

OCCUPATIONAL ACCIDENTS IN SECONDARY SCHOOL FARMS, CAUSES AND STRATEGIES IN UDI LOCAL GOVERNMENT AREA OF ENUGU STATE

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Abstract

This study was conducted to determine the occupational accident in secondary school farm; causes and strategies in Udi Local Government Area of Enugu State. Five research questions guided the study. Survey research design was adopted for the study. Five well-structured questionnaire was used to collect data and the collected data were analyzed using mean and standard deviation. The primary data used in this study were obtained from a total population of 350 agricultural science teachers, students and principals in the 35 public secondary schools in Udi Local Government Area of Enugu state. Since the population was manageable, no sampling was done. The study was validated by three experts in agricultural education department. The study revealed that there are 11 forms of Occupational Accidents in Secondary School farms, 14 Causes of Occupational Accidents in Secondary School farms, 13 effects of occupational Accidents in Secondary School farms, 10 teacher-related measures for reducing occupational Accidents in Secondary School farms, and 11 students-Related measures for reducing occupational Accidents. Based on the findings of this study, it was recommended among others that the school administration and Agricultural science teachers should ensure proper supervision during practical sessions in the school farm. Parents should be encouraged to provide for their wards personal safety wears for their practical farm work especially those not too expensive to procure.

Keywords: Occupational Accident, School Farm, Causes and Strategies, Secondary School.

Introduction

The teaching and learning of Agricultural science have been progressing for over a long time owing to the benefits derivable from Agriculture. Agriculture is taught in primary school level, Secondary School level, colleges and universities in Nigeria. Therefore, it is essential to have school farm in Secondary Schools for practice purposes. According to Daniel Ighakpe, (2018) School farms are not just spaces for growing food items. They are complete learning zones, which largely succeed in taking learning to new heights. School farms come in handy when it comes to teaching a variety of topics in agriculture, be it Crop Rotation, Mixed Cropping, Inter-Cropping, among others. For a successful school farm, implements and practical equipment should be purchased and distributed by the state government. Daniel Ighakpe (2018) also noted that whenever there is a record of bumper harvest in the secondary school farm, the pupils/students can be fed from the produce, while proceeds from the ones sold can be used to develop the school. The knowledge obtained from practical sessions on the school farm helps not only to re-enforce what is taught in the classrooms. It also teaches pupils, and students alike,

about eating healthy, about how food arrives our homes from the farms, etc. It also equips the pupils/students with first-hand knowledge of how to run agribusinesses. In view of the foregoing, it is important that both private and public schools at all levels establish viable school farms. Indeed, school farms are critical to meaningful engagement of students in practical agriculture.

School farm is a farm set up by a school for the purpose of practical teaching and learning of Agricultural Science and its related subjects/ courses. It can also be established for skills acquisition and entrepreneurship development, or as a business run by the school. It's very important for every school that offers Agricultural Science and its related subjects/ courses to establish school farm where the teachers can do on the farm demonstrations of what they taught the pupils/ students in classrooms. This will enable the pupils to garner practical knowledge in Agricultural Science. Without practical, agriculture is incomplete. (Fabian George, 2020). School farm according to (Onwumere, Modebelu, and Chukwuka, (2016)) is a place where student of agriculture acquire practical skills and knowledge in Crop or Animal production.

School Farms according to Edu Delight, (2019) is also known as a land laboratory, it's a place where student learn Agriculture by doing it themselves.

School Farm can also be seen as any type of land laboratory or feeding facility utilized by the agricultural science program; the laboratory/facilities could include but not limited to greenhouses, livestock/ small animal housing, crop fields, aquaculture tanks, orchards, soil pits, grass fields among others (Angela Gilbert, 2013). According to Ladokun, (2018) school farm are characterized by almost everything learnt in Agriculture by students. What the students learnt in the classroom can be practiced, observed or demonstrated on the school farm. Most of the activities on the school farm require supervision by the teacher of Agriculture and the farm provide an enclosed piece of land where crops and animals can be raised. It is accessible to the entire school and community.

An occupational accident is an unexpected and unplanned occurrence, including acts of violence, arising out of or in connection with work, which results in one or more workers incurring a personal injury, disease or death (international labor Organization, 2018). Occupational Accidents in Secondary School Farm according to Yohanna, (2010) can be explained to mean anything unpleasant or damages which happens unexpectedly or by chance that may result in injury ,loss of life, property damage and time loss as a result of operating farm machinery or as a result of working in the in secondary school farm.

According to Ufkes and Bright, (2019) occupational accident maybe caused by overturning tractors and heavy machinery. Tractors and other kinds of farm equipment are notoriously heavy and difficult to operate. Falls also in the Farm, toxic chemical exposure to pesticides, suffocation, among others can leave Students with broken bones, traumatic brain injuries, and many other severe injuries. Many fatal farming accidents are linked to suffocation and asphyxiation, limbs crushed with agricultural machinery. Limbs, fingers, and other extremities can easily get caught in the complex gear, chain, and pulley mechanisms of farm equipment.

Form of Occupational Accident in Secondary School Farm

Occupational Accident in Secondary School Farm can take the form of:

- **Fracture/ broken bones:** A fracture is a break, usually in a bone. If the broken bone punctures the skin, it is called an open or compound fracture. Fractures commonly

happen because of car accidents, falls, or sports injuries. Other causes are low bone density and osteoporosis, which causes weakening of the bones (Yvette brazier, 2021).A fracture is a broken bone. It can range from a thin crack to a complete break. Bone can fracture crosswise, lengthwise, in several places, or into many pieces. Most fractures happen when a bone is impacted by more force or pressure than it can support (Giorgio, 2017).

- **Dislocation:** The place where two or more bones in the body come together is called a joint. A dislocation occurs when the bones in a joint become separated or knocked out of their usual positions. Any joint in the body can become dislocated. If the joint is partially dislocated, it is called a subluxation. Dislocations can be very painful and cause the affected joint area to be unsteady or immobile (unable to move). They can also strain or tear the surrounding muscles, nerves, and tendons (tissue that connects the bones at a joint) (Virginia Rawls, 2021).
- **Burns and Scalds:** According to Farm Health admin, (2021) there are many causes of burns on school farms. These include burns from friction, heat, sun, chemicals, equipment and fuels. Some causes of burns include UV radiation (sunburn), flame, radiant heat, hot liquids or gases, electricity, fuels and certain chemicals. The cause of the burn will determine the category of the burn. Sometimes Students use burning to reduce pests in fields, get rid of stubble and snails. Carelessness is the most common cause and to avoid burns on the farm and in the home, proper safety precautions needs to be undertaken. There are several categories of burns: dry/wet burns – flames & scalds,
- Chemical burns – e.g. acid, alkaline (lime), or organic compounds, electrical burns, Mouth/throat/inhalation burns, Radiation burns, the category of the burn. Molten substances/plastics/metals and bitumen burns. All deep burns need emergency medical care and the management of the burn will vary depending on the category of the burn. According to Roddick, 2018, john, 2022, Johnson 2022, other forms of Occupational Accident in secondary school may include

wounds, poisoning, hemorrhage, sun burn and heat cramps.

Causes of Occupational Accident in Secondary School Farm

Working on school farm is hard. A day's work typically involves hard labor for long hours in conditions that can be less than ideal. Machines and other advances have made some jobs on the farm easier, but modern technologies and techniques come with their own hazards. Farming is one of the most dangerous occupations in the Nigeria. Some of the biggest dangers for Students on the farm include heavy machinery, heights, toxic chemicals, and more. Ufkes and Bright (2019) states the causes of occupational accident as:

- **Tractor overturn accidents:** students can become pinned underneath tractors and other heavy machinery when they overturn. Tens of thousands of pounds fall to the side in an overturn accident, putting the operator of the tractor and others in the vicinity at risk of being crushed. Crush injuries can consist of broken bones, significant bleeding, and damage to organs. Victims may also develop compartment syndrome, a complication where pressure rises inside damaged tissue. Without immediate medical attention, muscles and nerves in the injured area may die.
- **Falls:** Many jobs on the farm require students to scale heights. Falls from ladders, machines, barns, and more can lead to serious injuries and even death. Aerial lifts are a particularly dangerous piece of equipment found on school farms. The risk of falling from an elevated bucket or platform is exacerbated by the unstable nature of the machines, as well as the frequency of defects.
- **Entanglement and amputation:** The moving parts of heavy machinery can do severe damage to the human body. Students may get caught in machines when they are in use or if the machine is not powered down during maintenance and repairs. Arms, hands, and fingers are the parts of the body most at risk of being trapped, crushed, or cut by running machinery. Serious lacerations, dislocations, and even traumatic amputations may occur. Ufkes and bright, 2019 further noted suffocation, burns, toxic exposure, animal injuries and vehicle accidents as Occupational Accident in secondary school farm.

Effect of occupational Accident on Secondary School Students

Effect refers to a result, consequence or outcome of some action, event, agent or cause, Rene Tetzner (2020). Effect of occupational accident in secondary school farm are consequences or result of accident occurrence in school farm, the effect includes: injury, loss of life, time loss, tangible loss as a result of operating farm machinery or as a result of working in the secondary school farm (Yohanna, 2010). when accident occur in school farm, the students involved are harmed and withdrawn from school work for treatment, such situation will lead to the students work either left undone or passed to other students, this will lead to low productivity, anxiety, depression, discouragement, embarrassment, low self-esteem, loss of resources and time or even death. To the teacher and school authorities, hug amount of money may be spent on treatment of the victim, the school may experience backwardness because some parents may not want to put their children in that school or may withdraw their children for fear of being killed or injured in the school farm (J. Bonilla, 2016).

It is known fact that children and young people growing up in a farm environment run a greater risk of being injured or dying in a farm accident than their non-farming counterparts and Secondary school children are not exceptional. Accidents are still the most common cause of death among children/ Students. Nearly half of all fatal injuries among student under the age of 17 occurred in the farm. There are currently still too many children injured, mutilated or killed in occupational accident, and children living on farms are at higher risk than hired workers (Wright, Marlenga and Lee, 2013)

Teacher-Related measures for Reducing Occupational accident in secondary school farm

Wilson Kehoe Winingham, (2019) and Lindsay Pringle, (2021) states that teacher related measures of reducing occupational accident in secondary school farms are:

1. The teacher should read the manual to the students: The teacher should always thoroughly read the manual for each piece of equipment for the Students. Because newly purchased tractor may function differently than old one, for example. Then, the Students and the teacher should comply with the instructions and rules.
2. The teacher should endeavor to fence off all water sources such as dams, ponds, septic tanks, sheep dips, pools and creeks to avoid occupational accident in secondary school Farm.

3. The teacher should make sure that hazardous areas are locked and inaccessible to students
4. The teacher should endeavor to lock up chemicals and guns where Students cannot gain access to it
5. The teacher must ensure that electrical equipment and other dangerous materials are out of reach of the students, and should be informed before having access to the equipment's
6. The teacher must not allow the Students to ride on farm machinery, such as tractors and quad bikes.
7. The teacher should ensure that Students doesn't have access to any ladders and doesn't climb to heights (such as on hay stacks).
8. The teacher should teach the Students about both the positive and dangerous aspects of livestock and farm animals and also teach safety rules that apply to the different areas of the farm.
9. Teachers should be prepared in case of emergencies: The teachers and school manager should ensure that there is provision for emergency exit and fire escapes within the school structure. Possibly, narrow paths should be widened to ensure easier passage for all. The designated emergency exit points should be clearly marked too. A few moments of drills on using this would make students and teachers prepared in case of emergency.

Student-related measure for Reducing Occupational Accident in Secondary School Farm 1.

Students should be sure to wear closed-toed shoes like sneakers: Farms can have lots of stuff laying on the ground that Students probably don't want to step on like nails, wood, metal, and animal droppings. If you've ever stepped barefoot in animal droppings, you know it is not a pleasant experience or something you ever want to do again!

2. The Students should ask their teacher about how to work or play with farm animals: Some farm animals, like rabbits, may be really friendly; however, some animals, like cows, horses, and even chickens can hurt the Students if they don't know how to work with them. The Students should make sure to ask their teachers how to best work with animals before they go near them.

3. The Students should endeavor to wash their hands after working with animals: A fluffy little chicken can be cute, but it can also be deadly! Don't worry, the chicken won't go on a rampage, it's just the zoonotic diseases you can pick up from farm animals that can be harmful. Zoonotic diseases are illnesses that are passed on from animals to humans. Many farm animals, like chickens, can pass on life-threatening diseases to people, so it's

important for the Students to thoroughly wash their hands after touching farm animals.

4. Students should not play on or around agricultural machinery: Agricultural machinery, or machinery used for farming purposes, is oftentimes very dangerous. Equipment like tractors, hay balers, and threshing machines are used to harvest crops and can have very sharp edges that could cut Students. If a piece of equipment is moving, the Students should not play close to it as it may not be able to stop or turn if they get too close.

5. Dress appropriately: An untied shoelace, flowing long hair and stray threads from an old shirt have, in the past, led to horrendous injuries when operating farm equipment. Therefore, Students dressing appropriately can mean reducing risk of such injuries.

6. Students should always use safety equipment, such as helmets, goggles and gloves, where necessary to avoid occupational accident in the farm.

7. Students should not use equipment without authorization: Every student should be warned against using farm equipment's without authorization. It should only with the permission of the teacher or instructor that chemicals, farm implements or equipment are allowed to be taken by the Students. And they should only use the equipment if they have the competence about its usage (Lindsay Pringle, 2021)

Statement of the Problem

School farm is an area of land setup by school authorities to enable Agricultural students to practice knowledge gained in the classroom. The farm environment is supposed to be kept in good physical conditions, free from farm hazards such as falls, snake bits, fire outbreak, bee invasion among others. Many students revealed that they consider field practical a punishment rather than a complement to the knowledge passed in the classroom. (International Institute of Tropical Agriculture, 2020). Before now, Practical agriculture has been an interesting aspect of agricultural education. Most of the secondary school student in Udi Local Government Area compulsorily chooses the subject Agriculture because of the practical experiences gained during their practical in the school farm. This excitement has always made parents to provide accident free equipment and protective covers to avert Occupation accident in the school farm. At such times, food production in Udi community has always been in abundance because most of the secondary school leavers who passed through agriculture were deeply involved in food production. This has increased the number of farmers involved in food production in the

said area. However, today story has changed. The students who participate in agriculture while in school also tend to view it only as a subject and engage in it mainly to pass exams, not to build a future out of it. This may end up cultivating a very negative attitude towards agriculture, students no longer see agriculture as an enjoyable activity and profitable career. In addition, the dividends from the farming are shared out to the school teachers or taken by the school administration, without much benefit to the individual students who put in all their effort. Hence, the students work in school farm with anger and force without applying the protective technics or accident preventive strategies and thus exposing themselves to occupational accident. In the other hand, agriculture has been noted as one of the most hazardous industry, where farm workers become injured on-the-job. Hence, the need to determine the Occupational Accident in Secondary School Farm; causes and strategies in Udi Local government Area of Enugu State.

Objective of the Study

The main purpose of this study is to determine the Occupational Accident in secondary school farm; causes and strategies in Udi Local government Area of Enugu State. Specifically, this study seeks to:

1. Determine the forms of occupational accidents in secondary school farms
2. Ascertain the causes of occupational accidents in secondary school farms
3. Ascertain the effects of Occupational Accident on secondary school students.
4. Ascertain the teacher-related measures for Reducing Occupational accidents in secondary school farms
5. Ascertain the student-related measures for Reducing Occupational Accidents in Secondary School Farms

Research Questions

1. What are the forms of occupational accidents in secondary school farms?
2. What are the causes of occupational accidents in secondary school farms?
3. What are the effects of Occupational Accidents on secondary school students?
4. What are the teacher-Related measures for Reducing Occupational accidents in secondary school farms?

5. What are the student-Related measures for Reducing Occupational Accidents in secondary school farms?

Methodology

The study adopted a descriptive survey research design. According to Uzoagulu (2011) Survey research design is one in which large or small population is studied by collecting and analyzing data from the group through the use of questionnaire. The study therefore used questionnaire for collecting data from the respondents on Occupational Accident in Secondary School farm. The research was conducted in Udi local Government Area of Enugu state. The population of the study was 350 agricultural science teachers, Students and principals in the 35 public Secondary Schools in Udi Local Government Area of Enugu State.

120 item structured questionnaire was developed from the literature reviewed for the study and utilized for collecting data from the respondents. Each questionnaire item had a four point scale of Strongly Agreed (SA= 4), Agree (A=3), Disagree (D = 2), Strongly Disagree (SD= 1). From the above, any item with a mean value of 3.50-4.49 was interpreted as Strongly Agree, 2.50-3.49 was interpreted as Agree, 1.50 – 2.49 was interpreted as Disagree and 0.50 – 1.49 was interpreted as Strongly Disagree.

Three experts face validated the questioner items. Cronbach alpha method was used to determine the reliability of the instrument and a coefficient of 0.92 was obtained indicating a high reliability of the instrument. Data collected in the study were analyzed using mean and standard deviation in answering the research questions. The responses to the questionnaire were analyzed using mean and standard deviation. Any item that has a mean value of 2.50 and above was interpreted as agreed while any item with mean less than 2.50 was interpreted to be disagreed.

Results

Research Question 1: What are the forms of Occupational Accident in Secondary School Farms?

The data for answering this research question was obtained from the respondent and presented in table 1 below.

Table1: Mean and standard deviation of respondents' responses on forms of Occupational Accident that occur in Secondary School Farms?

S/N	Item statement	\bar{x}	SD	Remark
1.	Fracture/broken bones	2.88	0.73	A
2.	Dislocation	2.69	0.66	A
3.	Burns from Chemical explosion or from fire outbreak	3.39	0.76	A
4.	Wounds	2.80	0.82	A
5.	Poisoning from snake bites	3.74	0.71	A
6.	Hemorrhage/ Bleeding as a result of cuts	2.81	0.81	A
7.	Sun burn	2.92	0.82	A
8.	Heat cramps	2.74	0.75	A
9.	Bites from snake or insects	3.77	0.97	A
10.	Electric shock	2.64	0.84	A
11.	Drowns from pool or dams	3.73	0.71	A

\bar{x} = Mean of the respondents, and SD= Standard deviation

The result in Table 1 shows the mean of responses and standard deviation of the respondents on the forms of Occupational Accident that occur in Secondary School Farms. The value of the average mean of the respondents (teachers, students and principals) ranged from 2.64 to 3.77 indicating that the responses of the respondents for all the item fall under agree. The value for standard deviation ranges from 0.66 to 0.97. The

values of SD are low and this shows that the responses are clustered around mean.

Research Question 2: What are the causes of occupational accident in secondary school farm?

The data for answering this research question was obtained from the respondents and presented in Table 2 below.

Table 2: Mean and standard deviation of respondents' responses on causes of occupational accident in secondary school farm.

S/N	Item statement	\bar{x}	SD	Remark
1.	Tractor overturn accident	3.78	0.68	A
2.	Falls as a result of barrier and slippery ground	3.58	0.42	A
3.	Suffocations	2.76	0.87	A
4.	Excess heat due to sun intensity (burns)	3.95	0.71	A
5.	Animal attack	2.50	0.76	A
6.	Vehicle Accident	3.61	0.91	A
7.	Inhaling harmful Agricultural chemicals	3.15	0.68	A
8.	Poor working environment	2.61	0.90	A
9.	Cuts from cutlass or hoes	3.60	0.97	A
10.	Poor orientation for the Students on handling of Practical tools instrument and equipment for farm work	3.15	0.78	A
11.	Disobedience to instructions and manual machines and other farm tools for farm work.	2.80	0.81	A
12.	Wrong electrical connections	3.95	0.75	A
13.	Lack of equipped first aid box in case of emergency	3.70	0.80	A
14.	Carelessness on the side of Students and teachers	2.73	0.88	A

\bar{x} = Mean of the respondents, and SD= Standard deviation

The result in table 2 shows the mean of responses and standard deviation of the respondents on the causes of Occupational Accident in Secondary School Farms.

The value of the average mean of the respondents (teachers, students and principals) ranged from 2.50 to 3.95 indicating that the responses of the respondents for

all the item fall under agree. The value for standard deviation ranges from 0.4 to 0.97. The values of SD are low and this shows that the responses are clustered around mean.

Research Question 3: effects of Occupational Accident on Secondary School Students?

The data for answering this research question was obtained from the respondents and presented in Table 3 below.

Table 3: Mean and standard deviation of respondents' responses on Effects of Occupational Accident on Secondary School Students.

S/N	Item statement	\bar{x}_2	SD ₂	Remark
1.	Injury to students body part such as the cutting of the fingers	3.05	0.78	A
2.	Death of the students during severe accident occurrence	3.02	0.95	A
3.	Delay in the students supposed year of graduation	3.15	0.87	A
4.	Poor performance of students in practical works in the farm	3.85	0.62	A
5.	Leave students disabled	2.73	0.78	A
6.	Life Time regret specially where the Students part of the body is permanently damaged	2.90	0.91	A
7.	Absenteeism from school during such period of injury	3.73	0.64	A
8.	Loss of income due to treatment of injuries	2.90	0.76	A
9.	Low productivity within the season of injuries	3.11	0.82	A
10.	Discouragement to be involved in practical works in the farm	2.60	0.84	A
11.	Low self-esteem and anxiety	3.76	0.78	A
12.	Fear for being injured whenever Practical work is fixed in class	3.77	0.90	A
13.	Lack of interest in farm Practical	3.91	0.73	A

\bar{x} = Mean of the respondents, and SD = Standard deviation

The result in Table 3 shows the mean of responses and standard deviation of the respondents on effects of Occupational Accident on Secondary School Students.

The value of the average mean of the respondents (teachers, students and principals) ranged from 2.60 to 3.91 indicating that the responses of the respondents for all the item fall under agree. The value for standard deviation ranges from 0.62 to 0.95. The values of SD are low and this shows that the responses are clustered around mean.

Research Question 4: What are the teacher-Related measures for Reducing Occupational accident in secondary school farm?

The data for answering this research question was obtained from the respondents and presented in Table 4 below.

Table 4: Mean and standard deviation of respondents' responses on the teacher-Related measures for Reducing Occupational accident in secondary school farm.

S/N	Item statement	\bar{x}	SD	Remark
1.	The teacher should always and thoroughly read the manual for each piece of equipment for the Students	3.57	0.89	A
2.	The teacher should recommend to the school administration to fence off all water sources such as dams, ponds, septic tanks, sheep dips, pools and creeks to avoid Students from drowning	2.72	0.74	A
3.	The teacher should make sure that hazardous areas are locked and inaccessible to students	3.64	0.81	A
4.	The teacher must ensure that electrical equipment and other dangerous materials are out of reach of the students	3.53	0.74	A
5.	The teacher must not allow the inexperienced Students to ride on farm machinery, such as tractors and quad bikes.	2.54	0.63	A
6.	The teacher should ensure that students doesn't have access to any ladders and doesn't climb to heights (such as on hay stacks) without proper supervision	2.67	0.85	A
7.	The teacher should teach the students about positive and dangerous aspects of livestock and farm animals and also teach safety rules that apply to the different areas of the farm.	3.74	0.73	A
8.	The teachers and school manager should ensure that there is provision for emergency exit and fire escapes within the farm structure.	2.99	0.91	A
9.	The teacher Should organize proper farm orientation programmes before embarking on carrying out practical works in the school farm	3.91	0.84	A
10.	The teacher should provide Proper supervision during practical works in the school farm	2.61	0.74	A

\bar{x} = Mean of the respondents, and SD = Standard deviation

The result in Table 4 shows the mean of responses and standard deviation of the respondents on the teacher-Related measures for Reducing Occupational accident in secondary school farm.

The value of the average mean of the respondents (teachers, students and principals) ranged from 2.54 to 3.91 indicating that the responses of the respondents for all the item fall under agree. The value for standard deviation ranges from 0.63 to 0.91. The values of SD

are low and this shows that the responses are clustered around mean.

Research Question 5: What are the Student-related measures for Reducing Occupational Accident in Secondary School Farm?

The data for answering this research question was obtained from the respondents and presented in Table 5 below.

Table 5: Mean and standard deviation of respondents' responses on the Student-related measures for Reducing Occupational Accident in Secondary School Farm.

S/N	Item statement	\bar{x}_1	SD ₁	Remark
1.	The students should ask their teacher about how to work with farm animals without getting injured	2.96	0.6	A
2.	The students should endeavor to wash their hands and body after working in the school to avoid contamination with diseases.	2.30	0.42	A
3.	Students should not play on or around agricultural machineries	3.03	0.75	A
4.	Students should dress appropriately by putting on protective clothing	2.16	0.92	A
5.	Students should always use safety equipment, such as helmets, goggles and gloves, where necessary	2.95	0.73	A
6.	Students should not use farm equipment without permission or supervision of Agric. teachers	2.65	0.78	A
7.	Students should avoid areas where some objects can facilitate their falls	2.60	0.61	A
8.	Students should endeavor to keep working place clean	3.78	0.75	A
9.	Students should endeavor to remove broken bottles from the farm	2.90	0.87	A
10.	Students should use farm equipment for what they are made to be used	2.86	0.60	A
11.	Students should not play with or in the farm	3.94	0.76	A

\bar{x} = Mean of the respondents, and SD = Standard deviation

The result in Table 5 shows the mean of responses and standard deviation of the respondents on the students-Related measures for Reducing Occupational accident in secondary school farm.

The value of the average mean of the respondents (teachers, students and principals) ranged from 2.16 to 3.94 indicating that the responses of the respondents for all the item fall under agree. The value for standard deviation ranges from 0.6 to 0.92. The values of SD are low and this shows that the responses are clustered around mean.

Discussion

The study revealed that forms of occupational accident in secondary school farms includes; Fracture/broken bones, dislocation, burns from Chemical explosion or from fire outbreak, wounds, poisoning from snake bites, hemorrhage / bleeding as a result of cuts,, sun burn, heat cramps, bites from snake or insect, electric shock, drowns from pool or dams. This is in line with Giorgio, (2017) who stated that occupational accident can occur in this form. Therefore, both students and teachers should endeavor to do the necessary things needed and apply measures to prevent or reduce occupational accident from happening.

This study showed that causes of occupational accidents in secondary school farms includes; Tractor

overturn accidents, falls as a result of barrier and slippery ground, suffocation, excess heat due to sun intensity (Burns), inhaling harmful agricultural Chemicals, animal attack, vehicle accidents, poor working environment. This is in line with Ufkes and Bright (2019) who stated that occupational accident are caused by animal attack, cutting from cutlass, poor working environment among others. When students are aware of this causes, there would be minimal or no accident victims during farm practical in secondary school farms.

This study revealed that effects of occupational accident in secondary school farms include; Injury to Students body part such as the cutting of the fingers, death of the students during severe accident occurrence, delay in the Students supposed year of graduation, poor performance of Students in Practical works in the farm, leave Students disabled, life Time regret specially where the Students part of the body are permanently damaged, absenteeism from school during such period, loss of income due to treatment of injuries, low productivity within the season of injuries, discouragement to be involved in practical works in the farm, low self-esteem and Anxiety, fear for being injured whenever practical work is fixed in class, lack of interest in farm practical. This is online with Rene Tetzner (2020) who stated that loss of income due to treatment of injuries, low productivity within the season of injuries,

discouragement to be involved in practical works in the farm, low self-esteem and Anxiety, fear for being injured whenever practical work is fixed in class, lack of interest in farm practical farm work are effects of occupational accident in secondary school farms are effects of occupational accident in secondary school farms.

This study revealed that teacher-related measures for reducing occupational accident in secondary school farm and which is in line with Lindsay Pringle, (2021) include; the teacher should recommend to the school administration to fence off all water sources such as dams, ponds, septic tanks, sheep dips, pools and creeks to avoid occupational accident in secondary school Farm, the teacher Should make sure that hazardous areas are locked and inaccessible to students, the teacher must ensure that electrical equipment and other dangerous materials are out of reach of the students, the teacher must not allow inexperienced Students to ride on farm machinery, such as tractors and quad bikes, the teacher Should ensure that Students doesn't have access to any ladders and doesn't climb to heights (such as on hay stacks) without proper supervision, the teacher Should teach the Students about both the positive and dangerous aspects of livestock. These measures should be taking seriously by teachers and they should make sure students adhere to it and offenders should be punished.

This study revealed that students-Related measures for reducing occupational accident in secondary school farms which is in line with Lindsay Pringle (2021) include; students should be encouraged to wear closed-toed shoes like sneakers, the Students Should ask their teacher about how to work or play with farm animals without getting injured, the Students should make sure to ask their teachers how to best work with animals before they go near them, the students should endeavor to wash their hands and body after working in the school farm and with animals to avoid contamination with diseases, students Should not play in the farm or with agricultural machinery, equipment like tractors, hay balers, and threshing machine, if a piece of equipment is moving, the students should not

play close to it as it may not be able to stop or turn if they get too close, the Students should dress appropriately.

Conclusions

The findings of this study reveal that the teacher and the students of Agriculture in their learning process, knows the forms, causes, effect and Strategies or measures for reducing occupational accident in secondary school farm. This implies that the teachers and students of agricultural science in the secondary school should embrace and optimize all the students and teachers related measures for reducing occupational accident in the farm. This will enable them to apply the best practice in the school farm such as using the right tools for the right task, through education among others. This will enhance the students' interest and participation in practical farms and thus increase productivity.

Recommendations

Base on the findings of the study, the following Recommendations were made.

1. The teacher of Agriculture should ensure that they adopt and apply measures or strategies for reducing occupational accident in the secondary school farms so that injury, loss of life and other hazards will not occur.
2. The state government should ensure adequate supply of agricultural safety equipments for practical in school farm.
3. The school administration and Agricultural science teacher should ensure proper supervision during Practical session in the school farm.
4. Parents should be encouraged to provide for their wards personal safety wears for their Practical farm work especially those not too expensive to procure.
5. The school authority should organize appropriate orientation and seminar on safety precautions on occupational accidents before sending the students to school farms for practical.

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