Agricultural Experiences as Correlates of Secondary School Students’ Achievement and Career Decisions in Agricultural Science

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Abstract
This study examined agricultural experiences as correlates of secondary school students’ achievement and career decisions in agricultural science. The study adopted a survey research design. Simple random sampling technique was employed in
selecting six hundred (600) senior secondary schools (SS II) Agricultural Science Students. Instruments used were Career Decision Questionnaire, Agricultural Experience Questionnaire and Students Achievement Test in Agriculture. Four research questions were raised to guide the study. Data was analysed using Pearson Product Moment Correlation and Multiple regression. The results revealed that poultry, fishery and cashew farming had significant correlation with students’ achievement ($r = -0.093$, -0.127 and -0.127) and career decision ($r = -0.155$, -0.136 and -.132) in Agricultural Science respectively. The findings showed that there were significant joint contributions of agricultural experiences to students’ achievement ($F_{(3,600)} = 3.992; P < 0.05$) and career decision ($F_{(3,600)} = 22.807; P < 0.05$) in Agricultural Science. The findings further revealed that fishery ($\beta = -0.79$) was the greatest predictor of students’ achievement in agriculture while poultry ($\beta = -0.333$) mostly predicted students career decision in Agricultural Science. It was recommended that curriculum planners should systematically introduce agricultural science experiences (poultry, fishery and cashew farming) into the curriculum content of all the Secondary School Students and it should not be streamlined to only science students alone because of its educational value and it relevance to the needs of the learner and society as a whole.

Key Words: Agricultural experiences, achievement, career decision in Agricultural Science

Introduction

Agriculture is introduced into the curriculum content of secondary schools because of its educational value and relevance to the needs of the individual learner and society as a whole (Ogunleye, 2002). Agriculture as one of the science subjects at the secondary school level is an important subject and an instrument per excellence for self-reliance, it is also needed as a pre requisite to study disciplines such as veterinary medicine, agricultural engineering, fishery, animal/livestock production, forestry among others.

Agriculture is an important occupation in Nigeria with over 70% of her population depending on it directly or indirectly for livelihood. It provides the bulk of employment, income and food for the rapidly growing population as well as supplying raw materials for agro-based industries. World current agricultural production has an average growth rate of 1.8% as compared to the 3% in the 1960s and therefore at a lesser pace than the demographic growth. The World Bank has shown that in Sub-Saharan Africa (to which Nigeria belongs) the annual food increase needs to reach 4%, that is more than double the current figure in order to achieve food security (International Bank for Reconstruction and Development, IBRD, 1989). It is further suggested that this can be reached through a significant progress in plant and animal
breeding that plays a key role in the development of the agricultural sector as well as a significant impact using appropriate farm mechanization (Pawlak, Pellizzi and Fiala, 2002).

Agriculture is an important contributor to the Nigerian economy and its contribution to the nation and humanity cannot be over emphasized. However, it has been observed that the attitude of students towards studying it is not encouraging at all. Student performances in external examinations as well as the low enrolment of students in Agricultural Science have been very poor and discouraging in recent past. (West Africa Examination Council Chief Examiner report 2009). Hence the need for investigating the causes of this phenomenon which may have far reaching effects as it may affect the technological breakthrough needed by our country (Betz and Taylor, 2006). Approximately 4000 employment opportunities go unfilled because of few graduates with expertise in agriculture, natural resources, veterinary medicine, and closely aligned fields (Arrington and Hoover, 2004).

The Chief examiners report of 2008-2012 on Agricultural science reveals that there was no improvement of candidates when compared to previous year according to (Abimbola and Balschweid, 2013). This situation has affected the educational pursuits and aborted the ambition of many candidates who aspired to study professional courses like agricultural engineering and agricultural education. Several studies have been conducted in and outside Nigeria to investigate the causes of students under achievement in agriculture and other science subjects. According to (Adegoke, 2002), the most recurring factors in all reports include inadequate teaching strategies employed by the teachers, and also according to Usman and Memeh (2007), the factors that negatively affect agricultural science achievement include students’ background, students’ lack of interests, students’ negative attitude towards agriculture, teacher-related factors like poor teacher preparation, unqualified Agricultural science teachers, inadequate instructional materials, poor teaching methods and lack of exposure to different agricultural experiences. General observation indicated that students perform poorly in agriculture and the WAEC Chief Examiner’s report (2009) attributed the poor performance to agricultural practical.

Therefore, from the above, it can be seen clearly that students need to be well exposed to laboratory activities and agricultural experiences early enough to have a good understanding of agricultural concepts and be able to guide against all the simple mistakes and errors committed during external examinations. According to Adane and Adams (2011) laboratory activities are characteristic features of science teaching at all level of education. Croom (2001) claims that practical works is an indispensable part in the teaching and learning of agriculture. In WAEC chief examiners report 2003, it was also reported that candidates lost marks due to their lack of exposure to agricultural
experiences such as fishery, poultry management, plantation farming, forestry, arable crop production among others. To solve these problems, teachers should be encouraged by means of sponsorship to expose the agricultural science students to those agricultural experiences and workshops that will expose them to more knowledge and increase their interest to continue in agricultural science fields. In addition, instructional materials should be provided by schools or improvised by teachers, for effective teaching and learning.

Adolescence is a critical period where decisions about future careers develop (Ogunleye, 2002). According to Gati and Saka, (2001) it is also a time when children develop knowledge about themselves, which fosters their decisions regarding their career options. The awareness of self in adolescence leads to self-efficacy around career decisions and consequently, personally satisfying career choices setting the stage for success into adulthood as indicated by Bandura, Barbaranelli, Caprara, and Patorelli, (2001). Bandura et al. (2001) stated that “Perceived self-efficacy is posited as a pivotal factor in career choice and development”. Hence, effective career education programs are essential in aiding student progress toward satisfactory career choice and forming a career identity (Conroy, Scanlon, and Kelsey, 1998). Julian (1999) reported that secondary school students found it difficult to gather information on careers and lacked clarity on the career decision process. As a result, many adolescents leave their high school experience with indecision about their future careers (Vidal-Brown and Thompson, 2001).

Kanaimba (2009) noted that great priority should be placed on agricultural sector due to its strong backward and forward linkages with the rest of the economy.

Presently in Africa, most families reside in urban, suburban cities and communities which have made most children removed from farms and agriculture in general. Most youth lack knowledge on agriculture and have a narrow perception of associated career opportunities. Among many reasons, agricultural extension was introduced to promote agriculture among future generations. These are learning events which are mostly experiential and consist of exhibitions mounted by volunteers from various fields of agricultural production. The event features many educational stations displaying and demonstrating animals, equipment, plants products and how they were manipulated to bring high productivity. The agricultural extension is an initiative that gives the ministry, farmers and stakeholders the opportunity to showcase their products, latest technologies and models of good practices for possible replication (Phipps, Osborne, Dyer and Ball, 2008).

Agricultural educators build their entire educational programs on the philosophical foundation of experiential learning and commonly describe their
instruction as practical, applied, and hands-on as indicated by (Neil, 2003). Experiential learning through events such as agricultural extension has various dimensions such as real experience, concrete experience, reflective thinking, observational learning, abstract conceptualization, active experimentation and teacher-as-facilitator according to (Herbert, 1995). According to Boud and Miller (1996) the distinguishing features of experience-based learning comprise of earlier events in the life of the learner, current life events, or those arising from the learner's participation in activities implemented by teachers and facilitators. Cheek, Arrington, Carter and Randell (1994) described experiential learning as practicing in a real situation, modelling appropriate behaviours and procedures, receiving appropriate feedback and reinforcement, and providing opportunities to apply knowledge in new situations. Experiential learning increases critical thinking and empowers students with greater responsibility after being engaged in activities or events that left them being equipped with experience due to prior knowledge.

In Africa Neil (2003) reported that, there has been less emphasis on agricultural education in primary and secondary curricula. This makes it difficult for student to take agricultural based careers, hence development of negative attitudes towards agriculture due to lack of knowledge. Attitude has been reported to be central in assessing perceptions, as it consists of affective dimension - an individual's feelings about the attitude object; cognitive – an individual's knowledge about the individual's predisposition to act towards the subject in a particular way (Steele, 1997).

Students achieve the desired outcomes in an agricultural experience through developing beliefs and attitudes around the industry of agriculture. Simply exposing students to more diverse agricultural subject matter can improve their disposition toward the agriculture industry as a potential career option (Opara, 2006). Career decision outcomes result from students experiencing educational opportunities and acquiring knowledge to form attitudes which lead to decision-making behaviour concerning careers as indicated by (Dewey, 2008). Therefore, it is important for students to have the opportunity to not only learn about career options but to take steps to plan educational opportunities directing them toward a career (Hughey and Hughey, 1999). These educational opportunities according to (Phipps et al, 2008) can be facilitated through the complete agricultural education programs because of the curricular and developmental focus on the individual. Considering the increasing demand for people with expertise in agriculture, food systems, and natural resources through 2015 (Goeccker, Smith, and Goetz, 2007) shared that the secondary agriculture programs will need to nurture the career decision process for tens of thousands of students. However, the empirical evidence supporting the success of these programs’ vocational/career thrust is not clear. Thus, it is important to determine whether or not
students are being prepared to make career decisions and if there is evidence identifying which activities in agricultural education facilitate that preparation.

In addition to programme activities in agricultural education, an identification of factors that students perceive to influence their career decisions could also be important for teachers of agriculture in secondary schools to reference when developing educational opportunities. Educational experiences are not the only influence on students; however, as concluded by Gianakos, (1999) influences on students’ career decisions can be extended to interactions with identified influential individuals. Considering the career-directed activities in which secondary school agricultural students participate, students should be prepared to identify both the program activities and the people that influenced them the most. Agriculture is a branch of science which can be taught and learnt effectively if teaching involves ‘hands on’, and ‘minds on’ activities or learner centred rather than lecture method or ‘chalk and talk’ method which is teacher centred, theoretical, boring, disconnected or artificial. In line with this, the senior secondary school curriculum recommends the use of discovery or enquiry approach of teaching agriculture with emphasizes learner involvement in practical work. This study, therefore, examined agricultural experiences as correlates of secondary school students’ achievement and career decisions in agricultural science.

**Statement of the Problem**

Observation and reports from examining bodies revealed that a high percentage of secondary school students continue to perform poorly in agricultural sciences examinations. The poor performances continue to generate much concern among parents, teachers, students and other stakeholders in the education sector. Several factors have been adduced to be responsible for these trends, such as agricultural experiences of secondary school students which may influence their level of achievement and attitude to career decision. This study, therefore, investigated agricultural experiences as correlates of secondary school students’ achievement and career decision in agricultural science.

**Research Questions**

1. What is the relationship between Agricultural experiences (fishery, poultry and cashew farming) and (a) students’ academic achievement in Agriculture Science? (b) students’ career decision in Agricultural Science?

2. What is the joint contribution of agricultural experiences (fishing, poultry and cashew farming) on (a) students’ academic achievement in Agriculture Science? (b) students’ career decision in Agricultural Science?
3. What is the relative contribution of Agricultural experiences (poultry, fishery and cashew farming) on (a) students’ academic achievement in Agriculture Science? (b) students’ career decision in Agricultural Science?

4. Which of the agricultural experiences (fishing, poultry and cashew farming) will predict (a) students’ academic achievement in Agriculture Science? (b) students’ career decision in Agricultural Science?

Methodology

Research Design: This study adopted a descriptive survey of correlational type. Senior secondary school two students (SS2) offering Agricultural Science drawn from six public senior secondary schools in Oorelope Local Government Area were involved in the study. This local government area was stratified into two constituencies; three public secondary schools were randomly selected from each constituency. A total sample of 600 students took part in the study.

Research Instruments: Four research instruments were used for the collection of data. They are:

1. Career Decision Questionnaire (CDQ)
2. Agricultural Experiences Questionnaire (AEQ)
3. Students Achievement Test in Agriculture (SATA).

Career Decision Questionnaires (CDQ): The Career Decision Questionnaires (CDQ) was designed to evaluate students’ opinion about their choice of career based on these Agricultural experiences (fishery, poultry and cashew farming). It is made up of three parts (A, B and C). Part A contains personal data and variables related to students, while part B consists of items relating to choice of career in agricultural science and part C contains 20 items placed on a four-point Likert-scale of Strongly Agree(SA), Agree(A), Disagree(D), Strongly Disagree(SD).

The researchers gave the instrument to two science lecturers in the department of teacher education, faculty of education, university of Ibadan who helped to establish its content and face validity. It was subjected to trial testing by administering it to 40 SSII students from a school that was not part of the main study to determine its reliability. The reliability of the instrument was done using Cronbach alpha and the reliability index of 0.78 was obtained.

Agricultural Experiences Questionnaire (AEQ): Agricultural Experiences Questionnaire (AEQ) was designed to assess students’ agricultural experiences. It is made up of two parts (A and B). Part A contains personal data and factors related to
students, while part B consists of 30 items placed on a four-point Likert-scale of Strongly Agree(SA), Agree(A), Disagree(D), Strongly Disagree(SD) to test students’ agricultural experiences. Face and content validity of the instrument was established. It was trial tested on 40 SSII students from school that were not part of the study. The reliability of the instrument was done using Cronbach alpha and the reliability index of 0.76 was obtained.

**Students Achievement Test in Agriculture (SATA):** The researchers used the students’ achievement test to measure the student performance in agricultural experiences. The test consists of thirty (30) questions ten questions each from poultry, fishing and cashew farming. The reliability of the instrument was done using Kuder-Richardson Formula 20 (KR20) and the reliability index of 0.78 was obtained.

Data collected were analysed using descriptive statistics of mean, standard deviation and Inferential statistics of Pearson product moment correlation and Multiple regression at 0.05 level of significance.

**Results**

**Research Question 1a:** What is the Relationship between Agricultural experiences (Fishery, Poultry and Cashew farming) and students’ academic achievement in Agricultural Science?

Table 1 Shows that the correlation between poultry management, fishery production and cashew farming \( r = -0.093, P<0.05 \), \( r = -0.127; r<0.05 \) and \( r = -0.127; r<0.05 \) were significant on student achievement in Agricultural Science respectively. This implies poultry management, fishery production and cashew farming were related to student achievement in Agricultural Science.

**Research Question 1b:** What is the relationship between agricultural experiences (Fishery, Poultry and Cashew farming) and students’ career decision in Agricultural Science?

Table 2 shows that the correlation between poultry management, fishery production and cashew farming \( r = -0.155, P<0.05 \), \( r = -0.136; r<0.05 \) were positively significant on students’ career decision in Agricultural Science. The correlation of cashew farming \( r = -0.132, P<0.05 \) was negative with students’ career decision in Agricultural Science.

**Research Question 2a:** What is the joint contribution of agricultural experience (Fishery, Poultry and Cashew farming) on students’ academic achievement in Agricultural Science?
Table 3 shows that there is a significant joint contribution of agricultural experiences (Fishery, Poultry and Cashew Farming) on Students academic achievement in agricultural science. Thus, agricultural experience accounted for 1.5% of the total variance in the student academic achievement (Adjusted $R^2 = .015$). This joint relationship is shown to be significant ($F_{(3,600)} = 3.992; P < 0.05$). This implies that agricultural experiences (fishery, poultry and cashew farming) significantly contributed to students’ academic achievement in agricultural science.

**Research Question 2b:** What is the joint contribution of Agricultural experience (Fishing, Poultry and Cashew farming) to students’ career decision in Agricultural Science?

Table 4 shows that there is significant joint contribution of the Agricultural experiences (Fishery, Poultry and Cashew farming) on Students’ career decision in agricultural science ($R = .320a$).

Thus, agricultural experiences accounted for 9.8% of the total variable in the Students career decision in Agricultural Science (Adjusted $R^2 = 0.098$). This joint relationship is shown to be significant ($F_{(3,600)} = 22.807; P < 0.05$). This implies that the students’ agricultural experiences significant jointly contributed to the students’ career decision in agricultural science.

**Research Question 3a:** What is the relative contribution of agricultural experiences (Poultry, Fishery and Cashew Farming) to students’ achievement in Agricultural Science?

Table 5 revealed that all the independent variables Poultry ($\beta = -.024; t = -.498; p < 0.05$, Fishery ($\beta = -.079; t = -1.505; p < 0.05$) and Cashew farming ($\beta = -.0.062; t = 1.261; P < 0.005$) had relative contributions to students’ achievement in agricultural science. This implies, that there is relative contribution of independent variables on students’ achievement in agricultural science.

**Research Question 3b:** What is relative contribution of agricultural experiences (Fishery, Poultry and Cashew farming) to students’ career decision to agricultural science?

Table 6 reveals that all of the independent variables Poultry ($\beta = -.333 t = 3.837; P < 0.05$), fishery ($\beta = .179 t = 4.453, P < 0.05$) and cashew farming ($\beta = .224; t = -7.052; P < 0.05$) had relative contributions to students’ career decision in Agricultural Science. This implies, that there is relative contribution of independent variables on students’ career decision in Agricultural Science.
Research Question 4a: Which of the Agricultural experiences (Fishing, Poultry and Cashew farming) mostly predict students’ achievement in Agricultural Science?

Table 5 revealed that Fishery ($\beta = -0.79; t = -1.505; P < 0.05$) predicted students’ achievement in Agricultural Science most, followed by Cashew farming ($\beta = -0.062; t = -1.261; P < 0.05$) while Poultry ($\beta = 0.24; t = -495; P < 0.05$) was the least variable that predicted their achievement. Therefore, all the independent variables predicted students’ achievement in Agricultural science. The prediction equation is given by

\[ Y = 24.099 - 0.036x_1 - 0.117x_2 - 0.078x_3 \]

\[ x_1 = \text{poultry}; \ x_2 = \text{fishery}; \ x_3 = \text{cashew farming} \]

Where $Y = \text{achievement score in Agricultural Science}$.

Research Question 4b: Which of the agricultural experience (Poultry, fishery and cashew farming) will predict students career decision in Agricultural Science.

Table 6 revealed that poultry ($\beta = -0.333; t = 3.837; P < 0.05$) predicted students career decision in Agricultural Science most, followed by cashew farming ($\beta = 0.224; t = -7.052; P < 0.05$) while fishery ($\beta = 0.179; t = -0.453; P < 0.05$) was the least variable that predicted students’ career decision in Agricultural Science. The prediction equation is given by

\[ Y = 54.351 + 0.366X_1 + 0.454X_2 - 0.569X_3 \]

Where $Y = \text{Career Decision in Agricultural Science}$

$X_1=$Poultry; $X_2=$ Fishery and $X_3=$ Cashew Farming

Discussion

The finding shows that there is a significant relationship between agricultural experiences (poultry, fishery and cashew farming) and students’ achievement in Agricultural Science. This might be as a result of the fact that students’ exposure to these agricultural experiences opportune them to practically interact with their prescribed agricultural texts and real life situations. The result of this is in agreement with the finding of findings of kitsantas (2002) who reported that agricultural experiences (poultry, fishery and cashew farming) relates to academic achievement because they provide specific performance standards by which students’ can gauge their progress. Ricketts, Duncan and Peake (2006) who found a low but positive correlation between the level of students’ engagement in agricultural science education programmes (Future Farmers of America FFA) on students’ achievement in science.
The finding shows that there is a significant relationship between agricultural experiences (poultry, fishery and cashew farming) on students’ career decision in Agricultural Science. The finding of significant relationship is in accordance with the findings of Fizer (2013) who found that Future Farmers of America (FFA) which teaches high school students about topics related to agriculture through classes, hands on experience, competitions, and conventions played a bigger role in choosing a major in Agricultural field. It also supports the findings of Wildman and Torres (2002) who also found that prior agricultural experience, including FFA, was very important to students when choosing a major in agricultural field. Adam, Marx, Jon and Kitchel (2014) in their study found that supervised Agricultural Experiences (SAEs) did not highly influence secondary agricultural education students’ career decisions self-efficacy.

This finding of positive correlation negates the research work of Alibayghi, Afsharzade, Moradi and Pirmoradi (2014) who in their study found that the experience of the youth was not significant on students’ choice of careers in Agriculture. Adedapo, Sawant, Kobba and Bhise (2014) found significant relationship between work experience in agriculture on students’ choice of agriculture as a course and profession among youths in the University.

The results showed that there is a significant joint contribution of agricultural experiences (Fishery, Poultry and Cashew Farming) on students’ academic achievement in agricultural science. This implies that agricultural experiences (fishery, poultry and cashew farming) significantly contributed to students’ academic achievement in agricultural science. However, the positive significant relationship and contributions of all the independent variables to achievement in agricultural science may be as a result of the fact that students have a specific interest and exposure towards agricultural science. The result of the study corroborates the findings of Linn (1992) who found that attitude associated with science appear to affect students’ participation in science as a subject and impact performance in science.

The results showed that there is a significant joint contribution of agricultural experiences (Fishery, Poultry and Cashew Farming) on students’ career decision in Agricultural Science. The findings agreed with the findings of Adedapo, Sawant, Kobba and Bhise (2014) who in their study found significant relationship between work experience in agriculture on students’ choice of agriculture as a course and profession among youths in the University. This negates the research work of Levon and Bowen (2005) who found that former students who chose a career in agriculture reported that several themes influenced their chose of career they included career opportunities, high school educational experiences, and work experiences.
The findings also revealed that all of the independent variable (poultry, fishery and cashew farming) had significant relative contribution to students’ achievement in and their career decision in Agricultural Science. This implies, that each independent variable predicted students’ achievement in and their career decision in Agricultural Science. This might be as a result of the exposure that students’ had on all these agricultural experiences. The fact that poultry farming most predicted students’ career decision indicates that this may be seen as a viable means of livelihood and increased economic empowerment especially in the light of high levels of unemployment and the need for entrepreneurship development in Nigeria. More Students may therefore be encouraged to opt for agricultural science careers.

Conclusion

This study investigated agricultural experiences as correlates of Secondary School Students’ achievement in and career decisions in agricultural science. All the three independent variables (Fishery, Poultry and Cashew farming) had significant correlation, composite and relative contributions to students’ achievement in and career decision in agricultural science. In order to improve students’ achievement in secondary schools Agricultural Science, teachers should conduct effective Agricultural teaching activities and expose students to different Agricultural experiences in such a way as to arouse their interest and foster a more positive attitude towards a career decision in agricultural science.

Recommendations

1. Agricultural Science teachers should expose students to viable learning activities in poultry, fishery and cashew farming to provide them with the knowledge, skills and experience and to develop their interest in the subject.

2. Curriculum planners should effectively integrate these three components of agricultural science into the curriculum content at the Secondary School level, and it should not be streamlined to only science students because of its educational value and it relevance to the needs of the individual learner and society as a whole.

3. Schools and teachers should be supported by agricultural enterprises, farmers’ associations and other agro-allied industries by means of sponsorship to expose the Agricultural Science Students to these agricultural experiences and workshops that will provide them with more knowledge and experience as well as employment.
4. Government should ensure increase in research and development efforts as well as extension outreach where students can be funded to practice as agriculturists.

References


**APPENDIX**

**LIST OF TABLES**

Table 1: Correlation matrix of independent variables on Students’ Agricultural Experiences (Fishing, Poultry and Cashew Farming) and Students’ achievement in Agricultural Science.

<table>
<thead>
<tr>
<th></th>
<th>TEST</th>
<th>AGPOULTRY</th>
<th>AGFISHERY</th>
<th>AGCCASHEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST</td>
<td>1</td>
<td>-0.93*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGPOULTRY</td>
<td>-0.93*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGFISHERY</td>
<td>-0.127*</td>
<td>0.534*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AGCCASHEW</td>
<td>-0.117*</td>
<td>0.432*</td>
<td>0.551*</td>
<td>1</td>
</tr>
<tr>
<td>MEANS</td>
<td>16.86</td>
<td>31.37</td>
<td>31.22</td>
<td>31.54</td>
</tr>
<tr>
<td>S. D</td>
<td>5.624</td>
<td>3.770</td>
<td>3.809</td>
<td>4.509</td>
</tr>
</tbody>
</table>

* Denotes correlation at 0.05 Level of Significant.
Table 2: Correlation matrix between agricultural experiences (Fishery, Poultry and Cashew farming) and Students’ career decision in agricultural science

<table>
<thead>
<tr>
<th>CAREER DECISION</th>
<th>AGPOULTRY</th>
<th>AGFISHERY</th>
<th>AGCCASHEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGPOULTRY</td>
<td>.155*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AGFISHERY</td>
<td>.136*</td>
<td>.534*</td>
<td>1</td>
</tr>
<tr>
<td>AGCASHEW</td>
<td>.132*</td>
<td>.432*</td>
<td>.551*</td>
</tr>
<tr>
<td>MEANS</td>
<td>62.04</td>
<td>31.37</td>
<td>31.22</td>
</tr>
<tr>
<td>S. D</td>
<td>7.701</td>
<td>3.770</td>
<td>3.809</td>
</tr>
</tbody>
</table>

* Denotes correlation at 0.05 level of significant.

Table 3: Summary of Multiple Regression Composite contribution of agricultural experiences (Fishing, Poultry and Cashew Farming) to Students’ achievement in agricultural science

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SUM OF SQUARE</th>
<th>D.F.</th>
<th>MEAN SQUARE</th>
<th>F</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>373.756</td>
<td>3</td>
<td>124.585</td>
<td>3.991</td>
<td>.008*</td>
</tr>
<tr>
<td>Residual</td>
<td>18728.712</td>
<td>600</td>
<td>31.215</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19102.469</td>
<td>603</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .140a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .020</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Adjusted R² = .015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std Error of the estimate = 5.587</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* denote significant relationship at 0.05 significance level

Table 4: Summary of Multiple Regression Composite contribution of agricultural experiences (Fishing, Poultry and Cashew Farming) to students’ career decision in Agricultural Science

<table>
<thead>
<tr>
<th>TMODEL</th>
<th>SUM OF SQUARE</th>
<th>D.F.</th>
<th>MEAN SQUARE</th>
<th>F</th>
<th>SIG.</th>
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</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3665.971</td>
<td>3</td>
<td>1221.990</td>
<td>22.807</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>32147.367</td>
<td>600</td>
<td>53.579</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>35813.338</td>
<td>603</td>
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</tbody>
</table>
Table 5: Summary of multiple regression showing relative contributions of Students’ Agricultural experiences in fishery, poultry and cashew farming on students’ achievement in Agricultural Science

<table>
<thead>
<tr>
<th>MODEL</th>
<th>UNSTANDARDIZED COEFFICIENTS</th>
<th>STANDARDIZED COEFFICIENT</th>
<th>T</th>
<th>SIG.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>STD. ERROR</td>
<td>BETA</td>
<td>RANK</td>
</tr>
<tr>
<td>(Constant)</td>
<td>24,099</td>
<td>2.209</td>
<td>10.909</td>
<td>.000</td>
</tr>
<tr>
<td>AGPOULTRY</td>
<td>-.036</td>
<td>.073</td>
<td>-.024</td>
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</tr>
<tr>
<td>1 AGFISHERY</td>
<td>-.117</td>
<td>.078</td>
<td>-.079</td>
<td>1st</td>
</tr>
<tr>
<td>AGCASHEW FARM</td>
<td>-.078</td>
<td>.062</td>
<td>-.062</td>
<td>2nd</td>
</tr>
</tbody>
</table>

Table 6: Summary of multiple regression showing relative contributions of agricultural experiences (Fishery, Poultry and Cashew Farming) to students’ career decision in Agricultural Science

<table>
<thead>
<tr>
<th>MODEL</th>
<th>UNSTANDARDIZED COEFFICIENTS</th>
<th>STANDARDIZED COEFFICIENT</th>
<th>T</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>STD. ERROR</td>
<td>BETA</td>
<td>RANK</td>
</tr>
<tr>
<td>(Constant)</td>
<td>54.351</td>
<td>2.894</td>
<td>18.779</td>
<td>.000</td>
</tr>
<tr>
<td>AGPOULTRY</td>
<td>.366</td>
<td>.095</td>
<td>.179</td>
<td>2nd</td>
</tr>
<tr>
<td>1 AGFISHERY</td>
<td>.454</td>
<td>.102</td>
<td>.224</td>
<td>3rd</td>
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<tr>
<td>AGCASHEW FARM</td>
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<td>.081</td>
<td>-.333</td>
<td>1st</td>
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</tbody>
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