

# Agripreneurial Skills Required by Youths in the Processing of Chevon (Goat meat) into Kebab for Sustainable Income Generation in Delta State, Nigeria

Onoriode, O.

Department of Agricultural Education,  
Federal University of Agriculture, Makurdi, Benue State, Nigeria.  
PMB 2373, MAKURI, NIGERIA

## Abstract

The study identifies agripreneurial skills required by youths in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state. Three research questions were answered and three null Hypotheses were formulated to guide the study at 0.05 level of significance. The population for the study was 238 made up of 182 agricultural science teachers in Delta state (ministry of education Asaba, Delta state) and 56 lecturers from the departments of agriculture, Delta state. The sample for this study was 149 comprising 98 agricultural science teachers and 51 lecturers of agriculture from the three agricultural zones of Delta state. Sample techniques were determined using Taro Yamane Formula. The sample was selected using multistage sampling technique. The instrument used for data collection was a structured questionnaire. 58 items structured questionnaire titled: Agripreneurial skills in processing of chevon into kebab questionnaire (ASPCCKQ) was used for data collection. The ASPCKQ. was validated by three validates, two from the Department of Agricultural Education and one from the Department of animal Production , all from Federal University of Agriculture, Makurdi. Cronbach alpha reliability method was used to determine the internal consistency of the instrument which yielded a reliability coefficient of .96. The researcher and three research assistants were involved in the administration and retrieval (100%) of the questionnaire. Data collected was analyzed using mean to answer the research questions and t-test statistics to test the null hypotheses at 0.05 level of significance. It was found that youths required all the items on agripreneurial Skills in Processing of Chevon (Goat meat) into Kebab for Sustainable Income Generation in Delta State. The hypotheses of no significant differences were not rejected for the study. It was recommended among others that the identified agripreneurial skills should be used by skill acquisition centers training of secondary school levers.

**Keywords:** agripreneurs, youth, chevon, processing, sustainable, income

## 1. Introduction

The prioritization of private sector as an engine to drive growth of Agricultural sector as well as development of some effective institutional frameworks to facilitate and coordinate the delivery of Agribusiness and Investment Services in the handling of agricultural produces is an important component of value chain development, and a catalyst for progressive and sustainable expansion of agribusiness, investment and agro processing activities, thereby eradicating waste and ensuring import substitution, food security, wealth creation, employment generation, human capital development and security of human life and property, (Federal Ministry of Agriculture and Rural Development, 2017). the author states that The government of Nigeria has Develop and launch entrepreneurship platforms that create a pathway for youth and women to enter agribusiness economy, Expand cooperation with CBN's intervention funds targeted at women and youth e.g. MSME, Facilitate investment advisory support for potential agripreneurs .

Agripreneurs are individual who are involved in seeking out opportunities and investing in agriculture and the food system, (Ekeoji, 2017). Agripreneurs in the concept of this study are individual seeking opportunity in kebab enterprise. The kebab enterprise can create new opportunities for youths and provide more affordable and healthier diets for future generations, stimulate income and employment opportunities in the rural areas, protect the livelihoods of youths, improve resource use efficiency at all levels of the value chain, minimize negative environmental and health consequences, and ensure adequate access by the poorer sections of society to the food they need to live healthy lives, (Food and agricultural organization, 2017). Wickison, (2017) states that farmers are entrepreneur that rears animal and grow gourmet and Medicinal Mushrooms, Grow Flowers to Sell, Offer Space for a Private Air-Strip or Heliport, Offer Motor home, Boat, and Trailer Storage, Offer Parking for Bus Companies, Open Your Farm to the Public, Rent Out Bee Hives, Rent Your Land for Special Events Like Weddings and Parties, Publish Articles Online, Sell Seeds Over the Internet, Rent Your Land for an Antenna, Turbines, or Solar Panels, . Public Speaking and Demonstrations, Win Farm Equipment, Sell Farm By-Products, Grow Dual Crops Raise Specialist Breeds of Animals (e.g. Ostriches, Guinea fowl, Quail, Rabbit, Ostrich/Emu,. Llama, Deer) Breed Dogs, Raise Worms, Private Fishing Lakes, Raise Tilapia or Other Kinds of Fish, Rent Your Field to Metal Detecting Clubs or Allow Metal Detectors to Scan Your Land, Rental Space for Meetings or

Gatherings, Start a Bed and Breakfast, organize a Swap Meet, Farm Snails for Profit, Turn Your Field Into a Campsite, and sell goat meat, milk, butter, cheese, young, hair and as well as kebab.

Goat (*Capra hecus*) belong to the group to the genus *capra* and family *bovidae*. The domestication of goat started life at the Asian mountains, Goat is one of the commonest domestic animals throughout West Africa; they are ruminant animal and are commonly found in town and villages all over in West Africa. Approximately 200 million of the world population of goats is found in the tropics or subtropical region; more than one third of them are in Africa and Nigeria account for 35 million goats in world, ( Emedo, maduka, Oranekwulu, 1995: FMARD 2016). Commercial goat farming is very popular in northern part of Nigeria than southern part (Roy, 2016) the author submitted that goat popularity lies in the fact that no section of the community discriminates against it on any ground whether religious, social or cultural and majority of goat owe their existence to the fact they can thrive as meat producers due their unsurpassed ability to forage, their preference for browsing on widely variety of vegetation and their catholic taste for any kind of edible material and their power to withstand the strenuous of a tropical climate account for their widespread distribution through the zones, ( Emedo et 1995). The author submitted that Goat can be owned by anybody of any age because it requires very little care and normally fend for itself under any condition, Goat farming in Nigeria is very popular and common. Goat is a good source of meat (Chevon), milk, yoghurt, cheese and other by-products such as hide and skin, (Anaeto, Adeyeye, Chioma, Olarinmoye, & Tayo, 2010). The author also opined that Goat meat is a source of high quality protein and low saturated fats which is good for human health. Meat types of goat are West Africa dwarf goat, sokoto red goat, the sahel, kano brown Anglo nubiam among others.

According to the Alabama Cooperative Extension System, (2016) the Preferences and consumption patterns for goat meat are dictated by cultural, traditional, and religious backgrounds, and the socioeconomic status of the community. United state department of agriculture (2001) states that chevon offers more nutritional value; greater health benefits, and is an ideal choice to be considered than the other red meat. The author further submitted that chevon has been established as a lean meat with favorable nutritional qualities, and it's an ideal choice for the health-conscious consumer. Goat Calories contain 122, Fat (g) 2.6, Saturated Fat (g) 0.79, Protein (g), 23 Cholesterol (mg) 63.8. Chevon contain essential amino acid such, Aspartic acid, Threonine, Serine, Glutamic acid, Proline, Glycine Alanine, Valine, Methionine, Cystine, Isoleucine, Leucine, Tyrosine Phenylalanine Histidine Lysine Arginine and Tryptophane (Anaeto, Adeyeye, Chioma, Olarinmoye, & Tayo, 2010) the author also submitted that chevon contain minerals Calcium, magnesium, Phosphorus sodium, potassium Chlorine iron, Zinc Copper and vitamin such as Vitamin A (RE) Vitamin D Vitamin E Vitamin K Thiamin Riboflavin Niacin Ascorbic acid Panthothenic acid Vitamin B6 Vitamin B12. Goat meat value may be increased through production practices or meat processing (McMillin, & Brock, 2005).

Processing according to Adesida, Olusupo, Aluko & Isa, (2015) Are activity that maintains or raises the quality or alter the physical or chemical characteristics of a material or add to it anyway whatsoever. The authors stressed that in processing, therefore values are added to the produce to enhance their quality and transform them into useable forms, therefore processing extends the season for which they are available. Processing of meat into more palatable and usable forms or providing meat at times of higher purchaser demand will usually increase the price of the meat (McMillin, & Brock, 2005). The author further reviewed that relative value or price received is increased through products that are more palatable, usable, or available in a different form or time after sorting or processing. The relative value, and thus the amount of value that has been added or is available to the producer of the commodity or product, is ultimately determined through amounts and prices of purchases by consumers (McMillin, & Brock, 2005). Primary processing operations include tenderization, grinding, flaking, freezing, and case-ready fabrication and packaging, whereas examples of further processing are curing, smoking, marinating, and injection, emulsifying, forming, and cooking (Pearson & Gillett, 1996). Value-added product areas also would include irradiated products for microbial safety, precooked products for convenience, portioned and institutional items for uniformity, and nutritionally enhanced meat for healthfulness. (Mcmillin, & Brock, 2005). Bax, (2015) opined that equipments like sharp skinning knife, table or platform on which to lay the eviscerated carcass, or a hoist to lift the sheep by the hind legs to eye or chest level, If available, you can use a cradle, which is a trough about 6 inches wide at the bottom with sloping sides 6 inches high to be used for skinning, A dripping pan to catch the blood after sticking, using a chain-mail glove on your free hand will prevent accidental cuts, Stunning Sticking, Skinning and Evisceration are used kebab processing industries.

Kebabs in the opinion of hornby, (2010) are small pieces of meat and vegetables cooked on a wooden or metal stick. Food and agricultural oragnisation (2006) Submitted that "kebab" refers to processed meat on skewers usually made of sliced lean meat from veal, mutton, goat or chicken or mixes of them. The author further submitted that the lean meat has been marinated (mixture of salt, spices, oil, bell pepper, onions, or even liver/kidney) and the marinated meat pieces are arranged around a skewer bar usually 3-4 kg quantity of meat on the skewer. Kebab in the concept of this study is the small pieces of chevon and vegetable cooked on pieces of wood or metal. Mcmillin & Brock, (2005) pointed out that Goat meat was distinguishable from other species in plain and seasoned meat loaves, chili, curries, and patties. Specific organic acids are associated with goat meat

flavor, and oxidized flavors develop more rapidly in cooked goat meat than in meat from other species. The author further stated that more convenient product forms and the availability of goat meat would increase the value and penetration of goat meat in ethnic and nontraditional consumer markets. FAO, (2006) state that in preparing the product for consumption, the skewer is slowly rotated in a vertical position close to a source of heat; e.g charcoal gas elements, electro coils or infrared devices are used. The outside layers of the meat bulk, once they are sufficiently heated (slightly crispy), are carefully trimmed off as thin slices. In doing so, the deeper layers, which are still uncooked, will be exposed to the heat and trimmed off when cooked. The process is repeated until all meat has been trimmed off. A special kebab is produced using minced or finely comminuted meat mixes similar to patty mixes. This type of kebab must be heat treated (coagulated) prior to final roasting to make sure that the big chunk of meat firmly sticks to the vertical skewer and maintains its shape and position in other to be sustainable in meeting consumers need.

Igbabaka, (2015) submitted that something is said to be sustainable when it continues for a long time without depletion or causing harm. Sustainable kebab enterprise in the context of this study is the ability of kebab enterprise to maintain a well defined level of performance over time, and it required to enhance that output without reduction in its value or quality. Sustainable kebab enterprise will help youths increased the value chain of chevon and will help youths increased the source of income generation. Income is the money that an individual or business receives in exchange for providing a good or service or through investing capital and it is consume to fuel day to day expenditure (Abdulrahman & Abdelmalik, 2015). Income generation therefore is Interventions attempt to address poverty, unemployment, and lack of economic opportunities to increase participants' ability to generate income and secure livelihoods, (Research to prevention 2013). The author further enunciated that income generation is an intervention which imparts vocational skills or provides capital or commodities that enhance the capacity of individuals or groups to generate income. Sustainable income generation in the context of this study is the ability of exposing the youths to vocation skills in kebab enterprise as well as equipping them with occupational skill in a viable money earning enterprise with the potential of spreading income accruable to them over a long period of time or on regular basis.

Youths in the view of Egbule, (2001) refers to generality of the young members of our community within the age of span of 10-30 years. (Olantain, Asogwa, & Onipede, 2009) stressed that unemployed youths have no means of survival except by depending on their parents for food, shelter and vital needs. FMARD (2016) Opined that key goal of government policy are gear toward shift of behaviours that result in negative outcomes for youth and reinforce such shifts by expanding wealth creation opportunities for youths develop and launch entrepreneurship platforms that create a pathway for youth to enquire skills to enter agribusiness economy and expand capacity building for youths for entrepreneurship, including technical training and access to financial services pool of ideas

Amonjenu, Asogwa, & Iornenge, (2016) Skills is a specified ability to do something well. Skills in the context of this study are a specified ability required by youths to processed goat meat into kebab. In preparing goat product for consumption, rotating skewer into right position close to a source of heat, application of salt, spices and oil, bell pepper, onions, and even liver/kidney pieces, Butchering, equipments to be used, processing, and marketing of processed kebab required skills. Therefore in other for youth to be self reliance and address over dependence on their parent, friends and neighbor it's necessary to expose them to agriprenueral skills require in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state.

### **1.1. Statement of the problem.**

The kebab production in Delta state is a viable enterprise favour with with population, social centers and presence of industries. The demand for kebab products in Delta state usually exceeds production, yet most of the youths still remain unemployed, roam the street, and depend on parents, friends, neighbors and social vises for survival.

The researchers observed that most of the town visited in Delta state has few kebabs production ventures and most consumers do not always have kebab product to satisfy their desire.

A personnel interaction with some of kebabs producers show that their absenteeism on production is due to high price of beef and as a result of this, their output is equal to or slightly exceed their input. The researchers also find out that some of the producers prefer chevon to beef because it is cheaper compare to beef but lack necessary skills in processing chevon into kebab. It is on this background that this study seeks to indentify agriprenueral skills required by youths in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state.

### **1.2. Purpose of the Study**

The main purpose of this study is to determine the agriprenueral skills required by youths in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state. Specifically, the study sought to;

1. Determine the agriprenueral skills required by youths in the planning of chevon (goat meat)

enterprise for sustainable income generation in Delta state.

2. Determine the agriprenuerial skills required by youths in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state.
3. Determine the agriprenuerial skills required by youths in the marketing of chevon (goat meat) for sustainable income generation in Delta state.

### 1.3 Research Questions.

1. What are the agriprenuerial skills required by youths in the planning of kebab enterprise for sustainable income generation in Delta state?
2. What are the agriprenuerial skills required by youths in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state?
3. What are the agriprenuerial skills required by youths in the marketing of chevon (goat meat) for sustainable income generation in Delta state?

### 1.4 Statement of Hypotheses

The following hypotheses was formulated and tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of the responses of teachers and lecturers on the agriprenuerial skills required by youths in the planning of kebab enterprise for sustainable income generation in Delta state.
2. There is no significant difference in the mean ratings of the responses of teachers and lecturers on the agriprenuerial skills required by youths in the in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state.
3. There is no significant difference in the mean ratings of the responses of teachers and lecturers on the agriprenuerial skills required by youths in the marketing of chevon (goat meat) for sustainable income generation in Delta state?

### 2.0 Methodology

The study answered three research questions and tested three null hypotheses formulated at 0.05 level of significance. The study adopted survey research design. This design was considered appropriate because the opinion of a representative sample was sought using a structured questionnaire and the result obtained were generalized on the entire population of teacher and lectures in Delta state. The study was carried out in Delta state consisting of three agricultural zones namely; Delta central, North and south. The population for the study was 238 made up of 182 agricultural science teachers in Delta state (ministry of education Asaba, Delta state) and 56 lecturers from the department of agricultural education, Delta state. The sample for this study was 149 comprising 98 agricultural science teachers and 51 lecturers of agricultural from the three agricultural zones of Delta state. This was determined using Taro Yamane formula for a finite population. The sampling technique for the study was multistage technique. This is because the technique allowed the researcher to sample in stages hence two groups of respondents is required for the study. In arriving at the sample size, the entire population was stratified into Delta central, North and south using Stratified proportionate sampling technique. In each of the 3 zones, three Local government areas were purposively selected. Nine local government areas were thus sampled. This selection was premised on the reasons that they were the local government areas in each zone with the highest populations of people, many social events and areas with farmers that engaged in commercial goat production. Simple random sampling technique (balloting) was used to select the respondents from the local government areas according to the proportion in each of the zones, since there is a comprehensive list of the entire population of the respondents with their respective zones thereby, giving each sample an equal opportunity of being selected. The instrument used for data collection was a structured questionnaire titled: Agriprenuerial skills in processing of chevon into kebab questionnaire (ASPCKQ) developed by the researchers from literature reviewed. The questionnaire was divided into two parts namely; part A and B. Part A was used to elicit information on the personal data of the respondents while part B has three sections; Agriprenuerial skills required by youths in the planning of kebab enterprise, agriprenuerial skills required by youths in the processing of chevon (goat meat) into kebab, agriprenuerial skills required by youths in the marketing of kebab for sustainable income generation in Delta state.

Each ASPCKQ item was anchored on a four point rating scale of Highly Required (HR), Averagely Required (AR), Slightly Required (SR), and Not Required (NR) with a corresponding nominal value of 4, 3, 2 and 1 respectively. The instrument was subjected to face and content validity by three validates; two from the Department of Vocational Agriculture and Technology Education and one from the Department of animal Production, all from Federal University of Agriculture, Makurdi. Their suggestions and corrections made by validates was incorporated before producing the final copy of the questionnaire that was used for data collection. The validated instrument was administered to 30 respondents made up of 20 agricultural science teachers and 10



lecturers in Benue state. The data obtained from the trial testing were subjected to reliability analysis using Cronbach Alpha method which yielded a reliability coefficient of .96 indicating that the instrument is reliable for the study. The researcher and three research assistants who are familiar with the study area were selected and given orientation on how to administer to and retrieve copies of the questionnaire from the respondents. The researcher and research assistants visited the respondents in their various offices to administer the questionnaire on face to face bases. The questionnaires were either filled on the spot and given back to the researcher/ research assistants or the researcher/research assistants comes back on schedule to collect them. A total of 238 copies of the questionnaire were administered and retrieved and used for data analysis representing 100% retrieval rate.

The data collected were analyzed using arithmetic mean and standard deviation to answer the research questions while t-test statistics was used to test the null hypotheses at 0.05 level of significance. Bench mark of 2.50 was established to accept any item with a mean rating of 2.50 or above as agreed while any item with a mean rating less than 2.50 was regarded as disagreed for all the research questions. The decision rule for rejection or otherwise of hypotheses was based on the p-value and alpha value. A hypothesis of no significant difference was not rejected for any cluster of item whose p-value was equal to or greater than alpha value of 0.05 ( $P \geq 0.05$ ) while it was rejected for any cluster of item whose p-value was less than alpha value of 0.05 ( $P < 0.05$ ).

## 2.1 Discussion of Results

The results for the study which was obtained from the research questions answered and hypotheses tested through data collected and analyzed are presented as follows:

Table1: Mean Ratings and Standard Deviation on responses of teachers and lecturers on the agriprenuerial skills required by youths in the planning of kebab enterprise for sustainable income generation in Delta state. (N=:149 n<sub>1</sub>=98 agricultural science teachers: 51 lecturers of agriculture)

s/n	Statement	Mean	Sd deviation	Sig	Remark
1	Formulate specific objectives for kebab processing enterprise	3.92	.377	.614	NS*
2	Review the objectives periodically to meet economic or business situation	3.11	.781	.917	NS*
3	Decide on the location of the kebab processing enterprise	2.97	1.013	.950	NS*
4	Drawing programme to cover different stages of chevon(goat meat) processing into kebab	3.01	.904	.901	NS*
5	Identify other relevant inputs required for the enterprise	2.97	.926	.895	NS*
6	Identify market out let for kebab	2.99	.973	.682	NS*
7	Identify sources of fund to establish the enterprise	2.91	.958	.795	NS*
8	Identify relevant records to keep for the enterprise	2.97	1.023	.649	NS*
9	Make budget for kebab processing enterprise	2.87	.927	.732	SN*

N= mean of teacher and lecturers, SD = weighted standard deviation, Sig = p-value calculated values, S = significant, NS = not significant, \* = \*required, \*\* not required.

Table 1: revealed that all the items had their mean values ranged from 2.87– 3.91 which are agriprenuerial skills required by youths in planning for kebab processing enterprise. The table also shows that the standard deviation (SD) of the items ranged from 0.37 – 1.03, indicating that the respondents were not too far from the mean and from the opinion of one another in their responses. The table reveals that all the 9 items had their p-values greater ranges from 0.61- 0.95 which were greater than Alpha value of 0.05 , indicating that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the Agriprenuerial skills required by youths in planning for kebab processing enterprise.

Table 2; Mean Ratings and Standard Deviation of Respondents of Eachers and Lecturers on the agriprenuerial skills required by youths in the in the processing of chevon (goat meat) into kebab for sustainable income generation in Delta state (N=:149 n<sub>1</sub> =98 agricultural science teachers: 51 lecturers of agriculture)

s/n	Statement	Mean	Sd, deviation	Sig	Remark
10	Identify Butchering skills Skinning skills	2.87	.927	.732	NS*
11	Identify Handling skills (minimizes damages or injury to the live animal.)	2.95	.940	.799	NS*
12	Identify Butchering Equipment and Tools.	3.04	.829	.845	NS*
13	Stunning and Sticking skills( i.e killing methods)	3.05	.769	.953	NS*
14	Skinning skills	3.15	.757	.904	NS*
15	Evisceration skills	3.11	.790	.917	NS*
16	Remove Head, feet, skin and viscera	2.97	.870	.901	NS*
17	Cut and trimmed whole leg.	2.85	.918	.636	NS*
16	unboned and rolled breast	2.95	.936	.750	NS*
19	Kidneys (trimmed and devilled on toast five minutes after this was taken.	3.03	.822	.733	NS*
20	Find the top of the pelvic girdle by pushing with two fingers and mark with your knife.	3.05	.774	.893	NS*
21	Take a line perpendicular to the spine and as close as possible to the top of the pelvis; slice neatly down through the side to the spine.	3.14	.762	.966	NS*
22	Saw or cut with the cleaver	3.09	.791	.964	NS*
23	With one hand inside and one outside the ribcage, count off five ribs from the neck end and mark with your knife.	2.97	.873	.955	NS*
24	Following the line between ribs five and six, cut down, away from the spine, turning towards the tail end at the bottom.	3.09	.800	.865	NS*
25	Cut of the ribs to separate the loin cut from spine to belly behind the last rib	3.16	.780	.962	NS*
26	Trim up the tips of the ribs on both side and use the knife to scrape through the membrane inside the ribs.	3.18	.780	.785	NS*
27	Trim away the flap and tidy up the bone ends.	3.18	.717	.766	NS*
28	'Frenching, i.e turning back the meat outside the ribs, trim and scrape between them.	3.11	.746	.913	NS*
29	Trim off the loin ends around the point where the skin/meat ratio gets a bit pointless	3.09	.791	.863	NS*
30	Find the triangular shoulder blade and trim down either side and behind it	3.09	.796	.597	NS*
40	Unboned shoulder.(i.e Roll it, stuff it, tie it and unborn).	3.13	.759	.676	NS*
41	On to the rump. Pointing the legs up in the air, cut down either side of the tail	3.13	.759	.676	NS*
42	Cook properly	3.18	.717	.766	NS*
43	Identify required Heat equipment	3.18	.717	.766	NS*
44	Marinated meat pieces are arranged around a skewer bar usually 3-4 kg quantity of meat on the skewer	3.18	.717	.954	NS*
45	The skewer is slowly rotated in a vertical position close to a source of heat. e.g charcoal gas elements, electro coils or infrared devices are used.	3.18	.717	.932	NS*
46	The skewer is slowly rotated in a vertical position close to a source of heat. E.g charcoal gas elements, electro coils or infrared devices are used.	3.27	.622	.841	NS*
47	carefully trimmed off as thin slices, In doing so, the deeper layers,	3.22	.602	.823	NS*
48	Final roasting to make sure that the big chunk of meat firmly sticks to the vertical skewer	3.18	.582	.962	NS*
49	Maintains its shape and position	3.13	.553	962	NS*
50	Marinated the lean meat (mixture of salt, spices, oil, bell pepper, onions, or even liver/kidney)	3.13	.553	962	NS*

N= mean of teacher and lecturers, SD = weighted standard deviation, Sig = p-value calculated values, S = significant, NS = not significant, \* = required, \*\* not required

Table 1: revealed that all the items had their mean values ranged from 2.85– 3.22 which are required by

youths in the in the processing of chevon (goat meat) into kebab. The table also shows that the standard deviation (SD) of the items ranged from 0.57– 0.94, indicating that the respondent were not too far from the mean and from the opinion of one another in their responses. The table reveals that all the 9 items had their p-values greater ranges from 0.59- 0.96 which were greater than Alpha value 0.05, indicating that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the agriprenueal skills required by youths in the in the processing of chevon (goat meat) into kebab

Table 3: Mean Ratings and Standard Deviation of Respondents of teachers and lecturers on the agriprenueal skills required by youths in the marketing of chevon (goat meat) for sustainable income generation in Delta state?( =:149 n<sub>1</sub> =98 agricultural science teachers : 51 lecturers of agriculture

S/n	Statement	Mean	Sd deviation	Sig	Remark
51	Sort kebab into groups using size of kg or gram	3.13	.553	.962	NS*
52	Locate area with high demand	3.11	.727	.910	NS*
53	Fix price for each group of kebab kg or gram	3.01	.850	.894	NS*
54	Advertise the product locally or through the media or local methods	3.14	.744	.980	NS*
55	Sell to buyers at the site or in the market or at a particular site	3.07	.859	.908	NS*
56	Keep appropriate record of sale	3.09	.849	.873	NS*
57	Calculate the expenditure	3.14	.870	.815	NS*
58	Calculate the income to determine profit	3.13	.867	.868	NS*

N= mean of teacher and lecturers, SD = weighted standard deviation, Sig = p-value, calculated values, S = significant, NS = not significant, \* = required, \*\* not required.

Table 3: revealed that all the items had their mean values ranged from 3.07– 3.14 which are agriprenueal skills required by youths in the marketing of chevon. The table also shows that the standard deviation (SD) of the items ranged from 0.55 – 0.870, indicating that the respondent were not too far from the mean and from the opinion of one another in their responses. The table reveals that all the 9 items had their p-values greater 0.05 values, indicating that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the Agriprenueal skills required by youths in planning for kebab processing enterprise.

### The result

The result of the study revealed that 9 agriprenueal skills in planning, 32 agriprenueal skill in processing of chevon into kebab and 8 agriprenueal skill in marketing of kebabs are required by youths for sustainable income generation in Delta State. The findings of the study on Table 1: revealed the agriprenueal skills in planning for kebab planning enterprise. This include; review the objectives periodically to meet economic or business situation, Decide on the location of the kebab processing enterprise, Drawing programme to cover different stages of chevon (goat meat) processing into kebab, Identify other relevant inputs required for the enterprise, Identify market outlet for kebab, Identify sources of fund to establish the enterprise, Identify relevant records to keep for the enterprise, Make budget for kebab processing enterprise. The p-value revealed that there was no statistical significant difference between the mean ratings of responses of agricultural science teacher and lecturers of agriculture on how the agriprenueal skills required by youths kebab planning enterprise. Show that youth required all the 9 agriprenueal skills in planning. The findings of this study are in lined with the findings of Mama, Asogwa, & Ukonze, (2012) in a study carried out on Entrepreneurial Competencies Required by Secondary School Graduates for Processing Cashew Nuts to Kernel for Poverty Reduction in Enugu State, Nigeria, where it was found out that teachers of agricultural science required 9 entrepreneurial skills in planning activities.

The results of the study on Table 2 showed that there are 32 are agriprenueal skill required by youths in processing of chevon into kebab in Delta state. These skills are; Indentify Butchering skills Skinning skills, Indentify Handling skills (minimizes damages or injury to the live animal.), Indentify Butchering Equipment and Tools, Stunning and Sticking skills( i.e killing methods), Skinning skills, Evisceration skills, Remove Head, feet, skin and viscera, Cut and trimmed whole leg., unboned and rolled breast ,Kidneys (trimmed and devilled on toast five minutes after this was taken, Find the top of the pelvic girdle by pushing with two fingers and mark with your knife, Take a line perpendicular to the spine and as close as possible to the top of the pelvis, slice neatly down through the side to the spine., Saw or cut with the cleaver, With one hand inside and one outside the ribcage, count off five ribs from the neck end and mark with your knife, Following the line between ribs five and six, cut down, away from the spine, turning towards the tail end at the bottom, Cut of the ribs to separate the loin cut from spine to belly behind the last rib, Trim up the tips of the ribs on both side and use the knife to scrape through the membrane inside the ribs, Trim away the flap and tidy up the bone ends 'Frenching. i.e Turning back the meat outside the ribs, trim and scrape between them, The findings of this study are in consonance with them,

Trim off the loin ends around the point where the skin/meat ratio gets a bit pointless, Find the triangular shoulder blade and trim down either side and behind it Un boned shoulder.(i.e Roll it, stuff it, tie it and unborn), On to the rump. Pointing the legs up in the air, cut down either side of the tail, Cook properly, Identify required Heat equipment, Marinated meat pieces are arranged around a skewer bar usually 3-4 kg quantity of meat on the skewer, The skewer is slowly rotated in a vertical position close to a source of heat. E.g charcoal gas elements, electro coils or infrared devices are used; the skewer is slowly rotated in a vertical position close to a source of heat. E.g charcoal gas elements, electro coils or infrared devices are used, carefully trimmed off as thin slices, In doing so, the deeper layers, Final roasting to make sure that the big chunk of meat firmly sticks to the vertical skewer, Maintains its shape and position, Marinated the lean meat (mixture of salt, spices, oil, bell pepper, onions, or even liver/kidney). The p-value revealed that there was no statistical significant difference between the mean ratings of responses of agricultural science teacher and lecturers of agriculture on how the agripreneurial skills required by youths in processing chevon into kebab for sustainable income generation in Delta state. This findings is in consonance with Bax, (2015) who did work on, Step-by-Step Home Butchering for Sheep, Lambs and Goats. Finding of this study is in consonance with McMillin & Brock, (2005) who studied the Production practices and processing for value-added goat meat. This findings is also agreed with findings of Food and agricultural organization (2006) who studied the fresh processed meat into kebab. he result of the study on Table 3: showed that there are 8 agripreneurial skill required by youths in the marketing of kebabs for sustainable income generation in Delta state. The skills includes Sort kebab into groups using size of kg or gram, Locate area with high demand, Fix price for each group of kebab kg or gram, Advertise the product locally or through the media or local methods, Sell to buyers at the site or in the market or at a particular site, Keep appropriate record and of sale, Calculate the expenditure, Calculate the income to determine profit. The p-value revealed that there was no statistical significant difference between the mean ratings of responses of agricultural science teacher and lecturers of agriculture on the agripreneurial skills required by youths in marketing of kebab enterprise. This Show that youth required all the 8 agripreneurial skills required in marketing. The findings of this study are in lined with the findings of Mama, Asogwa, & Ukonze, (2012) in a study carried out on Entrepreneurial Competencies Required by Secondary School Graduates for Processing Cashew Nuts to Kernel for Poverty Reduction in Enugu State, Nigeria, where it was found out that teachers of agricultural science required 8 entrepreneurial skills in marketing activities.

The findings of the authors cited above helped to add validity to the result of this study

### Recommendations

1. The identified agripreneurial skills should be used by skill acquisition centers of retraining of secondary school levers.
2. The agripreneurial skills should be used to train retirees who may be interested in Kebab processing enterprise.
3. The agripreneurial skills should be used by teachers of agriculture in secondary schools to teach students step-by-step of processing chevon into kebab.

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