Marketing: A Step-by-Step Guide to Designing Change for Good?* London: Sage Publications.
- William A. and C. E. Little (2001). *Encyclopedia of Environmental Studies*. Facts on File. Inc., New York.