Social-Economic Factors Related to Miraa Farming Affecting Retention of Boy-Child in Public Secondary Schools in Mbeere South-Sub County, Kenya

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Abstract

The Government of Kenya, in its efforts to achieve vision 2030, aims at enhancing transition rates in basic education. This effort however is frustrated by increasing dropout rates particularly in public secondary schools which is attributed to a number of factors among them cultural, environmental, school based and socio economic. One of the factors that has been singled out as a cause for increased drop outs in secondary schools is child labour in agricultural farms. The purpose of this study was to establish the socio-economic factors related to miraa farming affecting school retention of boy child in public secondary schools in Mbeere-South Sub-County. The study was guided by the Social Systems Theory as advocated by Shultz. The study employed the survey research design. The location of the study was specifically the miraa growing areas of Mbeere South Sub County. The target population was 160 respondents comprising of be 12 principals, 140 teachers and eight local administrators. The teachers included 12 senior teachers, 48 class teachers, and 80 general subject teachers. The local administrators comprised of two chiefs, two assistant chiefs, two village elders, and two nyumba kumi members. Twelve schools from the miraa growing areas of Mbeere South Sub-County were purposively sampled for the study. Purposive sampling was also employed to select the 12 principals and eight local administrators while stratified random sampling was used to select 36 teachers from specific schools. Teachers were stratified according to their designation in the school as outlined in the target population. A questionnaire was used to collect data from the teachers while interview schedules were used for the principals and the local administrators. Test-retest method was used to establish the reliability of the questionnaire. The reliability test yielded a coefficient of 0.87 which was considered as reliable. Qualitative data was analyzed through content analysis by grouping the data along similar themes as per the objectives of the study. Quantitative data was analyzed using descriptive statistics such as percentages, means and standard deviations and was presented by use of frequency distribution tables. The study found that miraa farming and business contribute to low retention rates of the boy child through offering opportunities of employment to the students. Dropping out is caused by parents' lack of financial strength to cater for school needs and other levies due to the UK ban of miraa exportation. Secondary school boys are engaged in the miraa farming and business through, tending the miraa trees, harvesting, packaging, transporting, hawking in towns and shopping centers and also preparing the produce to external markets. Based on the findings of the study, the Ministry of Education may develop policies that may streamline the retention of the boy-child in public secondary schools.

Keywords: Enrolment, Retention, Socio-Economic Factors, Public Secondary Schools

INTRODUCTION

Miraa is a shrub whose leaves are used as a stimulant or medicine in certain regions of East Africa and Arabia (Jesso, 2012). Miraa was probably known and used on the Ethiopian uplands, where it seems to have originated, from very ancient times. Miraa trade and chewing is an economic and social habit, spread all over the world, with migration of people from Miraa growing regions to other parts of the world (Jager & Sireling, 2013). To the boy-child, education is the pivot to long-term growth and the key to achieving "social inclusion." It is one of the prerequisites for improving quality of life and liberty. Equitable access to high-quality information and skills means that everyone has a fair chance to contribute fully to community development and it is therefore important to include everyone in development plans regardless of their social status (Inonda & Riechi, 2010). Even though the advantages of formal learning are apparent, it has not been prioritized in many countries' development plans (Ohba, 2012). Between 40 and 45 percent of first-time entrants to all forms of schooling in the United States would ultimately receive elementary education, according to Tinto (Noel et al, 1985). He claims that a growing number of them need more than four years of continuous enrollment to do so. The majority of students who drop out do so before their second year begins. According to data from 2 513 educational institutions in the United States, 25.9% of first-year students dropped out in 1997.

Most schools in Africa are located in deprived rural areas, where they are often characterized by the need for multi-grade classroom management as a result of low enrolment and/or too few teachers, and they often face severe shortages in teaching and learning services as well as basic infrastructure. This often results in poor educational quality, student dissatisfaction, high dropout rates, and low retention rates (Lynn, 2010). According to Oketch (2010), most schools in Sub-Saharan Africa have low enrolment, lack of resources and support, and too few teachers to cover the necessary grade levels. This often results in poor educational quality, student disillusionment, and high dropout and retention rates. Most governments in the region, according to Biswal (2011), are facing severe budget constraints, especially since the global recession began. Although governments plan to expand free education, they also encourage public schools to charge fees to improve physical facilities and non-tuition expenses like sports fees, school meals, uniforms, textbooks, and so on. Even though most fees are not officially approved by the government, Lee and Miltberger (2011) claim that they are often used to make up for lost revenue due to a delay in governmental subsidies. This has led to students dropping out of school as their parents are not able to provide financial support, so they have to engaging in work to earn a living. Njeru (2013) conducted research in Igembe South District, Kenya, and found that children of primary school age are heavily involved in the miraa industry, thereby offering inexpensive labour for miraa production.

Due to of the restricted facilities in Kenya and other Sub-Saharan countries, Sifuna (2005) emphasizes that extending provision for all in the secondary sub-sector is a major challenge. Furthermore, opportunity costs, school levies, the perceived lack of value of instruction, and the mismatch between what is learned and the needs of the institution are all factors to consider. According to Gravenir (2009), poverty does not encourage parents to keep their children in school or students to stay in school. Therefore, encouraging them to engage in work to earn a living. Several studies have shown that students drop out of school in order to join Miraa farming (Njeru, 2013; Kithao, 2015; Gatumu et al., 2012; Guyo, 2019;

Agure et al., 2019). A hostile atmosphere in some schools, as well as absenteeism and lateness, especially in rural areas, household poverty, and the negative effects of the HIV/AIDS pandemic, all drive learners away from secondary schooling. According to Nabuzoka and Badhadhe (2011) most of the hawkers are young school drop-outs who purchase the bulk of the Miraa, which is then repackaged for sale to their customers. This is a tedious task, and is done by several women and young men. Again, it should be emphasised that majority of the people involved in this distribution network are women, mostly single mothers, while young, jobless girls and boys who have dropped out of school are employed. Some of them will now sit by the major road sides hawking the stuff, while others do home deliveries to their regular clients. This is the scenario in Mbeere Sub-County mainly in the Miraa growing regions. School completion rate in public secondary schools in Mbeere South Sub-County has been on a steady decrease in the last five years. Table 1.1 displays the statistics.

Table 1: Comparative Enrolment and Completion rates across gender

	2012		2013		2014		2015		2016		AVERAGE	
	B	G	B	G	B	G	B	G	B	G	B	G
Form 1 Enrolment	82	86	84	93	85	94	901	107	912	120	867	100
	5	0	6	6	9	4		3		7		4
Form 4 Completion	74	81	76	88	77	88	792	101	798	113	776	946
	8	8	4	0	5	6		2		4		
DISPARITY	77	42	82	56	84	58	109	61	114	73	91	58
% Drop Out Rate	9.3	4.9	9.7	5.9	9.8	6.1	12.1	5.7	12.5	6.1	**10.5**	5.8

Source: SCDE's Office (Mbeere South Sub-County).

Statement of the Problem

Despite the concerted efforts being made by the Kenya government to enhance access to basic primary education by all children, internal efficiency challenges in form of low access and retention of boys in day public schools continue to be experienced. National statistics on enrolment in Form 1 and completion rates at form 4 show a big disparity. This is more pronounced in the case of boys. In Mbeere South Sub-County, the case is not any different despite the area being a high economic potential area characterized by miraa farming and marketing. The statistics at the sub county level indicate that on average 14.6% of the boys who are enrolled at form 1 drop out before completing in Form 4. The present study sought to establish socio economic factors relating to Miraa farming that affect school retention of the boy-child in public secondary schools in Mbeere-South Sub-County

LITERATURE REVIEW

Socio Economic Factors Relating to Miraa Farming and School Retention

Miraa is one of the Kenya's horticultural exports although in the 2013 most of the European countries issued a ban on Miraa and rated it to be a dangerous drug unfit for human consumption (Kebedo, 2012). According to the past data it showed that the value of Miraa (khat) exports was growing at an average of 9.7% annually. Before 2013 Kiambuthi (2013) noted that Miraa earned the country shillings 16.5 billion in the last five years, most of it from Somalia according to a report by USAID. Randell (2013) acknowledges that Somalia was Kenya's main trading partner, accounting for 90% of the exports. Other markets included Djibuoti, Britain, USA, Canada, Saudi Arabia, Mozambique and Malawi. Currently, Middle-men and owners of chattered flights operating from Wilson Airport in

Nairobi to Somalia have emerged as the biggest beneficiaries of trade in Kenyan Miraa industry. Apart from the 20 tonnes of the crop that heads to Somalia from Nairobi every week, Amsterdam used to consume 5 tonnes, London 7 tonnes and the local community 40 tonnes before the ban (Rassool, 2013).

Miraa's expansion in Mbeere South District has been attributed to both socioeconomic and agro-ecological factors (Mwenda, 2012). Business prospects and favorable prices have increased as a result of the driving forces. Miraa production is primarily concentrated near highways and on farms with minimal irrigation. According to Ngeno (2013), the profitability of Miraa development is cited by 78 percent of farmers as the primary reason for the area's Miraa expansion. Miraa's high profitability has also prompted farmers to employ workers to help with its production. Miraa producers can also gain easier access to labor by offering Miraa to staff in exchange for their services. Credit is also easier to come by for Miraa growers (Mutura, 2013). In Mbeere Sub-County, miraa farming has become a major source of income. Miraa provides 70% of the County's revenue. Miraa intake has serious socioeconomic implications, as consumers spend a significant portion of their income on Miraa (Kariuki, 2013).

Glick and Sahn (2016) study on effects of parental income and dropout rates found a strong significant correlation between a family's financial strength and the likelihood of the child's dropout of school. Felter (2015) study on influence of economic status of parents on their children' Education established that students whose parents have higher economic status have an enhanced regard for learning and they use effective learning strategies than students of parents with lower economic status. Guarlello, Lyon and Rosai (2013) study on causes of school withdrawal found that low parental income leads to seasonal and permanent withdrawal from school. Poor parents are unable to meet schools' costs which increases dropout rates. Kithao (2015) study on influence of Miraa business on pupils' Igembe East division Meru County found that primary school pupils in the region are involved in buying and selling Miraa. More boys than girls are involved in buying and selling Miraa which earns them quick money. This results to truancy, failure to do homework, failure to revise for examinations and lack of concentration in class. Since pupils cannot focus on their studies, the result is absenteeism and dropouts.

THEORETICAL PERSPECTIVES

The study is guided by Social System Theory as advanced by Theodore Shultz (1987). According to the theory, there are two categories of systems namely the open and closed systems. Open systems are related to the surroundings while closed systems have no relation with the surroundings. In general, open systems are the focus of social systems theory. A learning institution is a social system since it communicates with its surroundings on a regular basis. Every organization can be considered as an open system since organizations get inputs from other systems and change the important ones through various processes into outputs in order to realize certain goals. Therefore, a learning institution can take up learners from the society with the help of their parents, government resources, transform them through the teaching and learning process with the help of the teachers and return them to the community as changed individuals who are knowledgeable and could help in community development. Therefore, a school cannot be considered a closed system.

All organizations (schools) need specific goals that will help to determine the type of inputs (student retention), process required to attain outputs (graduates) as well as accomplishment of institution (school) goals. Efficiency and feedback of a system as well its activities' impact on the environ is measured through the extent to which objectives are achieved. Organization and managerial concepts are applicable to all types of processes in any institution/firm. In all situations, planning, scheduling, directing, coordinating, and controlling apply in management of any organization. Although the basic management elements are applicable to any organization, their objectives and priorities vary hence affecting conversion of inputs to outputs and sequence of processes involved. Unique characteristics of a company are identified through its inputs, change process and the type of output delivered. These characteristics illustrate various organizational structures, management practices, and the actions of employees working in the organization departments. The theory was applicable to this study because it promotes a well-organized structure in organizations like a school, whereby inputs and outputs should be balanced and goals must be met

METHODOLOGY

The study employed descriptive survey research design. The target population was 160 respondents comprising of be 12 principals, 140 teachers and eight local administrators. The teachers included 12 senior teachers, 48 class teachers, and 80 general subject teachers. The local administrators comprised of two chiefs, two assistant chiefs, two village elders, and two nyumba kumi members. Twelve schools from the miraa growing areas of Mbeere South Sub-County were purposively sampled for the study. Purposive sampling was also employed to select the 12 principals and eight local administrators while stratified random sampling was used to select 36 teachers from specific schools. Teachers were stratified according to their designation in the school as outlined in the target population.

Table 2: Sampling Matrix

No.	Stratum	Target population	Sample Size	%
1.	Principals	12	12	100
2.	Teachers	140	36	26
3.	Local administrators	8	8	100
	TOTAL	160	56	-

Validity was determined in two stages. First, the developed instruments were handed over to the supervisors for perusal. They were then revised accordingly, based on the supervisors' recommendations. In order to determine the reliability of the research instruments, the instruments were administered twice within duration of two weeks and then the results correlated to determine the Cronbach's Alpha Coefficient (α) which was 0.87.

Data Collection and Analysis

The study used questionnaires and interview guides as data collection instruments. The questionnaire consisted of open and closed ended items. This was administered to the principals and teachers. The researcher solicited for consent from the sub county director of education. The researcher administered the questionnaires in person and waited for them to be filled up to ensure high

response rate. Interview guides were used to collect data from the local administrators. Data was analyzed using the descriptive statistics.

RESULTS

The study sought to determine the socio-economic factors relating to Miraa farming that affect school retention of the boy-child in public secondary schools in Mbeere-South Sub-County.

Retention Rates of Boys

In order to establish the retention rates of boys in secondary schools in Mbeere-South Sub-County, the current enrolment was compared with the enrolment at Form 1 term 1 for all the classes and the mean dropout rates and consequently the percentage retention rates worked out for each class. Table 3 vividly displays the means of the enrolment of each Form at Form 1 Term 1 compared to the current enrolment.

Table 3: Retention Rates across the Classes

FORM	Mean Current Enrolment (A)	Mean Enrolment At Form 1 Term 1 (B)	Mean Drop Out Rate (B-A)	% Retention Rate ($^{A}/_{B} * 100$)
1	59.9091	64.5455	4.6364	92.82
2	61.9091	66.0909	4.1818	93.67
3	63.8182	68.0909	4.2727	93.73
4	65.6364	68.7273	3.0909	95.50
TOTAL	**62.8182**	**66.8636**	**4.04545**	**93.93**

As is evident from the information presented in Table 3, Form 1 records the biggest mean dropout rate (4.6364) thus the lowest retention rate of 92.82% followed by Form 2 with a mean dropout rate of 4.1818 and a retention rate of 93.67%, then Form 3 with a dropout rate of 4.2727 and retention rate of 93.73%. Form 4 records the lowest mean dropout rate of 3.0909 translating to 95.50% retention rate. In addition, the statistics show that enrolment of boys is declining with time; Form 4 class recorded the highest mean enrolment at form 1 of 65.6364, Form 3; 63.8182, Form 2; 61.9091 and form 1 class has a mean enrolment of only 59.9091 boys per school. Thus, both retention rate and enrolment have been on a down ward trend for the years covered by the study. The implication of these statistics is that the retention rate of boys is decreasing with time. This is more so due to the fact that Form 1 class records the lowest retention rate despite them having been in secondary school for only one year compared to Form 4 class which records the highest retention rate despite having been in secondary school for 4 years. A similar trend is replicated in the enrolment rates which have been on a sustained down ward trend despite the many interventions put in place by the government to boost access to secondary education including increased capitation and other favorable policy initiatives.

Socio Economic Influences of Miraa Farming on Retention of Boy Child

Respondents were asked to tick on their agreement level on statements regarding socio-economic influences of Miraa farming on retention of boy child. Table 4 presents the findings.

Table 4: Socio Economic Influences of Miraa Farming on Retention of Boy Child

Key: SA=Strongly Agree, A=Agree, NS=Not sure, D= Disagree, SD= Strongly Disagree

Statements	SA		A		NS		D		SD	
	F	%	F	%	F	%	F	%	F	%
Quick and ready money in Miraa business lures boys out of school	10	22.7	21	47.7	6	13.6	5	11.4	2	4.5
High poverty levels in the community cause boys to work in Miraa farms	25	56.8	9	20.5	3	6.8	6	13.6	1	2.3
Declining earnings from Miraa due to UK ban has contributed to inability to pay fees.	8	18.2	19	43.2	6	13.6	7	15.9	4	9.1
Students often drop out of school to work in Miraa farms to contribute in the household expenses	11	25.0	23	52.3	5	11.4	3	6.8	2	4.5
Students whose parents have big Miraa firms don't concentrate in school and finally stop schooling.	8	18.2	18	40.9	4	9.1	12	27.3	2	4.5
Parents who lack the capability to pay for the hidden school costs are forced to withdraw their children from school.	22	50.0	11	25.0	6	13.6	4	9.1	1	2.3

N=44

Findings in Table 4 show that 47.7% (21) of the respondents agreed that quick and ready money in Miraa business lures boys out of school, 56.8% (25) strongly agreed that high poverty levels in the community cause boys to work in Miraa farms, 43.2% (19) agreed that declining earnings from Miraa due to UK ban has contributed to inability to pay fees, 52.3% (23) agreed that students often drop out of school to work in Miraa farms in order to supplement the family income, 40.9% (18) agreed that students whose family have big Miraa firms don't concentrate in school and eventually drop out of school and 50% (22) of the respondents strongly agreed that parents who lack the ability to to pay for the hidden school costs are forced to withdraw their children from school.

These findings were emphasized by an administrator who put forth that;

> *When secondary school students are engaged in Miraa business, chances of dropping out are very high because of the easy money they make from the business. The boys who drop out of school come from unsupportive families so they drop out of school to sell Miraa and get money for their daily needs. Children are paid Ksh.100 per bag and most of them manage to pluck about six bags making 600 per day. This is too much money for a student who ends up using the money to lure girls, engage in alcohol sprees and other ill practices like betting. This trend contributes to school dropout (Interview, 19th February 2020).*

The sentiments were echoed by another local administrator who had this to say during the interview;

> *A good number of the boys of school going age have been going to the miraa farms and miraa selling points to be employed to tend the miraa farms, harvest the produce as well as transporting and marketing. The field offer cheap employment opportunities for the boys. The growth of miraa farms has attracted 80 % of boys from the schools in the neighbourhood who find casual jobs there (Interview, 20th February 2020).*

This implies that miraa farming and business contribute to low retention rates of the boy child through offering opportunities of employment to the students. The findings of the study strengthen the findings of other studies. For instance, Wachira (2012) study on influence of socio-economic factors on participation in secondary schools which reported that about 80% of male students and 10% of female students get involved in miraa business and involvement of boy child in the miraa business lured by ease of earning and the lucrative employment of the boys in the industry pulls them away from school. Consequently, there is low participation of boys in education; Agence (2010) found that Khat contributes significantly to boys' school dropout in Kangeta Division since boys provided most labour in Khat producing farms and in marketing the crop; Kithao (2015) that primary school pupils in Meru County are involved in buying and selling Miraa and more boys than girls are involved in buying and selling Miraa which earns them quick money. This results to truancy, failure to do homework, failure to revise for examinations and lack of concentration in class.

CONCLUSION AND RECOMMENDATIONS

The study concludes that socio economic factors such as high poverty levels, financial difficulties, quick and ready money in Miraa business greatly influence students' retention in the study area. The study recommends that government agencies collaborate with stakeholders to educate parents on the significance of education and outstanding KCPE performance. In addition, there is a need for rigorous and stringent oversight of miraa trading activities so as not to damage the education of elementary school pupils. Finally, the government should ensure that there is no child labour in Miraa farming and trade in order to save the boy children who have been severely impacted by the sub-economic county's activity.

Conflict of Interest

The authors declare no conflict of interest.

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