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Technical Skills Required by Youths for Goat Production in Ebonyi State

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Abstract

The study focused on identifying the technical skills required by youths for goat production in Ebonyi State. The area of the study was Ebonyi State and survey research design was adopted. Four research questions were answered and 4 hypotheses tested for the study. The population of the study is 232 consisting of 129 goat farmers and 103 extension agents in the State. There was no sampling because the total population was accessible and manageable. The whole population was therefore used for the study. The instrument used for data collection was a structured questionnaire containing 69 items. The instrument was validated by 3 experts, test retest method of reliability and Pearson product moment correlation was used to obtain a reliability index of 0.82. The data collected were analyzed using mean and standard deviation while t-test was used to test the null hypotheses. The result of the study revealed that the technical skills required by youths for goat production are 15 skills in planning, 13 skills in site preparation and housing, 28 skills in breeding and management and 14 skills in marketing of the goat produced. Among the recommendations made were that youths should return to the farm and utilize their physical agility in goat production and that government should provide an enabling environment for youths to embark on goat production by providing soft loans or grants and establishing skill acquisition centers where youths can acquire the identified goat production skills.

Key words: technical, skills, youths, goat production.

Introduction

Youth unemployment has been a great challenge to Nigeria and Ebonyi state since long. This could be attributed to less emphasis on blue collar jobs which would have proffered a lasting solution to the menace of unemployment as witnessed among youths today. The accelerated emphasis on white collar jobs which in recent time are in great decline against the ever increasing population has been accused as the major cause of this acute unemployment and restiveness as witnessed in the society today. Youth is the time of life when someone is young, a time when someone has not become an adult. It is also defined as the appearance, freshness, vigor, spirit and characteristics of one who is young. Youths as defined above can be referred to a time of life when one is neither a child nor an adult but rather in between the two stages. Dorcas and Moses (2016) described youths as a stage of life very important in determining young people's paths to achieving productive employment and decent work. Youth is an experience that shapes an individual's level of independency which can be noted in various ways according to different cultural perspectives. The youth's level of independency means the extent to which they rely on their family emotionally and economically. Generally around the world, terms such as adolescent, teenager, kid, young person and many related others are often inter used with youth. It is worth noting that they cannot always mean the same. Youths is also

identified as a particular mindset or attitude exhibited or expressed in certain situations. At times, certain age brackets are attributed to youths but this might depend to a large extent on society, country and the purpose which the classification is being made. For certain uses such as employment statistics, youths may be referred to individuals from the age of 14-21, 15-30, 18-35 depending on country and purpose.

In Nigeria however, youths includes all members of the federal republic of Nigeria aged 18-35. Youth should therefore be demanded not as a time of life but as a state of mind, a temper of the will, a quality of imagination, a predominance of courage over timidity, of the appetite for adventure over the life of ease (Thomas in Robert, 2003). It is a stage which a person is physically and mentally able to acquire productive knowledge and skills for self-reliance. It is a time to go out and secure the future and to contribute significantly to the welfare of their families, communities and any society they may find themselves. In the context of this study, youths are those between childhood and adulthood and are full of agility, mentally and physically fit to embark on an independent living through independent work or business such as goat production. People at this stage are very energetic and capable of learning and maintaining profitable production technical skills that can make themselves and communities to flourish and the nation strengthen. Youths are risk takers and more likely to have access to extension service and make use of agricultural loans more effectively (Amaza & Tashikalma, 2003). As emphasized above, technical skill acquisition and possession which leads to blue collar jobs such as farming is as a matter of fact the most reliable means by which youths can utilize, harness and take advantage of their mental and physical agility for their personal and societal benefits.

Technical skill is the possession of muscular action in production related practice. Okorie (2000) defined skill as rapid and precision usually of muscular action. Skill is expertness, practiced ability, proficiency executed and usually displaying a flexible but systematic temporary patterning. Okorie (2001) defined skill as manual dexterity through repetitive performance of an operation. Skill is a well-established habit of doing something. It involves the acquisition of performance capabilities. In the other way round, technical means having a special skill and knowledge about how a kind of practical work is being done. It has to do with practical use of machines or science in agriculture, industries, medicine etc. Technical skill is the ability to demonstrate the technical knowledge of a certain thing practically. In the context of this study, technical skill is the proficient ability of doing in all the activities involved in goat production by youths in Ebonyi state.

Goat is a hollow horned small ruminant belonging to the family Bovidae of the Genus Capra (Iwena, 2012). Goats are reared for its milk, meat and hide and skin. History has it that goat was the first animal domesticated for the purpose of food after dog which was domesticated for hunting by the early men. It is believed that the present day goat was originated from Capra Oegagrus, the hair producers descended from Capra Falconeri while the domesticated goat started life at the Asian mountain (Ogba, 2013). These species of goat have however undergone changes depending on the environment and the purpose to which the improvement is directed towards, thus yielding the three groups of goat which are meat producers, milk producers and hair producers. More so, certain environmental condition have given rise to the long legged, fine skinned and the narrow bodied goat at the desert regions and the short legged, small stock usually found in the humid regions (Nwangbo, 2014).

Nevertheless, there are many breeds of goat available all over the world and Nigeria in particular. The descendants of the originally domesticated goats fall under two groups which are the breeds in the tropics and breeds in the temperate zones of the world (Nweze, 2007). In Ebonyi state however, the breeds of goat produced by farmers is the West Africa dwarf goat (WADG). These breeds of goat are short legged meat type goat with an average weight of about 27.2kg. They are known with the characteristics of surviving unfavorable environmental conditions, withstanding triapanosomiasis disease, producing twice a year, having a gestation period of about 145 to 150 days or four to five months. They browse on many forage crops hence making the cost of producing goats cheap (Iwena, 2012). There are majorly four systems of goat keeping in Ebonyi state. The system to be adopted by the farmers depends to a large extent on the pattern of agriculture and the availability of land. Goats therefore are usually kept under these four major techniques:tethering, extensive, intensive and semi intensive system.

Goat production in Ebonyi state requires competency in various technical skills in order to keep and raise goat from parturition to adult ready for slaughter or marketing. Goat production requires skill in planning, site selection, site preparation, breeding, management practices, diseases control, feeding, marketing and so on (Ogbu, 2013). In the view of Boniface, Patrick and Camilus (2003), goat farmers require skills in planning, housing, feeding husbandry, disbudding, castration, disease control, breeding, record keeping, marketing etc. The Penn State College Agricultural Science Research and Extension PSCASRE (2000) outlined the technical skills required in goat production to include applying Identification tags, castration, breeding and breed knowledge, flushing, dehorning, medication, milking, housing and moving (behaviourial and aggression knowledge), sickness identification, sheltering, feeding, manure handling, fencing and marketing. Asogwa (2013) classified competencies in goat production to include planning, housing, rearing weaned goat to market weight and marketing of matured goats. Technical skills in goat production with regards to this study is categorized into planning, site preparation and housing, breeding and management and the final stage of any production cycle which is marketing.

Planning is the process of thinking about and organizing activities required to achieve a goal. Nwobasi (2013) defined planning as a mental process requiring the use of intellectual faculties, imaginations, foresight, sound judgment etc. to decide in advance as to what is to be done, how and where it is to be done, by whom it is to be done and how the results are to be evaluated. Planning with reference to this study is the process of organizing and lining up future activities to be carried out in goat production from choice of site, inception (stocking) stage to marketing. This involves budgeting, sourcing funds, sourcing inputs, sourcing land, setting clear purpose for the production business, sourcing suitable tools and equipment, sourcing labour. Nwangbo (2014) identified that farm business registration, defining target customers etc are among the key components of goat production planning. Planning in goat production entails making prior arrangement on how to locate customers, preparing timetable of activities, deciding the management system to adopt based on the area and cost (Asogwa 2013).

However, good housing system is paramount for goat farming; the house should be started in dry season. Aliyu & Jegede (2000) opined that goat production house is intended to offer protection against bad weather and to provide an ideal environment for the development of the animals. Skills in goat farm site preparation and housing include selection of suitable location, putting into consideration certain things such as availability of some factors as outlined at the planning

stage. The authors further asserted that site preparation and housing involves clearing of the chosen site, construction of the house with local materials such as woods and thatches etc. Goat housing and site preparation include clearing of the site, planning the building, laying of brick or mud blocks, provision of bedding materials, construction of fence or gate, cutting of tethering pegs in the case of tethering system etc. Asogwa (2013) outlined skills in goat housing to include making the earthen floor of the pen sloppy, construction of gutter from one end of the house to the other, raising wall with bricks, putting strong fence at the entrance of the pen, provision of pegs in the pen for tethering the goats, selection of materials for building the house, marking out positions based on standard specifications. Youths in Ebonyi state may require the above skills in order to efficiently produce goats as a means of livelihood.

Another important skill required by youths to go into goat farming is the breeding and management skills. Breeds according to Nweze (2007) are animals with a common origin and characteristics like appearance, size etc. which makes them look different from others within the same species. Breeding means the act of mating and reproduction in goat. Breeding can as well be extended to mean the act or process by which young goats are kept and cared for, providing them with all the necessities for proper growth for the purpose of procreation. Breeding as regards to this study is the reproduction, keeping and caring of goats for the purpose of selling them to make money by the youths in Ebonyi state. For this to be possible, youths may require skills such as identification of does on heat, castration, feeds and feeding, concentrate feeds formulation, disease control, dehorning, identification of pregnant does, identification of sick goats and proper treatment, weaning, disbudding, manure handling, identifying signs of approaching birth (Aliyu and Jegede, 2000). The management technical skills that may be required by youths in goat production business may also be extended to other activities carried out to ensure the success of the business such as record keeping, cleaning of the pen ensuring general sanitation of the house, environment and tools. In a more elaborate perspective, Nwangbo (2014) categorized techniques in goat management and breeding into three via; breeding to kidding, kidding to weaning and weaning to finishing which is the market or table size of goat. At the first stage (breeding to kidding), the buck and doe for breeding are taken to the already prepared house as outlined above. The buck and doe are to be at a maximum of 12 months before they can be used for breeding. Between 7 to 10 days of mating, the does are given high nutrient in order to increase the number of eggs ovulated which will consequently lead to increase in number of kids to be kidded. This process in goat production is called flushing (Nwangbo, 2014). It is advisable to deworm goats before flushing in order to remove some endo parasites. The mating is technically arranged by discovering the doe on heat. Federal Ministry of agriculture FMA (2016) outlined three mating types to include hand mating, which involves identifying the does on heat by a teaser buck and then taking to the designated buck for mating. The pen mating system is another system which involves allowing the buck to run with selected does on heat in a pen and bucks are fitted with marking harnesses to identify when they have mated for record purpose; artificial insemination AI is the third mating system. In this system, there is no need for special maintenance of the buck for mating. The breeding is done with the use of frozen or fresh semen straws from selected bucks (FMA, 2016). The does should be synchronized in batches to ears AI process. It is worthy to note that the mating system to adopt depends on the system of goat keeping adopted. The gestation period of the does kept in Nigeria is 145 to 150 days (Nweze, 2007). At the gestation period, the does are allowed to graze on pastures and supplementary feeds in the form of concentrates should be given to them. Few days to kidding, adequate sanitations should be carried out; comfortable bedding should be arranged

in the kidding pen. The farmer identifies parturition with some signs such as mucus discharge from vulva, frequent urination, restlessness, undue noise etc. During kidding, the does should be left alone unless in exceptional case of difficult kidding during when the farmer or attendant can give some assistance to save the doe and kid. In a case where the doe dies after kidding, a foster mother (a doe that kidded within the same range) is brought to breastfeed the kid. If a foster mother could not be accessed, a mixture of milk and warm water is carefully given to the goat to serve as breast milk (Aliyu & Jegede 2000).

In usual cases where no mortality of either the doe or the kid is recorded after kidding, mucus membrane is wiped out from their nose to enhance normal breathing and avoid suffocation. The naval cord which usually breaks on its own can be dipped in iodine solution to prevent infection and to enhance quick healing. The does should be allowed to lick up the mucus on the kid's body, this is because they naturally derive joy from that and promotes milk letdown (Onuka, 2014). The placenta comes out after few hours of kidding and should be disposed by burying, the pen should be cleaned immediately and the udder of the doe washed and disinfected in readiness for breastfeeding of the kids. The kids should be carefully helped to suckle colostrum produced by the dam for the first three days of kidding (Nwangbo, 2014). Kids not required for breeding should be castrated to avoid indiscriminate mating and to increase their market size (FMA, 2016). Castration in goat is the careful and purposeful removal of the testis of a buck. It is done to bucks which are not needed for mating in order to increase their size, fat and market size. For ease of identification and security against poachers or rustlers, identification marks either by branding; ear tags or tattooing should be done to the kids before weaning. They should as well be vaccinated against foot and mouth disease, rinder pest and anthrax disease. Close to weaning, kids should be introduced to roughages in order to promote the functioning of the rumen. All through this period, sanitation is maintained in order to prevent parasite and disease infestation (Iwena, 2012).

Weaning to finishing is the last stage of goat production before marketing as identified by the Penn State College of Agriculture Science Research Extension (PSCASRE, 2000). Weaning is a planned and strategic removal or separation of the mother (doe) from the kid to stop breast feeding and become independent. PSCASRE (2000) opined that weaning is a good time to accustom future replacement stock. Weaning takes place after about eight weeks. It is advisable to remove the doe from the pen instead of removing the kid. PSCASRE (2000) and Aliyu and Jegede (2016) maintained that separating the mother goats from the kid during weaning is preferable than the otherwise because removing the kids from the mother's care and at the same time from the environment they are accustomed with is worse than removing the mother and leaving them in the environment. It is therefore advisable to remove the does during weaning instead of the kid and after some while, the kids can be relocated to another growing house from where they can go out to browse on legumes depending on the system adopted. The semi intensive system has been revealed to be the most suitable method of goat production in Nigeria and Ebonyi state. In addition to taking the goats to browse on legumes and grasses, they can also be fed with supplementary banana, yam, cassava peels and other household wastes. Salt licks which are very rich in minerals and vitamin, clean water should be provided regularly. As a means or measure to prevent diseases, good sanitary should be maintained at all times by dipping of the goats in disinfectants to eradicate ecto-parasites which might lead to dangerous diseases. Endo parasites are prevented through deworming with led arsenate or phenothiazine using drenching gun to administer the dewormer to kill parasites such as tape worm and ascaris.

Vaccination on rinderpest, brucellosis, foot and mouth, anthrax disease has to be repeated at an interval (Nweze, 2007). Under ideal housing, feeding and healthcare, goat matures within 5 to 7 months and attains full table size at 24 to 27 months (Iwena, 2012). Though market size of goat depends on demand and the model of rearing adopted. A farmer can breed goats, train them to weaning size and market, others can buy weaned goat, raise them to table size and sell while many others may still prefer to breed, wean and raise them to table size before marketing. After the first production cycle, the farmer carefully select good goats to be used for breeding putting into consideration certain factors as outlined earlier at the planning stage. PSCASRE (2000) maintained that a kid can return to the breeding flock when they reach desirable size usually two third the mature weight or are one year old. At this stage, a breeder to finish or weaners to finish goat farmer can market their goats by contacting his targeted customers as earlier anticipated in his planning stage.

Marketing is the activity associated with buying and selling of product or services. This includes advertising, selling, delivering, products, identifying customers. Marketing is defined as a management process through which goods and services move from producers to the consumer. It includes the coordination of the 4ps of marketing which are: product, price, place and promotional strategy. Marketing in the context of this study has to do with the selling of goats produced by farmers to make money. Goat farmers production cycle cannot be complete without marketing his products, production of any kind is said not to be complete until the products gets to the hands of the final consumers through marketing. Marketing therefore becomes among the most paramount requisites in goat production business requiring certain skills for success. This is because it is the stage which determines the rate of financial exchange and therefore requires technical skills such as marketing intelligent, understanding market and buyer's behavior, negotiation and price fixing, customer relation, understanding sudden market changes, advertisement, identifying and contacting buyers, transportations, convincing buyers, etc. (PSCASRE, 2000). The most important consideration for effective marketing are quality and consistency of products, PSCASRE (2000) further maintained that the most common and effective method of meat goat marketing are through livestock auction marketers, private buyers, consignment sales. Nweze (2007) opined that the most profitable means of selling goat is on-farm sales. This is because the farmer escapes the sales commission and taxations at the market together with pending transportation cost. Farmers need to contact buyers to come to their farms to buy their goats through advertisement and other means (Agricultural marketing resource center AGMRC, 2016). A study by Asogwa (2013) identified skills in goat marketing to include customer relation, price fixing, advertisement, contacting buyers, keeping financial record for marketing, grading and sorting using age, size, weight to determine their price, marketing matured goats at 23- 28 months. Acquisition of the above skills by youths in Ebonyi state may equip them for sustainable self- employment in goat production as an enterprise of continuous demand amidst this outcry for jobs.

Statement of the Problem

The need for technical skills in agriculture in the world of today can never be over emphasized, gone are days when emphasis are laid on the white collar jobs. Ebonyi state is located in the south Eastern part of Nigeria with continuous and highly accelerating population growth and unemployment rate especially among youths. The state has an approximate population of 2,176,947 (2006 census) with a state population growth rate of 3.5 percent annually. Odo (2016)

opined that the human development report of 2013 by the United Nations' development program shows that the unemployment rate in Ebonyi state is very high when compared to other states in the country. This same UNDP report of 2013 has it that there is just about an average of 28% of youths engaging in agricultural related jobs even as the white collar jobs are very scarce. This report could be summarized to mean that a very high percentage of the youths are still not employed in either white collar or blue collar jobs such as farming. This problem could be attributed to the general poverty of the state which hampers youth from securing capital for farming and lack of the technical skills required to go into productive agriculture such as goat production by the youths hence, the need for this study. The total population of youths neither engaged in white collar jobs nor blue collar jobs such as farming is alarming. These youths who should have been the major source of development to the state through farming and general agriculture seems to be handicapped skillfully. Unemployment is also connected to the issue of lack of employable technical skills. This is because although opportunities for gainful employment in agricultural firms do arise, the youths do not at times have the skills required to get the employment. Although opportunities for skillful employment do exist, the youths do not possess the skills required to perform proficiently in the occupation and this could be attributed to youths drop out in schools, lack of interest in skill acquisition and a mismatch between the labour market needs and the knowledge and skills acquired in schools. There seems to be a gap between the youths and the skills needed for gainful employment in agricultural production as regards to goat production especially as goat is of higher demand than the supply in Ebonyi State due to continuous protein need by the people. This is the worry of the researcher. This study therefore tends to bridge this gap by identifying those technical skills required by youths for goat production in the study area.

Purpose of the Study

The major purpose of this study is to find out the technical skills required by youths for goat production in Ebonyi State. Specifically, the study tends to find out the technical skills required by youths in:

1. planning for goat production in Ebonyi state;
2. site preparation and housing for goat production in Ebonyi state;
3. breeding and management for goat production in Ebonyi state; and
4. marketing for goat production in Ebonyi state.

Research Questions

The following research questions were answered for the study.

1. What are the technical skills required by youths in planning for goat production in Ebonyi State?
2. What are the technical skills required by youths in site preparation and housing for goat production in Ebonyi State?
3. What are the technical skills required by youths inbreeding and management for goat production in Ebonyi state?
4. What are the technical skills required by youths in marketing for goat production in Ebonyi state?

Hypotheses (Ho)

The following null hypotheses were tested at 0.05 level of significance. There is no significant difference between the mean response of farmers and extension agents on the skills required by youths in:

Ho_1. planning for goat production in Ebonyi state;

Ho_2. site preparation and housing for goat production in Ebonyi state;

Ho_3. breeding and management for goat production in Ebonyi state; and

Ho_4. marketing for goat production in Ebonyi state.

Research Method

The study adopted survey research design. This is a design that permits generalization of the result gotten from a representative sample, this then becomes useful in this research so that the results of the respondents from the representative sample on the technical skills required by youths for goat production in Ebonyi state can be generalized. The area of the study is Ebonyi state Nigeria; the state has three (3) agricultural zones which are South, North and Central. The population of the study is 232 consisting of the entire 129 goat farmers and 103 extension agents in the State. There was no sampling because the total population was accessible and manageable for the study. The instrument used for data collection was structured questionnaire. The questionnaire was divided into two parts; first part contains the respondent's personal details while the second part sort the actual answers to the level of agreement or disagreement of the respondents on the questionnaire items. The questionnaire was structured on a four point scale using highly required, (HR) as 4 points, required (R) as 3 points, not required (NR) as 2 points, highly not required (HNR) as 1 point. The instrument was validated by three experts. Crombach alpha was used to test the reliability of the instrument during when a reliability of 0.82was obtained, this means that the instrument is highly reliable for the study. Three (3) research assistants were trained by the researchers to help administer and retrieve the instrument. The questionnaires were administered and collected at the spot, so all the 232 questionnaires were retrieved (100% return). Data collected from the respondents were analyzed using mean, standard deviation and z-test to test the null hypothesis. Any item with mean up to 2.50or above was regarded as required skill (R) while any one less than 2.50 was regarded as not required skill (NR). More so the null hypothesis for any item was not accepted if the critical value is less than the calculated value and vise-versa at 0.05 level of significance.

Results

The results from the study are presented in Tables 1 to 4.

Table 1: *Mean Rating Scores and t-test Results of Respondents on the Technical Skills Required by Youths in Planning for Goat Production in Ebonyi state.*

S/N	Item statement	X_1	X_2	S_1	S_2	t-cal.	Rmks
1	Source capital for goat production	3.02	2.99	1.44	1.39	0.14	R,NS
2	Acquire suitable land for goat farming	3.61	3.22	1.52	1.31	1.95	R,NS
3	Source labour for goat farming	3.09	3.01	1.31	1.09	0.47	R,NS
4	Choose the system to be adopted	3.28	3.19	1.01	1.00	0.53	R,NS
5	Source feed for feeding the goats	2.99	2.68	1.10	1.06	1.82	R,NS
6	Source veterinary services	3.39	3.29	1.20	1.19	0.5	R,NS
7	Choose means of marketing	3.65	3.41	1.08	1.06	1.41	R,NS
8	Source other inputs such as disinfectants	3.79	3.60	1.82	1.59	0.73	R,NS
9	Make budget for intended production	3.65	3.42	1.36	1.36	1.20	R,NS
10	Map out a well-defined production timetable	3.42	3.15	1.63	1.49	1.13	R,NS
11	Map out the estimated production cycle.	3.60	3.50	1.61	1.39	0.45	R,NS
12	Registration of the business to avoid government or association threat	3.61	3.50	1.59	1.39	0.5	R,NS
13	Farm survey and layout.	3.82	3.79	1.29	1.60	0.13	R,NS
14	Choose breed to produce.	3.21	3.18	1.39	1.41	0.14	R,NS
15	Define marketing route to adopt.	3.39	3.26	1.21	1.39	0.59	R,NS

Key: X1 mean of goat farmers, X2 mean of extension agents, SD1 standard deviation of goat farmers SD2 standard deviation of extension agents, R required, NS no significant. Degree of freedom =230, level of significance = 0.05, NI =180, N2 =52, t-calc.=1.97.

The finding from Table 1 above proves that all the 15 items had their mean ranging from 2.68-3.82 which is above the cutoff point (2.50). This means that all the respondents agreed that all the 15 items are the planning technical skills required by the youths for goat production in Ebonyi state. The table also reveals that the calculated values for all the items are between 0.5 and 1.95, this is lower than the critical value which is 1.97. This means that there is no significant difference between the two groups of respondents.

Table 2: *Mean Rating Scores and t-test result of Respondents on the Technical Skills Required By Youths in Site Preparation and Housing for Goat Production in Ebonyi State.*

S/N	Item statements	X_1	X_2	S_1	S_2	t-cal.	Rmks
1	Clear and stump the site to build goat house.	3.48	3.39	1.16	1.08	0.53	R,NS
2	Develop the building plan.	3.69	3.58	1.17	1.06	0.65	R,NS
3	Construct the building based on the plan and marked specifications	3.73	3.69	1.20	1.21	0.1	R,NS
4	Fence the building to avoid unwanted access	3.83	3.79	1.60	1.73	0.15	R,NS
5	Gather materials for the building	3.91	3.89	1.63	1.40	0.14	R,NS
6	Lay out brick blocks	3.65	3.59	1.09	1.03	0.35	R,NS
7	Construct gutter from one end of the house to the other slanting side	3.35	3.49	1.38	1.31	0.3	R,NS
8	Construct a sloppy floor in the pen.	3.64	3.51	1.22	1.19	0.65	R,NS
	Prepare a tethering peg	3.82	3.74	1.56	1.31	0.4	R,NS
9	Use wire gauze or strong wire net at the half up of the wall to permit ventilation	3.73	3.67	1.44	1.28	0.3	R,NS
10	Provide adequate bedding materials at the floor for comfort of the pigs	3.39	3.12	1.26	1.10	1.59	R,NS
11	Put a strong protector at the entrance of the house	3.64	3.40	1.45	1.36	1.1	R,NS
12	Roof with zinc or water proof thatch material	3.48	3.39	1.56	1.49	0.41	R,NS

Key: X1 mean of goat farmers, X2 mean of extension agents, SD1 standard deviation of goat farmers SD2 standard deviation of extension agents, R required, NS no significant. Degree of freedom =230, level of significance = 0.05, NI =180, N2 =52, t calc. =1.97.

The finding from Table 2 above proves that all the 12 items had their mean ranging from 3.12 to 3.91 which is above the cutoff point. This means that all the respondents agreed that all the 12 items are the site preparation and housing technical skills required by the youths for goat production in Ebonyi state. The table also reveals that the calculated values for all the items ranges from 0.1 to 0.65, this is lower than the critical value which is 1.97. This means that there are no significant differences between the two groups of respondents.

Table 3: *Mean Rating Scores and t-test Result of Respondents on the Technical Skills Required By Youths in Breeding and Management for Goat Production in Ebonyi State.*

S/N	Item statement	X_1	X_2	S_1	S_2	t-cal.	Rmks
1	Identify does on heat	3.61	3.41	1.23	1.32	1	N,NS
2	Adopt suitable mating method	3.72	3.55	1.55	1.32	0.85	R,NS
3	Castrate bucks not needed for breeding to avoid indiscriminate mating	3.76	3.60	1.28	1.30	0.8	R,NS
4	Formulate concentrate feeds	3.67	3.60	1.59	1.50	0.3	R,NS
5	Adopt proper disease and parasite control measure	3.64	3.47	1.42	1.39	0.77	R,NS
6	Handle waste or Manure properly	3.69	3.50	1.32	1.48	0.86	R,NS
7	Identification of a sick goat	3.75	3.61	1.32	1.56	0.58	R,NS
8	Dehorn for ease of handling and to avoid harming others if they were not disbudded at early stage.	3.81	3.63	1.59	1.41	0.82	R,NS
9	Apply Id tags, tattoo, ear notching for recognition purpose	3.44	3.23	1.28	1.10	1.24	R,NS
10	Identify a pregnant doe after mating	3.52	3.40	1.61	1.39	0.55	R,NS
11	Identifying signs of approaching birth after 145-150 days.	3.68	3.48	1.29	1.38	0.91	R,NS
12	Keep adequate record for proper evaluation	3.71	3.52	1.59	1.51	0.86	R,NS
13	Wean after 8 weeks	3.06	3.00	1.64	1.78	0.23	R,NS
14	Support during kidding when necessary	3.81	3.62	1.19	1.40	0.86	R,NS
15	Wipe mucus membrane to avoid infection	3.66	3.49	1.18	1.09	1	R,NS
16	Flush the does 7-10 days before mating	3.75	3.62	1.26	1.61	0.54	R,NS
17	Handle and clean feeding materials to avoid contaminating feeds	3.68	3.42	1.27	1.38	1.18	R,NS
18	Disinfect the house regularly to avert infection	3.78	3.49	1.42	1.28	1.45	R,NS
19	Sweep and wash the pen and the water exit gutters to reduce urine (urea) odour	3.65	3.49	1.53	1.28	0.8	R,NS
20	Sort and separate the goats according to age, sex, purpose etc.	3.49	3.36	1.59	1.31	0.65	R,NS
21	Select matured doe and buck (11-12 months) to be used for next breeding	3.70	3.41	1.26	1.28	1.45	R,NS
22	Deworm the goats before flushing	3.49	3.19	1.60	1.65	1.25	R,NS
23	Dip the naval cord in iodine solution after kidding	3.79	3.58	1.30	1.26	1.05	R,NS
24	Allow the doe to lick up mucus on the kid's body for better milk letdown	3.79	3.60	1.60	1.58	0.79	R,NS
25	Bury the placenta to avert environment pollution	3.65	3.50	1.29	1.08	0.88	R,NS
26	Wash and disinfect the doe's udder in readiness for sucking	3.49	3.29	1.28	1.30	0.2	R,NS
27	Feed with creep feed after 6-9 days of age	3.72	3.61	1.09	1.50	0.5	R,NS
28	Disbud at early stage to reduce shock and difficulty in dehorning the adult.	3.28	3.19	1.25	1.63	0.38	R,NS

Key: X1 mean of goat farmers, X2 mean of extension agents, SD1 standard deviation of goat farmers SD2 standard deviation of extension agents, R required, NS no significant. Degree of freedom =230, level of significance = 0.05, NI =180, N2 =52, t-calc.=1.97.

The finding from Table 3 above proves that all the 28 items had their mean between 3.00 and 3.81 which is above the cutoff point. This means that all the respondents agreed that all the 28 items are the breeding and management technical skills required by the youths for goat

production in Ebonyi state. The table also reveals that the calculated values for all the items ranges from 0.2 to 1.45, this is lower than the critical value which is 1.97. This means that there are no significance differences between the two groups of respondents.

Table 4: *Mean Rating Scores and t-test Result of the Respondents on the Technical Skills Required By Youths in Marketing for Goat Production in Ebonyi State.*

S/N	Item statement	X_1	X_2	S_1	S_2	t-cal	Rmks
1	Sort out matured table size goats for sale after 24-28 months	3.60	3.39	1.83	1.19	0.95	R,NS
2	Contact buyers who placed order	3.49	3.29	1.49	1.29	1	R,NS
3	Customer relation	3.69	3.38	1.62	1.42	1.41	R,NS
4	Identify customers	3.88	3.59	1.55	1.28	1.45	R,NS
5	Advertise for better awareness of the farm and goat produced.	3.61	3.29	1.63	1.53	1.33	R,NS
6	Find out the breed, size, sex, quality of goats buyers may need	3.48	3.39	1.21	1.08	0.53	R,NS
7	Transport goats to marketing points	3.76	3.59	1.60	1.25	0.85	R,NS
8	Market intelligence to determine current market situation	3.49	3.31	1.69	1.50	0.75	R,NS
9	Keep adequate financial record of sales for evaluation purpose	3.77	3.68	1.39	1.32	0.45	R,NS
10	On-farm sells to cut transportation cost and taxation in the market	3.80	3.66	1.49	1.26	0.7	R,NS
11	Livestock auction marketing	2.40	2.33	1.28	1.09	0.41	NR,NS
12	Online marketing of goats	3.28	3.19	1.39	1.60	0.38	R,NS

Key: X1 mean of goat farmers, X2 mean of extension agents, SD1 standard deviation of goat farmers SD2 standard deviation of extension agents, R required, NR not required, NS no significance. Degree of freedom =230, level of significance = 0.05, NI =180, N2 =52, t-calc. =1.97.

The result of Table 4 above reveals that item 12 has its mean below 2.50; this proves that the respondents refused that the item is a marketing technical skills required by youths for goat production. But all other items have their mean between 3.19 and 3.88 which is above the cut-off, proving that all the respondents agreed that the 12 items are the marketing technical skills required by youths for goat production in Ebonyi state. The table also proves that all the items had their calculated value ranging from 0.7 to 1.45; this is below the critical value which is 1.97. This means that there is no significant difference between the two groups of respondents.

Discussion of the Findings

The result of the study in table 1 shows that there are 15 technical skills in planning for goat production in Ebonyi State. The technical skills include sourcing fund, choosing marketing route, budgeting and farm survey. This result is in keeping with Nwangbo (2014) who said that farm business registration, defining target customers, etc are the planning skills in goat production. Result is also in accordance with the findings of Asogwa (2013) who found that planning in goat production entails making prior arrangement on how to locate customers, preparing timetable of activities, deciding on the management system to adopt depending on the area and cost, sourcing capital and land.

The result of the study in table 2 shows that there are 13 technical skills in site preparation and housing for goat production in Ebonyi State. The technical skills include clearing and stumping of the goat building site, developing building plan, fending, laying brick blocks and so on. This finding is in keeping with Aliyu and Jegede (2006) who opined that goat site preparation and housing include clearing of the chosen site, construction of the building with local materials such as woods and thatches. In line with this findings also, Asogwa (2013) outlined skills in goat housing to include making earthen floor of the pen sloppy, construction of gutter from one end of the house to the other, fencing, etc.

The result of the study in table 3 shows that there are 28 technical skills in breeding and management for goat production in Ebonyi State. The technical skills include dehorning, disease control, identifying does on heat, adoption of suitable mating methods and so on. This result is in accordance with Iwena (2013) who opined that breeding and management skills in goat production include proper sanitation of the house. This study is also in support of Aliyu and Jegede (2006) who said that management technical skills that may be required by youths in goat production business may also be extended to other activities carried out to ensure the success of the business such as record keeping, cleaning of the pen ensuring general sanitation of the house, environment and tools. In line with this study, PSCASRE (2000) opined that weaning which is a planned and strategic removal or separation of the mother (doe) from the kid to stop breast feeding and become independent is one of the breeding and management skills required in goat production.

The result of the study in table 4 shows that there are 14 technical skills in marketing for goat production in Ebonyi State. The technical skills include transportation to marketing points, market intelligence, price fixing, negotiation, sales record and so on. This finding is in support of Nweze (2007) who opined that the most profitable means of selling goat is on-farm selling. AGMRC (2016) also said that farmers need to contact buyers to come to their farms to buy their goats through advertisement and other means. In line with the findings, PSCASRE (2000) maintained that the most common and effective method of meat goat marketing are through private buyers and consignment sales.

Conclusion

The above findings from the study are the technical skills required by youths for goat production in Ebonyi state. If the youths can acquire and utilize the skills as articulated from planning to marketing stage above, the problem of youth unemployment resulting to youth restiveness and financial stress on the government in trying to cater for the unskilled youths will be drastically reduced.

Recommendations

Based on the background and findings of this study, the researchers therefore recommend as follows.

1. Ebonyi State Ministry of Educations in collaboration with appropriate curriculum experts should build the above skills into the school curriculum in order for the youths to be

competently equipped with the skills during school training for sustainable self-employment in goat production after school.

2. Government through the Ministry of youths empowerment should provide an enabling environment by assisting the youths with grants and soft loans to procure the necessary resources to embark on profitable goat production business, skill acquisition centers where the above identified skills will be thought to youths who may not have the opportunity to attend formal institutions should be built and equipped with the necessary facilities.
3. Youths should return to the farm and utilize the advantage of their mental and physical agility to go into blue collar jobs such as goat production especially now that the white collar jobs are on continuous holidays and the demand for goat products is in a high increase.

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