

Influence of School- Based Income Generating Projects on Students' Retention Rate in Secondary Education in Kenya

Dickson Kamanda Nyangaresi¹, Henry Onderi² and Benard Mwebi³

^{1, 2 & 3}School of Education, Jaramogi Oginga Odinga University of Science and Technology
P.O. Box 210-40601, Bondo, Kenya

Nyangaresi@yahoo.com, honderi@jooust.ac.ke and bmwebi@jooust.ac.ke

Abstract

The purpose of the study was to find out influence of school based income generating projects on retention rate in secondary education in Kisii County. The objectives of the study were to: find out various income generating projects; find out how income generating projects were utilized to address students' retention rate and establish the challenges facing sustenance of Income Generating Projects (IGPs) on retention of students in secondary schools. The target populations of the study were: 60 principals, 95 class teachers, 4267 form four students, 60 bursars and 1 Sub county quality assurance and standards officer (SQASO). Simple random sampling technique was used to obtain 24 principals, 24 bursars, 38 class teachers and 214 form four students. Purposive sampling in addition was used to select the SQASO. The study employed a descriptive survey design. Instruments for data collection involved semi-structured questionnaire and interview schedule. Conceptual framework was employed. Validity of instruments was enhanced under close consultations and guidance of the supervisors. Test-retest method was used to establish reliability of the instruments and a correlation coefficient of 0.87 was obtained. Quantitative data was analyzed using descriptive statistics that included percentages and frequency counts while qualitative data was analyzed thematically. Findings of the study were: secondary schools had various IGPs with the majority of the schools engaging in agricultural based projects; IGPs were used to supplement students' tea break, lunch, supper and buying uniform to bright but needy students and this has led to average retention of students. The main Challenge facing the Income Generating projects was lack of proper records. The study concluded that majority of the schools were engaged in IGPs as a way of supplementing the school budget with improved accessibility. The study recommends that there should be proper and up- to -date records on IGPs and which should be audited twice a year as a way of accountability and that a study should be carried out with a focus on the influence of school based income generating projects on students' retention rates in primary schools.

Keywords: School- Based Income Generating Projects, enrollment rates, secondary education and retention rate

Introduction

Education is a vital tool in the development of any country including Kenya, its' development would lead to accelerated economic growth, more wealth and income distribution, greater quality of opportunity, availability of skilled manpower, decline in population growth, long life, better health

outcomes, low crimes rate, national unity and political stability. This understanding has created a high demand for secondary education especially in developing countries. For example it is projected that enrollment in Kenya's secondary school is to grow by 115% from 0.9 million students in 2004 to 2.7 million by 2015 (KIPPRA, 2006) cited by Khatete (2014). Kenya's vision to be an industrialized country by the year 2030 and therefore, it demands that a majority of the youth should be able to access secondary education as a component of basic education. On the other hand, the increasing demand comes at a point in time of rising thinning resources due to low economic growth and rising poverty levels among the household.

In addition, Masimbwa (2010) argues that its' expansion can contribute to poverty alleviation. Masimbwa (2010) further added that globally, growth in demand for secondary education is driven by several factors such as the huge bulge of students completing primary education, an increased demand for new types of skills and knowledge; growth in the service sector and its requirement for knowledgeable workers to the benefit of government or agrarian sectors, a democracy's need for better educated citizens and the private returns of secondary education as labour market demands graduates with a set of knowledge and competence. But then the traditional source of financing secondary education, mainly by the governments, does not cater for all the needs of an institution. The governments world over are constrained by the budgetary allocations and competition from other sectors of the economy. Therefore there is need to explore other possible sources of financing education in order to supplement the government to promote access, retention, enrollment and quality education Simatwa and Ojwang ,2011; Getange, Onkeo & Orodho,2014; Gongera & Okoth,2013) identifies Income Generating Activities (IGAs) within schools as one of the viable sources that school management can adopt to narrow budgetary financial insufficiency brought about by inability of partners of education to meet educational duty towards education financing .

In Asian schools Self-Sufficient Schools focus the entrepreneurial flair of their staff and students on maximizing the returns to the human and physical resources at their disposal creating income to fund their education work, and providing a valuable learning experience for all (Kafka and Stephenson, 2006). Kafka and Stephenson (2006) focusing on schools in Asian countries and those in developed countries suggest that schools draw a lot of benefits by investing in agricultural projects. The authors argued that a self-sufficient School is one that covers the costs of providing an education to its students from internally generated revenue rather than relying on external financing or user fees. The rather ensures that students are retained in schools throughout the year as the school is able to provide school uniform, pay lunch, meet transport costs and field trips for the bright but needy students using money drawn from agricultural projects.

Strategies have been suggested to mitigate the inconsistency in attendance of students encountered by schools in the united stated. First and foremost, Helping schools gain control of the learning environment; Concentrating resources and efforts on providing students with challenging curriculum and high-quality instruction; providing services so that young children come to school ready to learn; Creating a professional development program aligned with the content of curriculum and focused on improving instruction and Helping schools implement comprehensive school reform programs (Lethwood, 2010) cited by Achumbi (2012).

When SAPs were introduced, in Nigeria's ,universities developed adaptive mechanisms such as; curtailments of laboratory and practical classes, limitation of field trips ,freezing of new appointments among other measures. Income generating activities such as research work, issue of bonds by Nigerian universities and introduction of module 2 studies in Kenyan universities are living example of how universities have come up with innovative programmes to generate funds internally to cushion budgetary deficit brought about by underfunding (Kimuyi and Igwe; 1998; Lumuli, 2009). Universities in Kenya have parallel programmes as one of the IGA to expand education opportunities to all students from different social economic backgrounds. Kilemi, Njuguna, Ngome, Ouma-Odero, Wawire and Wesonga (2007); Kilemi et al (2007) asserted that despite the increased Kenyan government expenditure in secondary schools educational facilities have not been adequate.

Therefore, schools look for ways of supplementing government expenditure in order to increase teaching/ learning resources to match enrolment rate. In an effort to make up to the shortfalls and enhance productivity, schools just like universities mount innovative Income Generating Activities (IGAs) by engaging in business and productive ventures. This is being undertaken for the purpose of increasing Gross Enrolment Rate, graduation rate, transition rate and reducing wastage in education (Kilemi et al 2007). This study sought to find out how secondary schools in Kisii central sub county had utilized school based projects of generating income to influence retention of students in secondary schools.

The annual conferences of Kenyan secondary school heads held in Mombasa in 2013, asserted that some schools have initiated income generating projects, others are still planning to do so (Getange, 2005, Nyambura, 2012 and Watima, 2013). Most principals who had started IGPs stated that the income realized is majorly used in paying salary for Parents teachers association (PTA), subordinate staff and maintaining the school bus. However what was not clear is how the income generated influence students' retention in schools that have initiated such projects.

Despite the increased government expenditure, not all children that enroll in secondary education complete it due to the fact that many of them have poor social economic backgrounds and demand brought about by demographic and improvement of primary school internal efficiency in Kenya (Government of Kenya, 2009). The increased demand comes at a time of unstable resources as the Government experiences poor economic growth and increasing demand from other sectors of the economy. Donor funding is unreliable as it keeps on shifting conditions and this affects most households. This has made reliance on traditional sources inadequate to support access, retention and completion rates. The Ministry of education science and technology (2005) has made efforts in encouraging schools to engage in IGPs that can fill the gap for the purpose of easing the burden of education financing to support retention in secondary schools. In response to this the GOK (2009) asserted that several alternatives in supporting education budget outside the traditional sources have been advanced with IGPs being one of the alternatives. A study by Omukoba, Simatwa and Ayodo (2011) on the contribution of income generating activities on financing secondary schools in Kenya recognized that there are some aspects of IGPs in Kenyan schools. In his study, Getange (2005) noted that school-based IGAs has played an important role in reducing fee deficits; thus, making the management of schools easier. However, these studies did not give a clear picture on the extent to which those projects influence students' retention rates in secondary schools. The present study therefore, sought to establish the influence produced by school-based income generating projects on students' retention rates in secondary education in Kisii Central Sub County and the extent to which IGPs are being used as an alternative strategy of financing education to promote students' retention.

Methodology

Research Design

This study adopted the descriptive survey design which used both qualitative and quantitative approaches to collect data from the members of the population to determine their current status. This design was found useful for the study because the performance of secondary schools continue being poor in Kisii Central Sub-County, raising the crisis of quality of educational achievement in these schools. The study sought to describe the existing situation in Kisii Central Sub County as it relates to the influence on income generating projects on enhancing students' retention in secondary education.

Area of study

The study was conducted in Kisii Central Sub County in Kisii County situated in the Lake Region. It borders Nyamira Sub County to the West, Rachuonyo Sub County to the North, Masaba Sub County

to the South East and Gucha Sub County to the South. The sub county covers a total area of 361.0 km². It consists of four administrative divisions; Kiogoro, Mosochi, Getembe and Keumbu. It has eighteen locations and forty six sub-locations. The sub county has a highland equatorial climate resulting into a bimodal rainfall pattern with an average annual rainfall of 200mm. The Sub County holds a population of 365,745 (Kenya Census Report, 2009). Agriculture contributes 80% of household income while other sectors contribute 20%. Social-economic indicators show that the number of people living in absolute poverty is 60% (DDP Kisii Central 2008-2012). The rationale for the selection of the study area is that the sub county has recorded unstable enrolment and completion rates since the inception of FPE in 2003 to date (GoK; Statistical Abstract 2008). In the sub county also 29,036 school going age children are out of school in spite of the introduction of FPE (Kenya Census Report, 2009). It carries with it some poor divisions in the sub county. This is re-affirmed by UN Research which Rankes former Nyanza and North Eastern Province as poorest zones (Dairy Nation, 2010). Further the district is the administrative centre.

Target population

A target population is one that the researcher wants to generalize the result of the study and a population defines a complete set of individuals, case or objects with some common observable characteristics. For this study, the researcher targeted all the 60 secondary schools in Kisii central sub county and the stakeholders involved in income generating projects on students' retention. These were: 60 principals, 95 class teachers, 4267 form fours, 60 bursars and 1 SQASO. (Statistical returns August 2014 Sub County Education Office, Kisii Central Sub County) Therefore, the target population was 4483.

Table 3.1 Target population for the study

Category	Target number
Principals	60
Form four class teachers	95
School bursars	60
Form four students	4267
SQASO	1
Sub Total	4483

Samples and sampling techniques

Simple random sampling was used to select schools for the study. Gorard (2001) argues that simple random sampling is free from systematic biases that stem from choices made by researchers and enable analysts to estimate the probability of any finding actually occurring solely by chance. Orodho (2005) supports that; simple random sampling is the simplest technique of ensuring that each member of the target population has an equal and independent chance of being selected. Nwana (1979), cited by Ngwacho (2011) recommends 5% to 20% sample for populations that run in thousands, however he asserts that there is no hard and fast rule on sample size. Therefore, in every sampled school, the researcher selected 5% of the form fours because they were the beneficiaries of the income generated from school based projects. In this study, 24 bursars and 24 principals representing 40% were employed as they are the individuals who handle financial issues within the school and therefore they were resourceful respondents. The study in addition employed purposive sampling to select the SQASO. Cases which have the required information to respond to research questions, then purposive sampling should be used (Mugenda and Mugenda; 2008). The choice of Sub County Quality Assurance and Standards Officers was prompted by the fact that these are the officers who carry out routine inspections of the schools. Thirty eight Class teachers of form fours were also involved in the study because they were the ones who had information of social economic background, dropouts and

transfers. Class teachers are daily in class marking class registers and were hoped to give clear students' pattern of school attendance before dropouts.

Table 3.2
Sample size

Respondents	Target population	Sample	Percentage
Principals	60	24	40
Form four class teachers	95	38	40
School bursar	60	24	40
Form four students	4267	214	5
SQASO	1	1	100
TOTAL	4483	301	6.71

From Table 3.2 above, the researcher used 24 principals, 24 bursars, 38 form four class teachers, Form four students were 214 and finally 1 SQASO. This sample size was considered adequate for the study. Neuman (2005) indicate that a sample size, 40% of the target population is large enough so long as it allows for reliable data analysis by cross tabulation, provides desired level of accuracy in estimates of the large population and allows for testing for significance of differences between estimates.

Orodho (2005) noted that we can select and adopt a method, instrument or even replicate the entire study already used by another researcher. Knowledge of these helps to guide and enable the researcher to come up with more refined and significant research findings that may help to moderate the influence of school based income generating projects on retention of students.

Questionnaires

A questionnaire is a set of carefully designed, written down, and tested questions, which are asked of individual respondents to gather information in research (Enon, 1998). Questionnaire is chosen due to its ability to ensure confidentiality of research answers from respondents (Saunders, 2007). The questionnaire is commonly used to obtain data about population, since each item is developed to address a specific objective, research questions or hypothesis of the study (Mugenda & Mugenda, 2008). Orodho, (2005) observed that questionnaires are appropriate because they are efficient, questions can be easily analyzed, anonymity is possible and questions are standardized. There were three sets of semi-structured questionnaires, that is, Questionnaire for the Principals, second questionnaire for the form four class teachers, thirdly questionnaire for school bursars and the fourth one for the form four students (Appendix I, II, III and IV respectively). The questionnaire for the Principal (QFP) was divided into four sections labeled A, B, C and D. Section A sought the background information of the school. Section B collected information on school based projects of generating income. Section C dealt with how Income generating project were utilized to address students' retention rate. Section D, gathered information on the challenges facing sustenance of IGPs. (See appendix I).

The questionnaire for form four class teachers (QFFCT) was divided into three sections, A, B and C. Section A sought the background information of the school. Section B dealt establishing schools based projects of generating income and seeks information on their availability or lack of and Section C dealt with how Income generating project were utilized o address students' retention rate (See appendix II).

The questionnaire for school bursar (QFSB) was also divided into three sections, A, B, C and D. Section A sought the background information of the school. Section B dealt with establishing school based projects of generating income and seeks information on their availability or lack of. Section C gathered information on the challenges facing sustenance of IGPs in the secondary schools (See appendix III).

The questionnaire for form four students (QFFFS) was divided into two sections, A and B. Section A collected background information on social economic status of the student. Section B dealt with establishing various schools based projects of generating income. (See appendix IV).

All questionnaires employed closed-ended and open-ended questions depending on the nature of information sought. Open-ended questions sought opinions and feelings of the respondents while closed items sought factual information. Orodho (2010) argued that open ended questionnaires give the respondents an opportunity to give an insight into the hidden feelings, background, hidden and deeper motivations, interests and much more. The Likert scale was useful in analyzing data in questions that directly involved the attitudes of the respondents (Appendix I, II, III and IV). All questionnaires were administered by the researcher and research assistant.

Interview schedule

An interview is a face-to-face oral between a researcher (interviewer) and a respondent (interviewee). Kombo and Tromp (2006), where ideas are exchanged and recorded, the study employed the use of interviews as a method of collecting data; this method was specific and contained information on the influence of school based income generating projects on students' retention rates. Structured and semi-structured interview questions were designed for this exercise. The reason for use of interviews was that they were easy to administer since the questions were prepared in advance. They also allowed a great deal of information to be gathered in a short period of time. Interviews also eliminate many sources of bias common to other instruments like observations. The questions that were asked were confidential between the researcher and the respondent. It attempted to provide a true picture of opinions and feelings. This instrument was administered by the researcher and research assistant. Interview schedule for the SQASO (See appendix V) was used to collect data on students' retention and intervention measures used by these schools to address instances of retention.

Validity of the instruments

Orodho (2012), validity refers to the degree to which a test measures what it purports to measure. For face and content validation the research instruments were presented to two experts in education planning and economics from Jaramogi Oginga Odinga University of Science and Technology. This is according to (Gall, Borg & Gall, 1996) who points out that, content experts help determine content validity by defining in precise terms the domain of the specific content that the test is assumed to represent and then determine how well that content universe is sampled by the test items. According to Kothari, 2004; Mugenda and Mugenda; 2008) validity is an acceptable method in survey research that is qualitative in nature since it lends credibility to the findings on several accounts and sources.

Reliability

Reliability refers to the extent to which a test in the research is internally consistent and yields consistent results upon testing and retesting (Orodho, 2012). To enhance reliability of the instruments, a pilot study was conducted in six schools which were not used in the final study. Mugenda and Mugenda (2008) recommend that 10% is good for a pilot study. Based on this, six schools were randomly selected from the 60 targeted secondary schools and were excluded from the actual sample of study. The prepared questionnaires were administered to these schools and re-administered shortly after the first administration and the two sets of results were analysed to obtain the reliability of the test. The test-re-test approach is intended to determine the stability of the instrument. The reliability is the correlation between the scores on the two instruments. If the results are consistent (stable) over time, the scores should be similar. To determine stability, the relationship between the two scores

obtained from the *test* and the *re-test* must be considered. This was done using the Pearson product-moment correlation coefficient (r).

The Pearson product-moment correlation coefficient (r) was calculated using the formula;

$$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

Where:

x = the first observations (*test*)

y = the second observations (*re-test*).

It was established that the correlation coefficient of 0.87 was indicated. Considering Guilford's and Fruchter (1978) values, the correlation value of greater than 0.80 can be considered as high, indicating acceptable reliability (Orodho, 2012). Therefore the instruments were considered suitable for research use. Following the findings of the pilot study, all the six principals did not respond to question 14 requiring them to state the number of acres owned by their schools. Therefore the researcher deleted this item. Question 6 was edited by introducing a likert scale after it had been left unattended. The main intention of the pilot study was to identify problems that respondents would encounter and might help improve reliability of the research instruments for the main study. This was achieved as the items in the instruments were revised depending on the result of pilot study. Some questions which were not attended to were eliminated and some edited.

Data Collection procedures

The study sought approval from the Jaramogi Oginga Odinga University of science and technology, graduate school (See appendix VI). A permit was sought from the National Commission of Science Technology and Innovation (NACOSTI) before the study was conducted (See appendix VI). Consent was sought from individual respondents and the institutions that were included in the study. Then an advance letter was sent to the sample respondents explaining the purpose of the study. The respondents were guided through the questionnaire which was also translated where necessary. Research Assistants were involved in distributing advance letters where necessary. Relevant documents (questionnaires and interview schedule) were then analyzed and gave information on influence of school based income generating projects on students' retention rates.

Data analysis

Data analysis refers to a systematic searching and arranging interviews, field notes, data and other materials obtained from the field with the aims of increasing their understanding and enabling the researcher to present them to others (Orodho, 2005). The collected data were sorted, coded and organized in tables to reveal the percentage scores of the different study attributes. The findings were also subjected to further analysis using quantitative and qualitative techniques. As for the quantitative data analysis, the researcher interpreted the field-based meanings of the collected data, and made it verbal. The responses of subjects from opinion oriented Self-Administered Questionnaire (SAQs) was computed into descriptive statistics such as; frequency, percentages, tables, and charts. Later, it was summarized and tabulated for easy presentation, assessment, analyses and interpretation. Expressions like: a bigger number, the least number, most respondents and the majority of respondents was used to describe the findings.

Qualitative data, obtained from the open-ended questionnaires and interview schedule, considered the inferences that were made from the opinions of the respondents.

Coding refers to the process of assigning numerals or other symbols to answers so that responses can be put into a limited number of categories or classes (Kothari, 2010). Kothari (2010) further argues

that such classes should be appropriate to the research problem under study. Coding is therefore necessary for efficient analysis and through it several replies may be reduced to a small number of classes which contain the critical information required for analysis (Kothari (2010).

The researcher descriptively analyzed the results of all self-administered questionnaires on the four study objectives prior to research questions. The problem under study was broken into five study areas which required the respondents to do self-rating based on the Likert scale as follows: 1 represented Strongly Disagree; 2 for Disagree; 3 for Agree and 4 for strongly agree. 1 for Very high; 2 for High; 3 for Average and 4 for Low. 1 for Very good; 2 for Good; 3 for Satisfactory and 4 for Bad. 1 for highly satisfactory; 2 for satisfactory; 3 neutral and 4 unsatisfactory. 1 for high level; 2 average level and 3 low level. 1 for adequate and 2 for inadequate. 1 for Not useful; 2 for Moderately useful; 3 for Useful; 4 for Useful. At other instances, the researcher also request the respondents to use the fill in aspect whereby chose between a “Yes” or “No” and No was taken to be 1 and yes to be a 2.

Results and Discussions

The researcher sought to establish whether land was available in the schools. The researcher sought clarification from the principals as to whether there exists income generating projects in secondary schools and the responses were recorded as shown in Table 4.13.

Table 4.13
Distribution of principals’ response on whether a school has set up income generating projects

Response	Frequency	percentage
Agree	14	70.00
Disagree	6	30.00
Total	20	100

On whether the school has set up IGPs, 14(70.00%) out of 20(100%) of the responded had set up IGPs in their schools and on the other hand only 6 (30%) had not established IGPs in their schools. The findings reveal that majority of the secondary schools in Kisii central sub county run IGPs that can influence retention of students. This finding concurs with Kilemi et al (2007) who asserted that despite the increased Kenyan government expenditure in secondary schools educational facilities have not been adequate. Therefore, schools look for ways of supplementing government expenditure in order to increase teaching/ learning resources to match enrolment rate. Further, in an effort to make up to the shortfalls and enhance productivity, schools just like universities mount innovative Income Generating Activities (IGAs) by engaging in business and productive ventures. This is being undertaken for the purpose of increasing Gross Enrolment Rate, graduation rate, transition rate and reducing wastage in education (Kilemi et al 2007).

School based income generating projects in secondary schools

Principals were next asked to list the school based income generating projects in their schools and their responses were as reported in Table 4.14.

Table 4.14
Distribution of principals’ response on income generating projects in a school set up (n=14).

Response	Frequency	percentage
Land	14	100.00
Horticulture	09	64.26
Flower gardening	02	14.29
Livestock keeping	04	28.57
Halls for hire	03	21.43

Canteen in school	06	42.86
School bus	07	50.00
Community contribution	03	21.43
Donations from churches and well-wishers	02	14.29
Scholarships from NGOs and Banks	02	14.29
Parents' contributions	14	100.00
Politicians	03	21.43

The school based income generating projects as given by the principals were: Land and parents contribution as evidenced by 14(100.00%) of the principals; horticulture farming as evidenced by 9(64.26%) of the principals; school bus for hire as reported by 7(50.00%) of the principals; canteen as responded by 6(42.86%) of the principals; livestock rearing as shown by 4(28.57%) of the principals; halls for hire, community contribution and politicians as shown by equal number 3(21.43%) of principals and lastly donations from churches and scholarships from NGOs and banks as reported equally by 2(14.29%) of the principals. This depicted that majority of the schools have set agricultural projects. Obadha (2012) had the same findings that the IGAs identified included sugarcane cultivation, maize cultivation, rearing dairy cows, hiring out school facilities for different purposes. The findings also revealed that these IGAs could give quite substantial amount of money that could contribute significantly towards development of the schools.

Class teachers' response on school based income generating projects

Class teachers were asked to respond whether their schools were engaged in income generating projects. Figure 4.2 shows their responses.

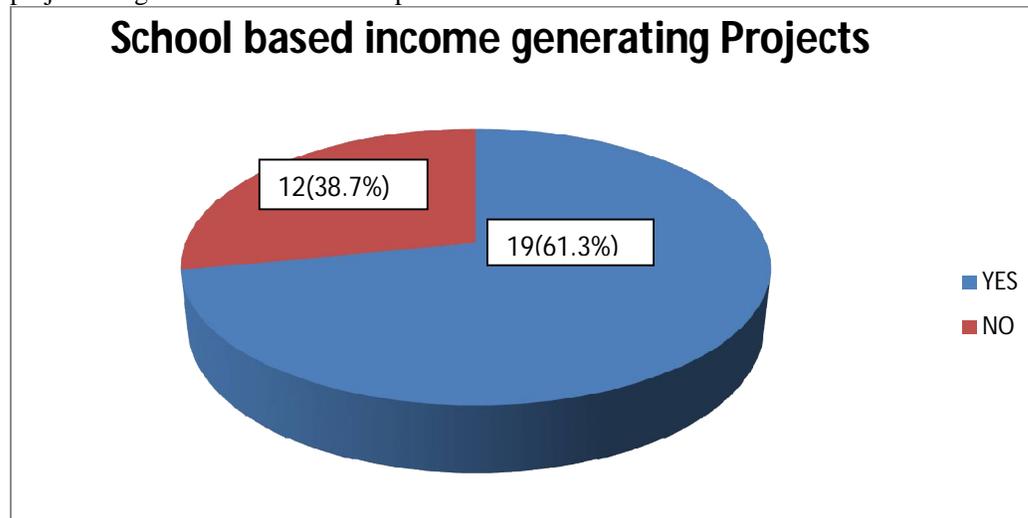


Figure 4.2: Class teachers' response on school based income generating projects

From Figure 4.2 out of a total of 31 form four class teachers who took part in the study 12(38.7%) had not adopted some IGPs while 19(61.3%) were having IGPs.

Class teachers were further requested to list the viable projects in the school and the results recorded as shown in Table 4.15 below.

Table 4.15
Class teachers' response on IGPs in their school (n=19)

IGP	Frequency	Percentage
Dairy farming	9	47.37
Crop farming	10	52.63
Fish farming	2	10.53
School bus	5	26.31
School hall	3	15.79
Fields for recreation	7	36.84
Bottled water	1	5.26
Poultry farming	7	36.84
Tents for hire	2	10.53

Ayodo, Simatwa and Omukoba's contribution of income generating activities to financing secondary school education in Kenya. Kenya: Maseno University.

Income generating projects as given by the class teachers were: crop farming as evidenced by 10(52.63%) of the class teachers; dairy farming as pointed out by 9 (47.37%) of the class teachers; fields for recreation and poultry farming were identified equally by 7 (36.84%); school hall as shown by 3 (15.79%) of the class teachers; Tents for hire as noted by 2(10.53%) of class teachers and finally bottled water as indicated by only 1 (5.26%) of the 19 (100%) of the class teachers. This finding corresponds to Ayodo, Simatwa & Omukoba (2011) who asserted that Kenyan secondary schools have various income generating activities e.g. buses, halls, furniture, uncultivated land among others which generate income that supplements their budget. Ayodo et al., 2011 adds that some of the money was used in paying BOM teachers and others in improving school facilities. These are the costs that could otherwise be born on students and end up failing to pay and finally drop out of school.

School bursar's response on school based income generating projects

School bursars were requested to establish the capability that schools had in establishing and sustaining IGPs that could be used in addressing students' retention. Their responses were recorded as shown in figure 4.3 below.

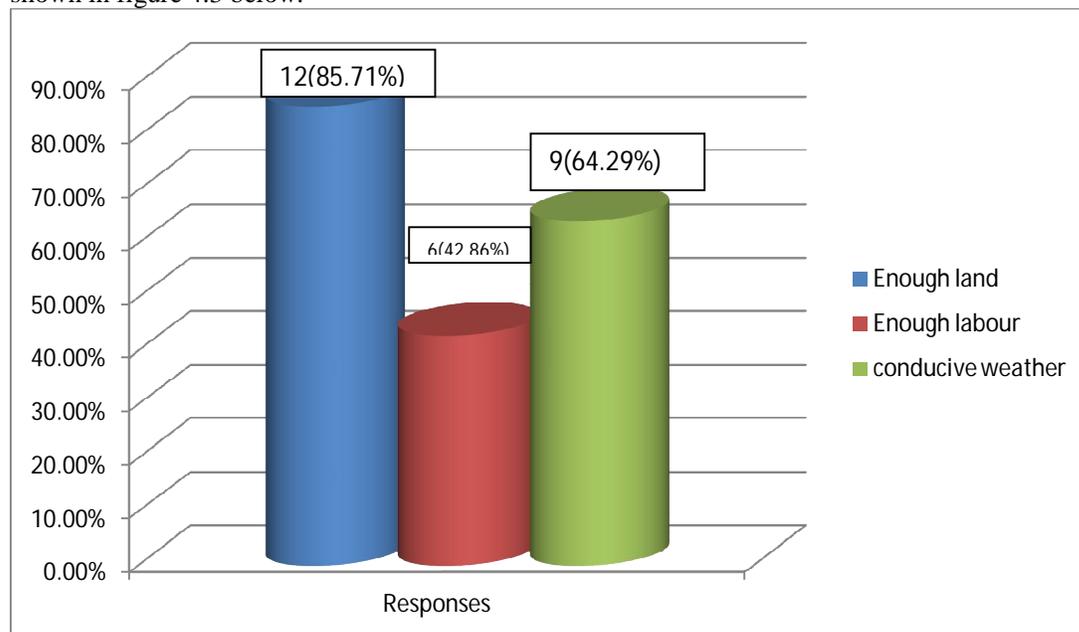


Figure 4.3, School bursars' response on capability that schools had in establishing and sustaining IGPs

The capability that schools had in establishing and sustaining IGPs that could be used in addressing students' retention were: There was enough land for putting up other various IGPs as depicted by 12(85.71%) of the bursars; Conducive weather for crops and animal farming as evidenced by 9(64.26%) of the bursars and finally enough labour as reported by 6(42.86%) of the bursars. On the same note bursars were again requested to respond by ticking the income generating project in their school. Their responses were as shown in figure 4.4 below.

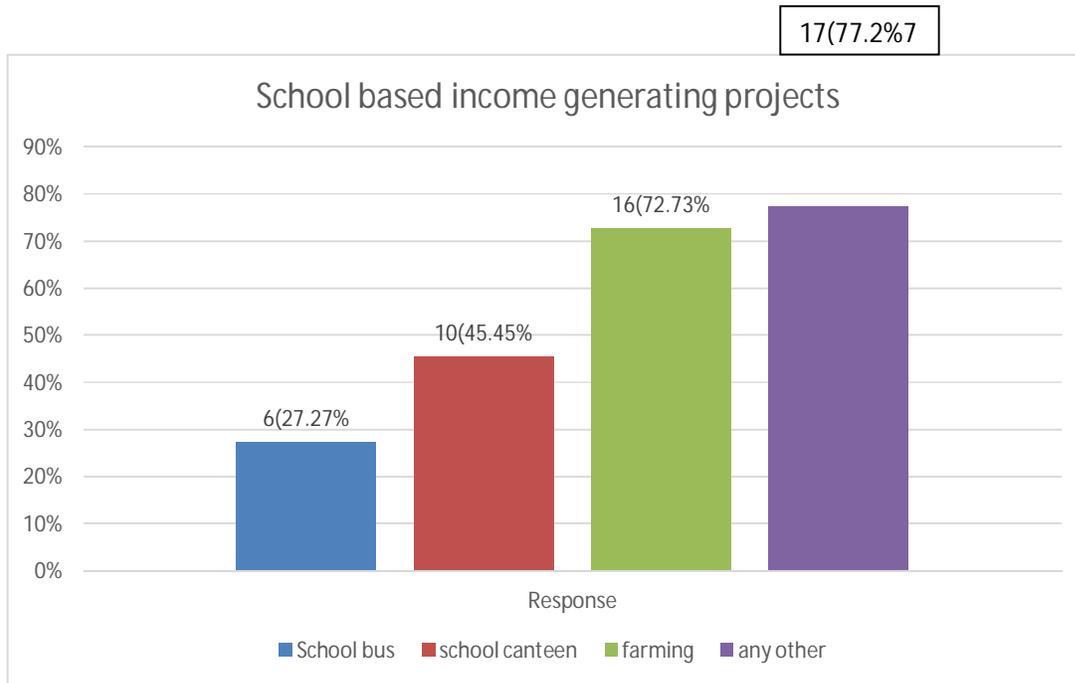


Figure 4.4 Bursars' response on school based income generating activities.

Income generating projects as reported by the bursars were: School bus as shown by 6(27.27%) of the bursars; school canteen as reported by 10(45.45%) of the bursars; farming of different kinds as given by 16(72.73%) of the bursars and the other bursars 17(77.27%) identified other sources as reported in the Table 4.16 below.

Table 4.16

Other IGPs identified by the bursars (n=22).

IGP in a school	Frequency	Percentage
Vegetable gardening	13	59.09
Dairy farming	6	27,27
Entertainment club	3	13.64
Poultry rearing	7	31.82
Fish farming	3	13.64
Sell of sweets	2	09.09
Tents for hire	3	13.64

Rabbit keeping	5	22.73
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On identifying the IGPs in their schools, bursars reported the following: Vegetable gardening as noted by 13(59.09%) of the bursars; dairy farming as shown by 6(27.27%) of the bursars; poultry farming as evidenced by 7(31.64%) of the bursars; rabbit keeping as responded by 5(22.73%) of the bursars; Entertainment club, Fish farming , Tents for hire as reported by equal number 3(13.64%) of the bursars and sell of sweets among students as given by 2 (09.09%) of the bursars. This finding illustrate that schools in Kisii central sub county have IGPs that influence students' retention. This is true according to Bray (2000), who contends that, many schools raise money through their own productive activities. The school undertakes contracts on carpentry and metal work, grow, produce and rear animals for sale. Other schools run stores, which serve the neighborhood and others. In urban areas some schools supplement their incomes by collecting empty bottles for return to drink manufacturers. In addition, children usually organize dances, drama and other fund raising events. They give an example in Rwanda where the use of organic fertilizers on small plot enables eight and nine years' old pupils to grow potatoes, worth the equivalent of US\$ 120 and makes six times what the school receives from the government for equipment.

Form four student's response on school based income generating projects

In order to establish if the existing school based income generating projects influence students' retention, they were first asked to indicate whether they were asked if they paid any levy to the school besides the government fees. The results is as shown in Table 4.17 below.

Table 4.17

Form four students' response on other levies besides the subsidized secondary education fee.

Response	Frequency	percentage
YES	149	79.7
NO	38	20.3
TOTAL	187	100

On payment of school fees besides the one the GOK pays for them ,149 (79.7%) of the sampled students agreed that they pay other levies apart from the fee paid by the GOK. 38 (20.3%) of the students reported that they don't pay any fee. This finding indicates that most schools in Kisii Central Sub County charge other fees on addition to the government fee. The findings therefore concur with Mukira (2005) who contended that traditional source of financing secondary education, mainly by the governments, does not cater for all the needs of an institution and parents paid for other charges like boarding, activity and personal effects.

The researcher further went ahead to ask form four students to give the range of the amount they pay for various activities annually. The results were analysed as shown in Table 4.218 below.

Table 4.18

The range of the amount paid for various activities annually.

Activity	Amount	Frequency	Percentage
Buying school uniform	<10,000	119	63.6
	>10000	68	36.4S
Paying for school lunch	<10000	158	84.5
	>10000	29	15.5
Paying educational trips	<10000	141	75.4
	>10000	46	24.6

Fare to school	<10000	160	85.6
	>10000	27	14.4
Buying personal effects	<10000	94	50.3
	>10000	93	49.7

< Less than
>More than

Table 4.18 shows that 119 (63.6%) of the respondents said that they pay less than kshs10000 annually in buying the school uniform and another 68(36.4%) pay more than Kshs 10000.In Paying for school lunch 158 (84.5%) pay more than Kshs 10000 whereby only 29(15.5%) pay less than Kshs 10000.It's also believed that 141(75.4%) pay less than Kshs 10000 in educational trips compared to 46(24.6%) who pay more than Kshs 10000.Fare to school is less than Kshs 10000 paid by 160 (85.6%) and 27(14.4%) who pay more than Kshs 10000.Lastly ,students also meet costs in buying personal effects whereby less than Kshs 10000 is paid annually by 94 (50.3%) and 93 (49.7%) who pay more than Kshs 10000.This is in line with GOK (2005) that despite the increased government expenditure, not all children that enroll in secondary education complete it due to the fact that many of them have poor social economic backgrounds and the vote heads provided by the ministry of education does not cater for school uniforms ,transport, boarding and personal effects.

They were then asked to state whether their schools engaged in IGPs in order to establish the influence of the income on their retention. The respondents were as shown in Figure 4.5

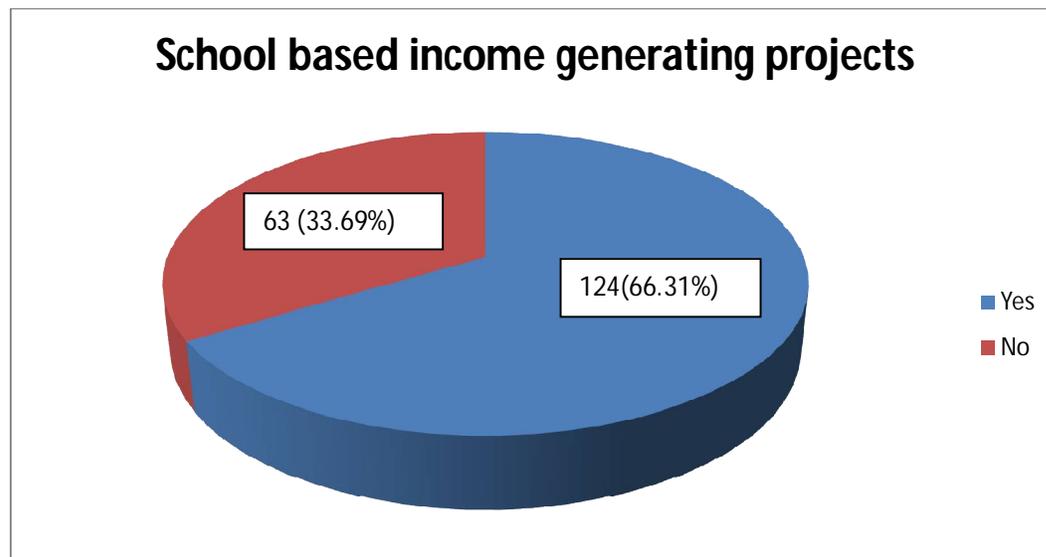


Figure 4.5, Students response on school based income generating projects

Figure 4.3, shows that 124(66.3%) confirms that their schools engaged in IGPs and different view is shared by 63(33.7%) who said that no IGPs in their schools. The findings correspond to those of the principals and class teachers that there exist IGPs in schools. Getange (2014) had the same findings that it was necessary for schools to venture into enterprises which can generate more income like rental houses, crop and animal production, intensive gardening and hiring of school facilities; minimal cost sharing to continue being adopted in financing education.

Students were then asked to list the income present in their schools and the responses were as recorded as shown in Table 4.19 below.

Table 4.19
Students' response on types of income in their schools (n=187)

IGP in a school	Frequency	Percentage
Vegetable gardening	117	62.57
Dairy farming	100	53.48
Poultry rearing	61	32.62
School bus for hire	40	21.39
Fish farming	10	5.35
Pig keeping	10	5.35
Bee keeping	8	4.28
Entertainment club	7	3.74
Sell of sweets	20	10.70
Tents for hire	15	8.02
Rabbit keeping	23	12.30

On listing the types of IGPs in a respondents' school students reported the following: more than half 117 (62.57%) students out of 187 (100%) identified vegetable gardening in their schools ; dairy farming 100(53.48%) as responded by students; poultry farming sc 61 (32.62%) as scored by students; school bus practiced in 40 (21.39%), according to students; Fish farming and bee keeping were also engaged in schools at an equal proportion of 10 (5.35%) as per the students; entertainment club in schools as reported by 7 (3.74%) of the students; Sell of sweets as recorded by 20 (10.70%) of the students; Schools also engaged in lending tents as 15 (8.02%) of the students and rabbits as indicated by 23(12.30%) of students. This finding illustrate that there exist various IGPs in secondary schools in Kisii Central Sub County that influence retention of students. Most of the IGPs here were agricultural based. The findings therefore reaffirm with Obadha (2012) who carried out a study on the impact of income generating activities on education in secondary schools in Migori County, and identified IGPs that included sugarcane cultivation, maize cultivation, rearing dairy cows, hiring out school facilities for different purposes. The findings also revealed that these IGAs could give quite substantial amount of money that could contribute significantly towards development of the schools.

SQASO's response on school based income generating projects

Sub county quality assurance and standards officer was asked to mention the kind of IGPs schools engage in within the sub county. He had these to say:

"Schools collect funds from hire of classrooms and halls during the school drama and music festivals and fields for sports competitions when they host these activities at any level. Some schools also lend dormitories during SMASSE insets and other in-service programmes. Some schools cultivate maize, beans and kales".

The points revealed by SQASO are the following on school based income generating projects in Kisii Central Sub County:

- i) Classrooms for hire
- ii) Dormitories
- iii) Maize cultivation
- iv) Beans cultivation
- v) Kales

On being asked whether those were the only IGPS in the sub county, he explained that:

Bwana (Mr.), these things are so many, you can also assist me in naming them. You said you are a teacher. Isn't? .Yes, there are reports that some schools engage in selling of snacks amongst students! And we wonder if this is wrong. Some teachers complain about this but my office has nothing against it. Talk of dairy cattles, pigs, fish, canteens, barbans, school bus and some pack battled drinking water that they sell to those who hire their premises. Aaah

nimechoka bwana na unaona nilikwambia hizi vitu ni chungu nzima. Shule haiwezi tegemea serikari peke yake. Hata wewe kama haujaanza maneno haya, go and start.

(Ok, am tired Mr. even told you early that these things are many. A school cannot depend on the government only. If you haven't started this know you also have responsibility of starting this in your school).

The points revealed by SQASO are the following on school based income generating projects in Kisii Central Sub County: Sell of snacks, Bottled water, Barbars (*kinyozi*), Dairy cattle, Pigs rearing, Fish rearing, Canteens and School bus.

The SQASO was further asked if the IGPs stated were the only one. He explained further:

The educational needs for secondary education have increased due to the introduction of Free Primary Education in 2003 and the increased transition rate .Some principals have made friends Who assist them with funds .For example, some suppliers are so good. They sometimes give grants to schools. Politicians also find their way to schools during capaining period and we have had one constructing a computer laboratory for the school. Banks, churches, alumni and harambees play a big role in financing schools. Lakini jua, hii hufanyika once sio kama serikali ambayo inatuma pesa kwa shule kila term.umenipata hapo? It must be remembered that though these systems occur ,politicians also dictate where the project has to be located .They don't just come. Take an example of an NGO that is common in Kisii County now. It has real done a good job in putting up modern class rooms for our children and now no congestion in our classrooms. Thus retention is increased year.

[But know that this happens rarely, unlike the government that sends money termly. Do you understand me well?]

The major issues that were cited by this respondent included the following:

- i) Secondary schools have more financial needs.
- ii) The government funds are never enough in schools
- iii) Principals explore different financial mechanisms for their school
- iv) The other sources of financing secondary education include; suppliers, banks, politicians, churches, harambees and alumni.
- v) Politicians influence other sources of financing education.
- vi) NGOs play a major role in construction of infrastructure in schools.

Conclusion

Based on the findings, the study concludes that the main school based income generating projects in secondary schools were: Most schools engaged in agricultural projects such as: dairy farming; crop farming; pig; rabbit and fish farming. Even in schools which engaged in IGPs, there was so little income generated to make much impact in the school budget hence difficult to be utilized in migrating retention of students.

How income generating projects were utilized to address students' retention rates.

The common IGPs such as school bus, school farm, and horticulture and school halls supported few students in school whereby they were mainly used to provide needy but bright students with tea break and supplement students' lunch and supper thereby improving their retention in schools. The income generating projects led to high enrollments, reduced dropouts, high classroom attendance, high completion rates, average retention and improved attendance in schools.

Challenges facing sustenance of Income generating projects on students' retention

The main Challenges facing the Income Generating projects were; Lack of sufficient funds; Lack of support from BOM and teachers; Lack of proper records; Lack of adequate time due to other administrative issues; Laxity and ignorance among employees; Lack of money to hire skilled manpower; High labour costs ;Lack of profits from the projects and Insufficient land.

Recommendations

- i) Resourceful projects which can generate supplementary income namely: flower gardening along the road; hire land for crop and animal production; mushroom growing; computer lessons should be established.
- ii) The government should encourage interested groups to continue and double their effort in supporting schools in order to contain students in schools.
- iii) The ministry of education should draft vote heads to schools on how income from IGPs should be distributed so as to embrace accountability.
- iv) Land should also be used for profitable projects only.
- v) Corrupt BOM should be given life sentences to serve as an example to other corrupt managers.
- vi) School managers should involve all parties in a school to take part in managing IGPs. For example agriculture teachers in managing farms and giving advice such as outbreak of diseases and pests instead of hiring somebody from outside. Students should be involved in watering seedlings and feeding livestock.

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