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Children's Engagement and Environmental Conservation: With Reference to Saku Constituency, Marsabit County Kenya

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Abstract

Purpose: The purpose of this study was to understand children's engagement in environmental conservation in Saku constituency, Marsabit county Kenya. The specific objectives this study was to investigate the effectiveness reforestation efforts, awareness creation, environmental clean-up and the role played by children in resource mobilization for environmental conservation in Saku Constituency. The study used the ladder of participation model developed by Hart which identifies eight levels of children's participation in projects. It is designed to encourage those working with the children to think more closely about the nature and purpose of children's participation in community activities.

Methodology: The research used mixed methods approach. The target population was school-going children and the teachers in Saku Constituency. The researcher used questionnaires as a tool for data collection with a sample size of 72 participants.

Results: The study finding revealed that schools have made very great strides in ensuring and promoting reforestation efforts by the students and the schools have done well. Most of the students are taught environmental conservation in their schools as it is part of the syllabus and also participation in environmental clean-up exercise by both teachers and students in the school and in the local community clearly shows that environmental conservation is on the rise in the schools, lastly the study found out that most schools have not set aside resources for environmental conservation and they rarely receive funds for such activities and for those few schools who receive such funding

are from the NGOs. The study also observed that lack of water and drought has been a major challenge when it comes to environmental conservation activities such as planting trees and clean-up exercises.

Unique Contribution to Theory, Policy and Practices: The study recommends that the county government of Marsabit county set aside funds to help schools set up tanks to harvest rainwater rainy seasons and also for other environmental activities where financial assistance is needed. The study further suggests the school environmental club with the help of other stakeholders can expand environmental activities outside the school for example in market centers and in the villages so that environmental conservation is not only practiced in schools, and further sensitize the community members on the importance of environmental conservation.

Keywords: *Reforestation Efforts, Awareness Creation, Environmental Clean-Up, Resource Mobilization and Environmental Conservation*

Introduction

Today's children live in a complex and fast changing environment that is profoundly influencing their growth and development. The planet is warming. Altered and more extreme weather is increasingly impacting every aspect of their lives. The world is seeing biodiversity loss at unprecedented rates (WHO, 2015). According to UNICEF (2021), for all countries and communities, children represent the future to be nurtured and protected. As governments address sustainability in the face of growing populations requiring food, water, housing, and other basic needs, investing in the health of children by reducing their exposure to environmental risks must be an overriding priority. Only in healthy environments do children have the potential to become healthy adults, capable of meeting the challenges of the future. Twenty-six percent of under-five deaths can be prevented by addressing environmental risks, a shocking missed opportunity described by the World Health Organizations (WHO) report (2015), *Inheriting a sustainable world, Atlas on children's health and the environment*. A large proportion of death and disease in children under 5 is still connected to living in households without access to basic services such as safe water and sanitation and households that have high air pollution from the use of solid fuel for cooking and heating with insufficient ventilation. The risk of developing a disease is often the result of combined exposures. For example, the combination of ambient air pollution and second-hand smoke prenatally and in the first years of life can adversely affect systems and organs as they develop. The consequences of these exposures may only be apparent later in life. Exposure to worse pollution often occurs together with poverty, social stressors, and inadequate health care. Meanwhile, although climate change and air pollution may seem like two distinct issues, they are closely interlinked. By reducing air pollution, we also protect the climate. Air pollutants include more than just greenhouse gases, principally carbon dioxide but also methane, nitrous oxide and others but there is a big overlap: the two often interact with each other (UNEP, 2019).

Children are among the most vulnerable to climate change, they need not be considered passive or helpless victims under all circumstances. In fact, studies have found that "many children can be extraordinarily resilient in the face of significant challenges" (Barlette, 2007). Older children often play a valuable role in identifying environmental problems and coming up with viable solutions based on their own knowledge and experience. Children can be important agents for social change, economic development, and technological innovation and are also likely to use environmental resources in fundamentally new ways. They have an inherent curiosity about the environment and seek to understand their place in the world from an early age. The knowledge and capacities of children can be invaluable to the development of realistic and practicable adaptation plans. In developing countries, children are often better in touch with their physical environment compared to their counterparts in industrialized countries and to adults. In most communities, they have a wide range of access; they play along riverbeds, in empty lots and in isolated areas, and have a wide knowledge of the physical environment. This kind of knowledge is invaluable and hard to

find in the adult world (Iltus, 2007). By raising their awareness of risk factors, strengthening capabilities and giving them opportunities to engage, children and young people can develop positive attributes and skills that will help safeguard both the environment and their own health and livelihoods (Iltus, 2007). Children and young people can be meaningfully engaged through more participatory approaches to community research and development.

Statement of the Problem

Environment conservation major role is to prevent climate change and policy developed is based on according to Rio de Janeiro, (3-14 June 1992) Paris convention. According to the Report of the United Nations conference on environment and development (Rio de Janeiro, 3-14 June 1992) Principle 21 states that the creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all. Hence Awareness creation and legal implications are ruling in Kenya and government and NGO initiatives are manifolds but adherence is challenging. Role of children are significant as future generation but not specified. Many projects to promote children's participation is most implemented by NGOs which still doesn't involve the children hence has a tailored program for children with their minimal involvement. Saku is known for its environmental degradation and deterioration of environment such as deforestation, soil erosion, and water pollution. Some children led projects are implemented and their role still not brought out evidently. For example in schools children have been engaged in afforestation where they take part in planting trees, environmental clean-up exercises, awareness creation, and resource mobilization for environmental conservation exercises . Most of the schools in Saku have present environmental clubs which with the help of their patrons have managed to take part in some of the above activities. This initiatives has in its small way brought about environmental conservation but they are not sustainable mostly because of lack of funds by the school to continue with these initiatives. Project Management advocates for recognition of every stakeholder when implementing a project. And clearly in Saku we find out that children are not completely involved in conservation initiatives completely. Hence this makes the study significant to know whether children led projects facilitate environmental conservation improvement and how they did it and what they need to facilitate such projects still unknown so this research is due.

Research Questions

i. To investigate the effectiveness of reforestation efforts by children in environmental conservation in Saku Constituency

ii. To determine the importance of awareness creation for children on environmental conservation in Saku Constituency

iii. To investigate the effectiveness of environmental clean-up on environmental conservation in Saku Constituency

iv. To determine the role played by children in resource mobilization for environmental conservation in Saku Constituency

Theoretical Literature Review

The Ladder of Participation Model

The ladder of participation is a model developed by Hart (1992) which identifies eight levels of children's participation in projects. It is designed to encourage those working with the children to think more closely about the nature and purpose of children's participation in community activities. Hart argues that genuine participation should not be confused with activities such as children's dance, music or theatre performance in which children act out predetermined roles in projects designed by adults, such performance, while they may be worthwhile in themselves and positive experience for children and adults alike, need to be recognized for what they are performances. In 2008, Hart explained his rationale for developing the model; the ladder was simply offered as a schema to help bring a critical perspective to a subject, which at that time lacked most beneficial quality of the model which was a utility for helping different professional groups and institutions to rethink how they work with young people. They include youth workers, television and radio directors, scout leaders, play workers street workers, health professionals, and even some school teachers. Its simplicity of form and clarity of goals enable them to find a language to look at their current ways of working systemically, and in so doing, come up with something more complex and useful to their particular context.Hart's typology of children's participation is presented as a metaphorical "ladder," with each ascending rung representing increasing levels of child agency, control, or power. In addition to the eight "rungs" of the ladder represent a continuum of power that ascends from nonparticipation (no agency) to degrees of participation (increasing levels of agency). It should be noted that Hart's use of the term "children" encompasses all legal minors from preschool-age children to adolescents. The eight rungs of Hart's Ladder of Children's Participation comprises of Manipulation, Decoration, Tokenism, Assigned but Informed, Consulted and Informed, Adult-Initiated, Shared Decisions with Children, Child-Initiated and Directed, Child-Initiated and Shared Decisions with Adults.

The ladder of participation model is important to this study in that it helps us today to understand how best to involve and engage children when it comes to project and programs around them. It also gives a base to understand children's participation and how it initiates an environmental awareness practice for the children and corporate in their day to day learning. The variables in this study are all children centered and this Model relates greatly to each of the variables. The study of this model will help understand with step in the participation ladder to employ so as to make sure each child is not left behind but rather involve in environmental conservation activities. The model helps to ensure that all the researchers or rather any agency working with children gets right what it means to engage children. It also gives as an insight on how to engage children and develop

better approach to help them embrace the whole idea of environmental conservation and build on what they already know. With better understanding on how children develop it makes work easier to work with children in promotion environmental conservation practice at a younger age which will stick with them to their adulthood. This model helps explain the variables in the study this is because the variables include children's participation and by understanding the model it gives and insight on how to involve the children fully in environmental conservation

The study will try to advocate for total involvement of children in environmental initiatives this will in turn promote ownership by the children hence showing the positive side of totally engaging the children. The ladder reflects some degree of cultural bias, and it may be less accurate or useful when applied to certain cultures. The study will incorporate all culture limitation and also investigate on the best way to overcome or incorporate the challenges in the activities or the initiative geared towards environmental management by the children.

Conceptual Framework

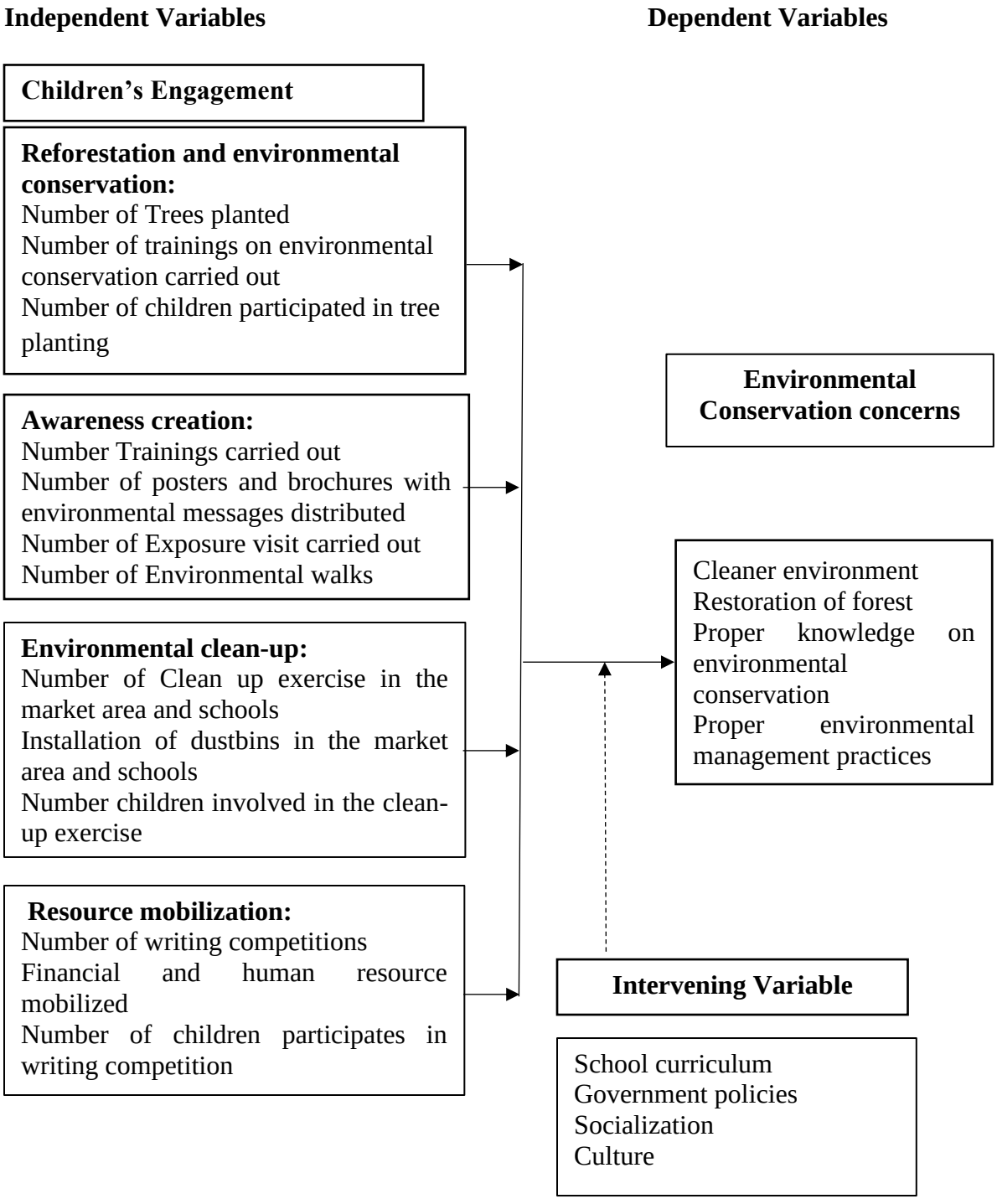

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

Research Design

This study used Descriptive research design the researcher combined both qualitative and quantitative forms. Descriptive research design approach illustrates the ideologies of the population by illustrating systematically the structured instance, problems, phenomena service or data related to the target population.

Target Population

The target population was school going children in Saku Constituency, Marsabit County. There are about seven schools in Saku but for the study two schools were reconsidered that is S.K.M and Marsabit primary schools and the school administration (i.e. the head teacher and the environmental club patron). The two schools were picked purposively as they cater the study inclusion criteria that is attached to the forest boundaries and because they are located in a forest coverage area in Saku, where reforestation has effect on environmental degradation is felt most. The two schools also have a presence of environmental clubs hence has a history of engaging in environmental conservation. The target population was able to provide adequate information on children's engagement in environmental conservation.

Sample and Sampling Techniques

The researcher used random sampling technique so as to be able to sample the target population. Random sampling is part of the sampling technique in which each sample has an equal probability of being chosen. The sample chosen randomly is meant to be unbiased representative of the population. The researcher purposively picked the two schools i.e. SKM and Marsabit primary as representative of the lager population. The study adopted a sample size of seventy two respondents which includes 14 teachers 7 from each school and 58 students 29 from each school. The choice of the sample is informed by the saturation point of data gotten from non-probabilistic sampling techniques.

Methods and Instruments of Data Collection

Primary data was collected with the help of a questionnaire which was administered to the target population that is the school-going children. The questionnaires were divided into five section, the general section and the four section contained the study objectives and contained both open and closed-ended questions. The researcher used open ended question to understand the respondent's true feelings and attitudes about the survey subject better and the closed end questions, due to their limitations, do not give respondents the choice to truly give their opinions. The researcher considered using the questionnaire because of its low cost, it's free from bias, and gives research participant's adequate time to give appropriate answers. Interviews was conducted for the teachers.

The secondary data will be obtained from relevant literature, past reports and journals that are related to the study.

Data Analysis Procedures

Data analysis means examining information that has been collected in a survey or experiment and making deduction and inferences. It's also the process of evaluating data using logical and analytical reasoning to carefully examine each component of the data collected or provided. In this study, the filled questionnaires were checked for completeness at two levels, first by the data collectors and then by the researcher. They not only checked the completeness but also for any other anomalies which was corrected immediately before the questionnaires were picked from the research participants. Once the data was collected, data analysis starts. Quantitative and qualitative data analytical techniques was used. Quantitative data was analyzed by using Statistical Package for Social Science (SPSS). Where the data from the questionnaires were coded and summarized using descriptive statistics, measures of variability, frequency distributions and percentages, and multiple regression.

Results

60 of the 72 respondents included in the sample answered the questionnaire contributing to 83.3% and 16.7% of the sample population did not return the questionnaires. This implies that the response rate was reliable and an excellent response rate. This good response rate became a reality after the researcher made personal visits to remind respondents to complete and return questionnaires. The results of this study concur with Cooper and Schindler (2014) who asserted that if the response rate is 60% and above then the social scientific study can proceed. This was a good response rate as it was more than 60%.

Presentation and Discussion of Findings

Reforestation Efforts by Children

The researcher wanted to find out if there has been any tree reforestation exercises in the schools in the last year. The results in figure 2 shows that 64% of the respondents acknowledged that there has been a tree planting exercise in the school for the last one year and 36% of the respondents indicated that there has been no tree planting exercise in the school for the last one year. This shows that there have been efforts towards reforestation by children in the schools. The respondents who acknowledged that they hadn't taken part in reforestation exercise due to mostly due to shortage of rainfall in the area.

"*We have tried planting trees in the past but due to lack of water the trees died and we lose moral in planting them again." (p.1)*Source: participant 1 (2021)

Lack of rainfall was noted as one of the major reasons tree planting has not been taking place in the schools for the last one year. But general reforestation has been happening in the schools.

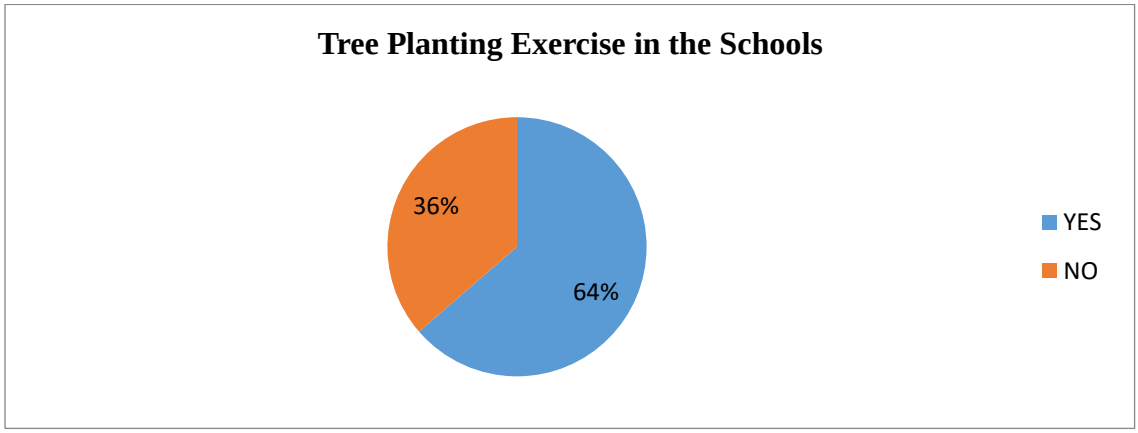

Figure 2. Tree Planting Exercise

The researcher also wanted to find out from the teachers if there is a segment in the syllabus where children are taught the importance of reforestation and which subject. The responses are as shown in figure 3 below. 55% of the respondents indicated that science as a subject teaches children the importance of reforestation while 27% indicated social studies as a subject and 18% showed agriculture as a subject where importance of reforestation is taught. *"The students get to learn about the environment and majorly on reforestation in a science subject which informs the students on the importance of reforestation and the effect of cutting trees." (p.5)* Source; Participant 5 (2021).This therefore indicates the current syllabus taught in the schools clearly places reforestation as a key area for all students to learn as a way of conserving the environment in the community as well as the society. With such initiatives, Section 69 (1) (b) of the Constitution of Kenya, 2010, which sets the target to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya can be realized. The researcher also wanted to find out the challenges that hinder tree planting exercise in the schools from teachers. The responses are shown in the figure 3.

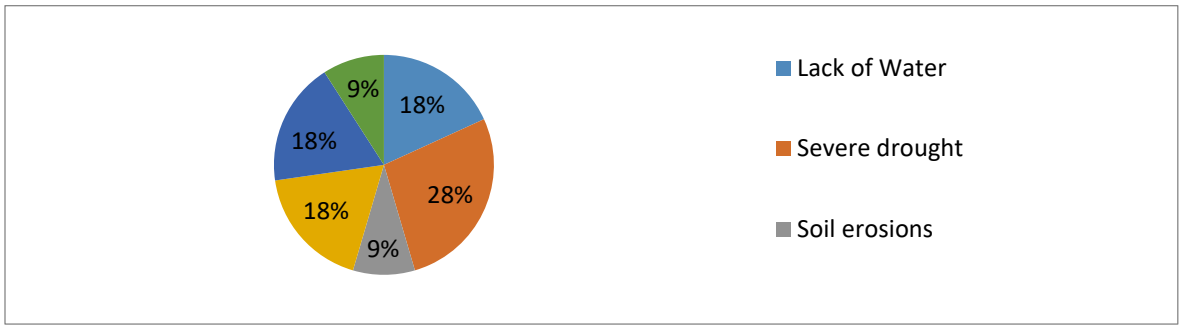

Figure 3: Challenges Hindering Tree Planting Exercise

From the findings in the figure 3, the respondents showed that lack of water is one of the main challenge of tree planting exercise at 18%, severe drought at 28%, provision of seedlings at 18%,

inadequate sensitization on tree planting at 18%, livestock from the community graze on the seedlings due to lack of fence 9% and soil erosions 9%. This implies that the tree planting exercise aimed at ensuring reforestation has been mostly affected by lack of water and severe drought in the region. It therefore means that various stakeholders have to address these concerns so as to improve on the issue of reforestation including sensitizing communities and also fencing the schools to prevent livestock from attacking and eating up the planted trees**.** *"Saku constituency faces a major challenge when it comes to issue of water, it being in a semi-arid area, rainfall fail most of the time hence the area lack water and due to lack of water activities such as tree planting becomes hard." (P.3)* Source; Participant 3 (2021). "*Persistent drought in the area has been one of the greatest challenges when it comes to planting of trees in. The trees dry out fast hence make it hard to plant trees" (P.5)* Source; Participant 5 (2021). According to the findings from the respondents lack of water has been one of the greatest challenge that has hindered tree planting. Saku being a semi-arid area it faces rainfall failure which has been another challenge when it comes to tree planting. Lack of rainfall leads to drought which is also a major challenge and due to this the trees are dry out very fast hence making it hard to plant trees. Other challenges include Soil erosion, inadequate sensitization on tree planting, provision of seedlings and community grazing on the seedlings. From the analysis, it was also revealed that most students had planted trees more than once as shown in the table 1 below.

Table 1:Ever Planted Tree

Statement	**Frequency**
Once	07
Twice	11
10 times	08
Thrice	13
Four times	6
Five times	4

From the findings in Table 1, most of the respondents had planted trees three times as shown by the frequency of 13, twice had a frequency of 11, four times had a frequency of 6, 10 times had a frequency of 8, five times had a frequency of 4 and those who had planted the trees at least once had a frequency of 7. This implies that students have shown a good effort towards reforestation

based on the number of time they have planted trees.The information was presented on a pie chart as shown below;

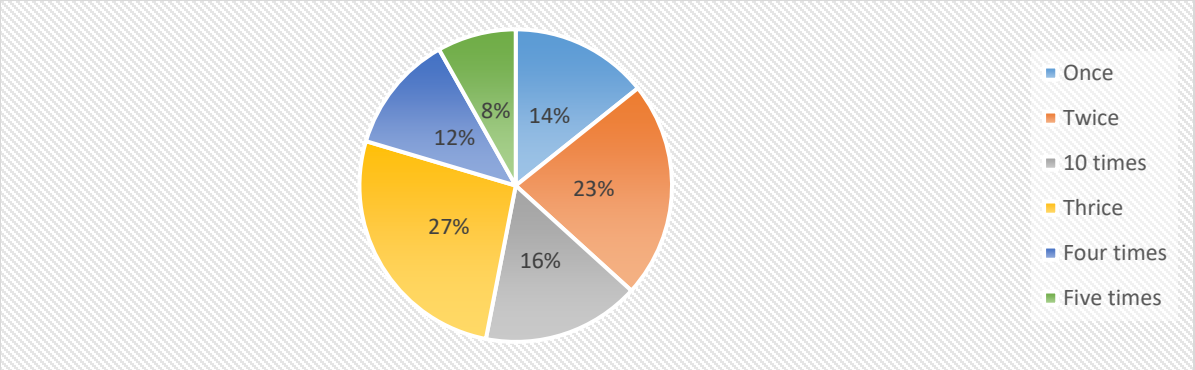

Figure 4: Ever Planted Tree

From the figure 4, most students had planted trees at 27% and few students had planted the trees five times at 8%. It therefore means that there are good efforts to ensure frequent planting of trees to ensure afforestation in the schools. *"We have planted tree many time but every time we do it dies, so we have tried it over and over" (P.7)* Source; Participant 7 (2021) According to the respondent trees are planted but every time the trees dies and this is mostly because the lack enough water. So according to the respondent they have tried planting trees a few times. The researcher also wanted to find out from students if they know the importance of planting trees. The table 2 shows the mean based on the answers given.

Table 2: Importance of Planting Trees

Statement	Frequency
Attracts rain	13
Timber	11
Firewood	8
Medicine	7
Shade	4
Control soil erosion	4
Home to wild animals	1

From the analysis in table 2, the respondents showed that trees are used for medicinal purpose as shown by a frequency of 7, timber with a frequency of 11, trees attract rain with a frequency of 13, trees provide firewood with a frequency of 8, trees providing shade with a frequency of 4, trees home to wild animals with a frequency of 1 and trees control soil erosion had a frequency of 4. This implies that the students are quite aware of the importance of trees and therefore can easily take part in planting of trees to ensure reforestation based on this importance of trees. "*We are aware of the importance of planting trees, it helps attract rain. We are learnt that in social studies and science."(P.1)* Source; Participant 1 (2021). As per the findings, it shows that children are involved in reforestation activities by taking part in tree planting exercises. They not only engage in tree planting exercise but they are also aware of their involvement and the importance of this activities in environmental conservation thus agrees with Hart's model, level D that is assigned and informed where children, Understand the intentions of the project, Know who made the decisions concerning their involvement and why, Have a meaningful (rather than 'decorative') role, Volunteer for the project after the project was made clear to them. This therefore justifies the relevance of the model theory in the study. It gives a clear background and study of the research topic.

Awareness Creation on Environmental Conservation

The researcher wanted to understand awareness created in environmental conservation. In order to understand, the researcher wanted to find out the segment in the syllabus that teaches environmental conservation. Figure 5 shows the responses on whether a segment on environmental conservation exists in the syllabus.

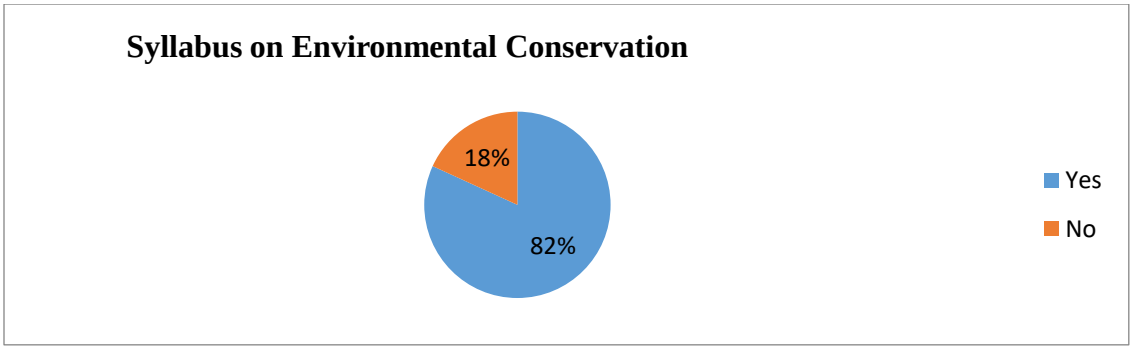

Figure 5: Syllabus on Environmental Conservation

From figure 5, 82% of the respondents (teachers) agreed that there is a segment in the syllabus that teaches environmental conservation and only 18% of the respondents no there are no syllabus that teaches environmental conservation. This implies that there is no syllabus in school that teaches on environmental conservation.The researcher also asked the respondents to which subjects contain such segments in the syllabus. Table 3 shows the responses from the teachers based on frequencies.

Table 3: Syllabus on environmental Conservation

Statement	Frequency
Social studies	4
Environmental activities	1
Agriculture	2
Science	3
Home science	1

Analysis in Table 3 shows that the syllabus on environmental conservation is taught more frequently in social studies followed by science. Followed by agriculture then by environmental studies, and home science. This implies that environmental conservation is found in most of the syllabuses taught in schools and therefore students and teachers are aware of the environmental conservation and by extension reforestation. The study revealed that social studies had more topics on environmental conservation at 37% than other subjects with environmental activism and home science being the least in terms of topics on environmental conservation at 9%. This therefore implies that more efforts should be done to ensure these subjects cover more on environmental conservation.

Presence of Environmental club

The Researcher wanted to find out if there was a presence of environmental clubs in the schools because environmental clubs have been majorly active when it comes to environmental conservation and also creating awareness on environmental issues. Below figure 6 shows the response from the respondents

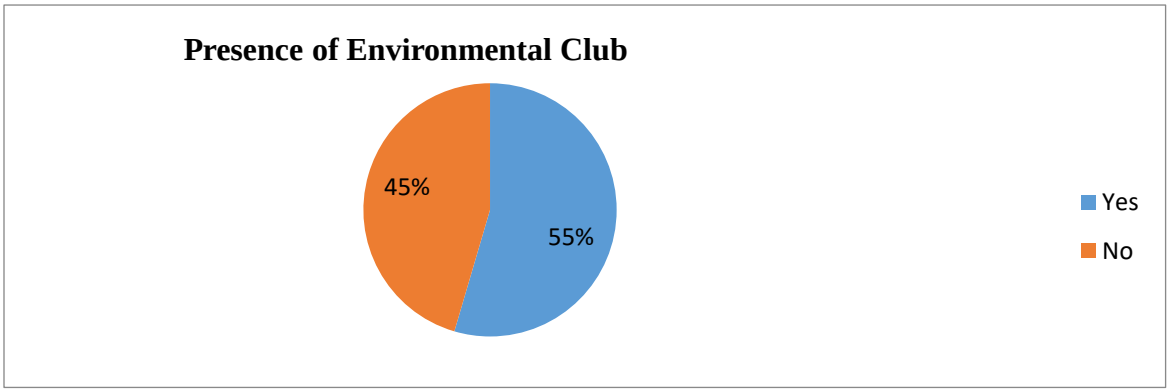

Figure 6: Presence of Environmental Club

From figure 6, 55% of the respondents acknowledged the presence of environmental clubs in their schools and only 45% had no environmental clubs in their schools. This shows that the schools have environmental club thus they are little engaged in environmental activities because it's the mandate of environmental clubs to help in conservation activities within their school and with the availability of the club the students are aware of the importance of environmental conservation because the patrons are mandated to teach the club members

The researcher wanted to find out from the students if they have lessons on environmental conservation. Figure 7 shows the results of the analysis.

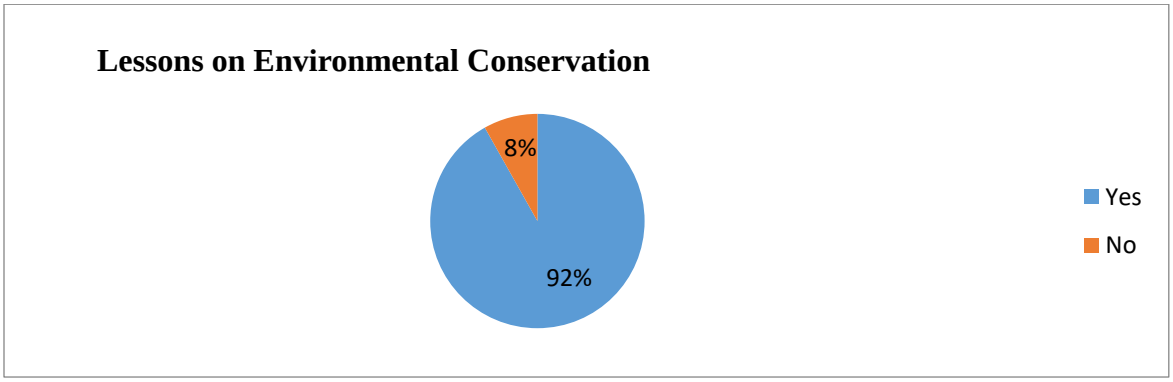

Figure 7: Lessons on Environmental Conservation

The results in figure 7 shows that the students have lessons on environmental conservation with 92% and 8% of the students indicated they had not been taught environmental conservation. This therefore means that environmental conservation is taught in schools and therefore the students are aware of environmental conservation efforts. "*The students are taught environmental conservation in various subjects such as social studies and science. They are taught during the environmental clubs meeting. The main reason for the formation of the club is not only to engage in environmental activities but also to learn from their patrons and put into practice what they are taught."(p.7)* Source; Participant 7 (2021). According to the respondent the students are taught environmental conservation in various subjects such as social studies and science. The students are also taught environmental activities by their patrons and the students put into practice what they are taught in schools. This shows that the students have a knowledge of what environmental conservation are implementing the knowledge they have learnt.

The researcher also wanted to find out from the students, how many times in a week such environmental conservation lessons are taught in a week. Table 4 shows the respond from the respondents

Table 4:Lessons on Environmental Conservation in a Week

Statement	Frequency
Five times	19
Four times	14
Three times	9
Once	2
Two times	5

From table 4, the respondents showed that they are taught fives weekly on environmental conservation with a frequency of 19, four times had a frequency of 14, three times had a frequency of 9, once had a frequency of 2 and twice weekly had a frequency of 5. This therefore implies that environmental conservation is taught for more than once in schools. The findings of this study agree with Bekalu (1995) who stated that an enhanced perception of environments and environmental change should lead to a sense of personal and community responsibility for environments and should foster the notion of people as custodians of the earth for future generations. UNEP (2007) outlines 4 major ways through which environmental education and awareness creation can be achieved. These are re-orienting current education and awareness programs to include environmental dimension, basic education and awareness programs in the community. In addition, religious convictions and traditions, highly influenced by the cultural context of an individual, may also contribute to the level of environmental awareness and influence people's behavior towards the environment. The findings also agrees with Hart's ladder model (1992) used in the literature review who stated that children participate better if they are aware/have a knowledge of the activities they are participating in. According to Hart's level of participation, Assigned but Informed children are assigned activities but they are informed of the activities and participation.

Environmental Clean-up Exercise

The researcher wanted to find out from the respondents if their schools have ever had a clean-up exercise in their schools or in the community. This will help understand if they take part in clean up exercise with is important in environmental conservation. They were expected to answer the question with a yes or no. Figure 8 shows the result of the findings.

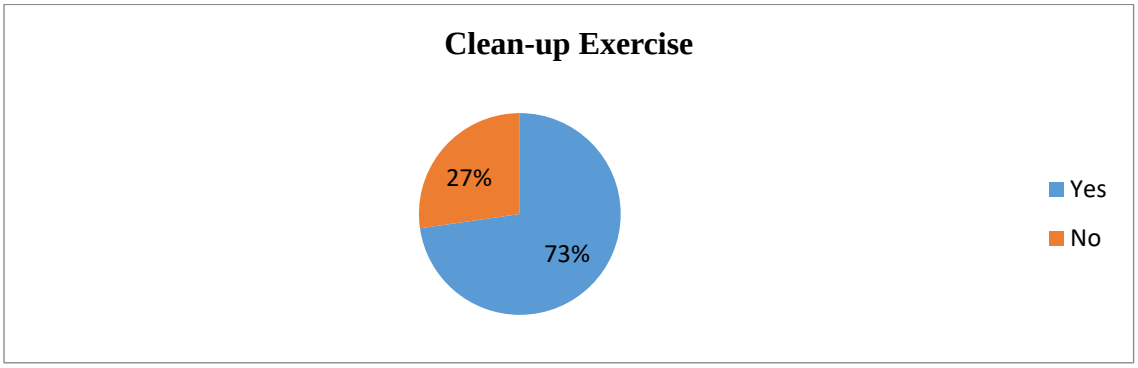

Figure 8: Clean-up Exercise

From the findings in figure 8, 73% of the students indicated that they have participated in the environmental clean-up exercise in the school or in the community and only 27% of the respondents indicated that they hadn't participated in environmental clean-up exercise. This implies that most of the teachers had led their students to participate in the environment clean-up exercise.

The researcher also wanted to find out from the respondents how many time in a year have they participated in environmental clean-up exercise. The responses are shown in figure table 5 below in terms of mean of participation.

Table 5: Environmental Clean-up Exercise in a year

Statement	Frequency
Daily in the schools	21
Weekly	19
Monthly	9

From the findings in table 5, most of the respondents showed that they had undertook environmental clean-up exercise on a daily basis as shown with a frequency of 21, weekly clean-up had a frequency of 19 and a monthly clean-up had a frequency of 9. This clearly shows that most of the schools and students had participated in environmental clean-up exercise in a year thus showing a clear effort on environmental conservation. "*Environmental cleanness is very important even for a pupil's learning. With a clean and tidy environment the pupils tend to understand and learn quickly, that's why we do our cleaning at least daily*." Source: Participant 5 (2021). "*We carry out our cleaning at the end of every day. This helps us to keep our classes ready for learning the next day" (P.7)* Source, participant 7 (2021)

According to the respondent the students clearly understand the importance of cleanness and a tidy environment and that it helps with their learning in school thus they participate in cleaning activities at least daily. The researcher also wanted to find out from students if they know the importance of an environmental clean-up exercise. This will help the researcher understand if the students knows the importance of environmental clean-up or they are engaging in the activity just because they are told to. The table 6 below shows the findings of the study.

Table 6:Importance of Environmental Clean-up Exercise

Statement	Frequency
To keep environment beautiful	25
For our health	07
To maintain cleanliness	17

From the findings on table 6, the respondents clearly showed that they know the importance of environmental clean-up exercise and could state that environmental clean-up exercise helps in keeping environment beautiful and attractive as shown with a frequency of 25, it is good for our health had a frequency of 7 and it is done to maintain cleanliness had a frequency of 17. This clearly shows that the students were aware of the importance of environmental conservation. The findings of this study agree with those of Kelly (2015) who also stated that; the clean-up is a great opportunity to beautify local common areas as well. This could be as simple as planting a few flowers, or fixing up a damaged sign or sidewalk. It is amazing how just a few minor changes can improve the look and feel of a community. One could also post signs asking neighbours not to litter. In addition, community clean-ups provide a great opportunity to get out and meet your neighbours and enjoy the summer weather and sunshine.

The findings agree with Hart's ladder of model (1992), used in literature review which advocates for participation of children in activities at different levels. The findings agree with Assigned but Informed levels where children are aware of what activities they are taking part in and are knowledgeable about the activities they are taking part in. hence it justifies the use of the model in literature review.

Resource Mobilization for Environmental Conservation

For every Environmental exercise to take place resource is needed. This resources can be financial or even human resources. Lack of finance means no activity can be done hence the researcher wanted to find out from the teachers of the schools if they set aside resources for environmental conservation in their schools. Figure 9 shows the responses from the teachers.

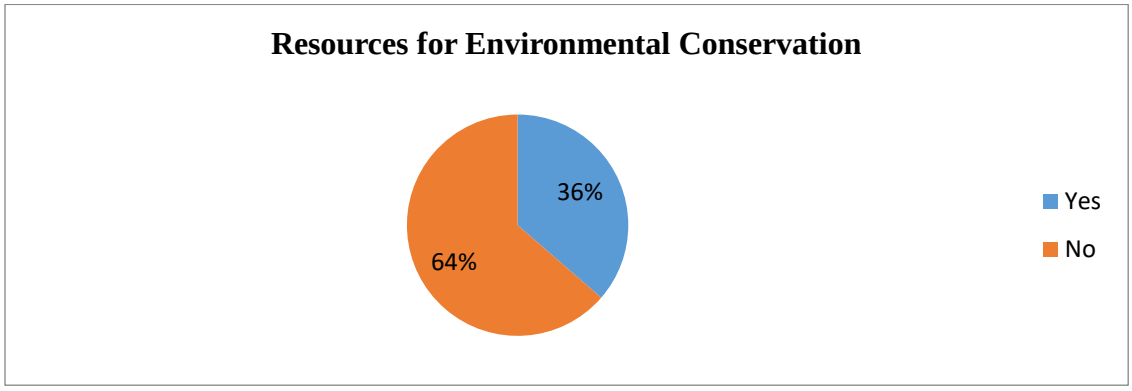

Figure 9: Resources for Environmental Conservation

From the findings in figure 9, most of the respondents indicated that they have not set aside resources for environmental conservation activities in their schools as shown with 64% while 36% indicated that their schools have set aside resources for environmental conservation activities in their schools. These respondents who indicated that they set aside resources mostly indicated they received funds or other support from the NGOs for such activities. The researcher also wanted to find from the students, if they have ever participated in resource mobilization activity for environmental conservation activity and also if they are activities in their schools that helps to generate resources for environmental conservation. The findings on figure 10 show the responses.

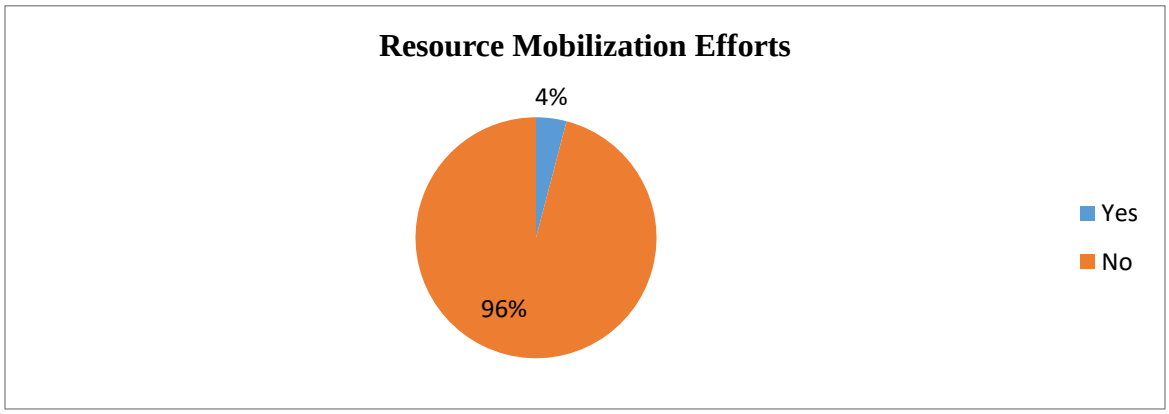

Figure 10: Generation of Resources for Environmental Conservation

From the findings, only 4% of the respondents had participated in activities for resource mobilization for environmental conservation. 96% of the respondents acknowledged that they had never been involved in resource mobilization activities for their schools. This therefore implies that most students haven't been empowered on resource mobilization for environmental conservation and therefore more efforts need to be done in that area. "*Unfortunately we've not had any competition where pupils got a chance to compete for any price for their environmental club or schools that could have helped with environmental conservation exercises." (P.6)* Source;

participant 6 (2021). These findings concur with According to National Environmental policy 2013, sound environmental protection and management require sustainable financing mechanism. The Kenyan government's budget is the single largest source of funding for protection and conservation of the environment and natural resources. However, the current allocation to environment and natural resources is inadequate. As such, there is an urgent need to complement government funding by harnessing additional funding from multilateral funding mechanisms, development partners, private sector and civil society organizations. Additional funding can be mobilized from willing partners and County governments are encouraged to develop partnerships for development and implementation of CEAPs. At the National level the output of the National Environmental Action Plan is to be integrated into the National planning blue prints. It also agrees with Hart's ladder Model (1992), level Adult-Initiated, Shared Decisions with Children. This is where the funds are generated by the adults but the activities are implemented by the children. From the findings, children are not involved in resource mobilization but the little resources allocated to them are planned for by the adults.

Regression Analysis

The study sought to determine the effectiveness of children's engagement in environmental conversation in Saku Constituency. To achieve this, regression analysis was performed to suggest the opposite or to find out if there is a relationship. The results are summarized in Table 7

Table 7:Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843[a]	.711	.6985	.513

A. Predictors: (Constant), Reforestation Efforts, Awareness Creation, Environmental Clean-Up, Resource Mobilization

The summary of the model in Table 7 reflects as indicated in R (0.843) with correlation coefficient being 0.000. The value of adjusted R^2 (69.85%) indicates the part of the dependent variable explained by the independent variables. The remaining 30.15% include other variables that were not examined in this study. There are other ways of engaging children effectively that influence environmental conversation but were not looked at in this study. This implies that there is a relationship between the variables examined and the environmental conversation. These results correspond with the (Sekaran and Bougie, 2016) who stated that the relationship is assumed to be linear when the correlation coefficient is below 0.05. This finding is in agreement with a study conducted by Perry (2014) who provided that engaging in human resource information systems in the firm lead to larger business performance. According to the findings there is a relationship

between children's engagement and environmental conversation. The variables in the study also affects the outcome that is environmental conservation.

Analysis Of Variance (ANOVA)

The aim of the study was to produce an analysis of variance (ANOVA), which is a collection of statistical models used to analyse the differences between the means of the groups and their members. The quality of the fit results for the regression model is shown in Table 8. The analysis gave an F-value of 18.7511 (p = 0.000), indicating that the regression model produced was adequate and statistically adequate for the prediction.

Table 7: Analysis Of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	8.468	4	2.117	18.7511	.000[b]
1	Residual	6.212	55	.1129		
	Total	14.680	60			

a. Dependent Variable: Environmental Conversation

b. Predictors: (Constant), Reforestation Efforts, Awareness Creation, Environmental Clean-Up, E Resource Mobilization

Analysis of variance shows that there is variation between the dependent variable and independent variable hence implying that there is a relationship between the variables

Conclusions

From the findings of the study, the following conclusions were made:

Firstly, the schools have made very great strides in ensuring and promoting reforestation efforts by the students and the schools have done pretty good. This is because reforestation is one of the major activities that can be done by children to promote environmental conservation. But they face a range of problems ranging from lack of water and severe drought in the region as well as attack of the planted trees by the animals from the grazing cows from the neighboring communities. Therefore a lot of sensitization will have to be done on the communities as well as a lot of efforts will have to be made to conserve water for tree planting. The researcher suggests that, school should try to invest in tanks for water harvest during the rainy season and later use the water to plant trees.

Secondly, in most of the schools and students are taught environmental conservation in their schools as it is part of the syllabus mainly taught in syllabus like science, agriculture and environmental activities. The existence of environmental clubs is also a clear manifestation of environmental awareness created in the schools aimed at preserving the environment. With this knowledge it makes it easy to engage the students in environmental activities, owing to the fact that they are aware of the importance of conserving the environment. This is a great acknowledgement of Hart's ladder model used in literature review representing level D that is assigned and informed, this is a great approach, engaging the children in activities that they are aware of will not only promote children participation but also voluntary participation with full knowledge on what they are doing.

Thirdly, participation in environmental clean-up exercise by both teachers and students in the school and in the local community clearly shows that environmental conservation is on the rise in the schools. The students were also aware of the importance of environmental clean-up exercise to the environment and stated such importance. According to the findings it shows that the students are engaged in environmental conservation through environmental clean-up so as to help keep the environment clean.

Fourthly, the study found out that most schools have not set aside resources for environmental conservation and they rarely receive funds for such activities and for those few schools who receive such funding are from the NGOs. Therefore schools must now set aside and mobilize resources effectively in order to enhance environmental conservation. Also the non-government agencies working in Saku and government department working in environmental department should try and support this schools in the environmental conservation activities that they participate in.

Lastly, the study has shown that yes children are being engage in environmental activities such as reforestation, clean up exercise and they are aware that by taking part in this activities they are improving and conserving their environment and has highlighted by many respondent it's important to have a clean environment because it vey conducive for learning. The biggest challenge though if lack of funds to keep this activities going. The schools have little budget for environment conservation activities, if they had more they would have done more activities not only in schools but even in their communities.

Recommendations

The schools and the communities around the schools must now allocate and mobilize for the resources to ensure environmental conservation. This would entail mobilizing such resources from the NGOs or other bodies which offer such funding's like UNEP. The schools may also make tree planting, conservation awareness campaigns and environmental clean-up exercise a compulsory mandates so as to ensure proper environmental conservation. This must also involve sensitizing the students and the community members about environmental conservation so as to reduce

incidences where grazing cows destroy the planted trees. The schools may start environmental clubs or revive them is they are already in existence so that it will be easy to engage pupils in environmental conservation activities. The clubs play a huge role when it comes to environmental conservation. It's the mandate of environmental clubs to play lead role in promoting environmental conservation in schools and it being a student's club it promotes the whole aspect of children engagement where the activities are led by the students themselves.

The school environmental club with the help of other stakeholder may try to expand this environmental activities outside school for example in market centers, in the villages so that environmental conservation is not only practiced in school but even at home. This is not only important for the students but also for the community members in that it helps promote a culture of environmental conservation both in school and homes. The ministry of education may consider coming up with policies aimed at environmental conservation practices in schools so as to meet the threshold of 10% forest cover in the country. This will make the schools to adopt environmental policies like tree planting days, environmental clean-up days and environmental conservation awards aimed at ensuring environmental conservation. Agencies like United Nations Environmental Program, Kenya Forest Service and Ministry of Environment and natural resources could partner with schools in their various programs aimed at ensuring environmental conservation. This will reduce the incidences apathy in issues related to environmental conservation. Such efforts may include sensitizing schools on environmental conservation efforts and practices as well as mobilizing resources for these schools to undertake such activities. This agencies should tailor make some of their project so that I accommodates the voice and participation of this children. They should be heard and their contribution to put in consideration because they do have enough knowledge and understanding on issues environmental and also their active participation will help nurture them into becoming more aware of their surrounding and to carry forward what they learnt as a good practice.

The county government through its ministry of environment should at least develop a series of competition within the county where children from various schools are invited to compete for some reward which go towards environmental conservation in schools. This will not only avail funds for environmental conservation but also promote children's participation in environmental conservation actively. This will ensure ownership by the children and promote eager among the children to participate in such activities. Lastly, the county governments could come in and provide water collection materials as well as water conservation equipment's so as to be used in tree planting during the drought seasons. This will ensure continuous watering of the planted plants to ensure continued growth and thus promote environmental conservation efforts.

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