



# Analysis of Youth Participation in Hides and Skin Processing and Marketing in Sokoto-Metropolis, Sokoto State, Nigeria

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## ABSTRACT

*Livestock breeding with other related activities the most important sectors of agriculture provide the population with food and essential raw materials. The aim of this study is to describe the socio-economic characteristics of the youth participating in hide and skin processing and marketing in the study area, and to describe the level of youth participation in hide and skin processing and marketing; with view to determine the cost and return in hide and skin processing and marketing; as well as to evaluate the constraint encountered by youth involved in hide and skin processing and marketing in the study area. A total number of 100 samples were collected with the aid of a structured questionnaire. The information was collected based on socio-demography, hide and skin processing methods practiced by respondents, and constraints faced by the processor in the study area. Descriptive statistics were used to analyze the data collected, which involves the use of measures of central tendency such as means, frequency distributions and percentages to describe the socio-economic characteristics of leather processors in the study area and the constraint confronting the leather processing and marketers. It was found that quality control assessment of the product, poor extension services, lack of protective wears, expose to dangerous chemicals were seen to have a significant effect on the participation of youth in hide and skin processing and marketing. Age, marital status, household size, and training experience had no effect on the youth's participation in the hide and skin processing and marketing. The study also found that despite the constraint youth experienced in the study area, they still contributed greatly to tanning activities and were willing to continue with tanning activities as a profession.*

**Key words:** Hides and Skin, Youth, Processing, Marketing, Tanning, Income, Sokoto.

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## 1. INTRODUCTION

Hides and skins are the main export income generators from the livestock sector in Africa. In the year 2000, Africa's share of total world production was only 5% of bovine hides, 14% of goat and kidskins and 8% of sheep and lambskins (UNDP, 2005). The potential of Nigeria in the production of hides and skins may be assessed from the slaughter statistics. On the average, Nigeria

produces over one million hides and about three million skins per year from the registered abattoirs and slaughterhouses. Many animals are slaughtered outside these registered premises and the utilization of the resultant hides and skins is unaccounted for. Hides and skins are an end product of animal production. As an end product – although more correctly they are a by-product – they are an important and valuable resource. In the developing world they are almost never exploited to anything like their full potential. Hides and skins are a renewable resource of national and international significance. They provide scope for exploitation on a sustainable long-term basis. More particularly, production and marketing of hides and skins provide opportunities to support and sustain livelihoods especially in rural areas. In order to operate successful ventures, however, there must be a suitable business structure and the hides and skins must be treated as commercial assets (Ihuoma *et al.*, 2001).

Tanning of hides and skins into leather is one of the main industrial activities of the North West, particularly in Kano and Sokoto States, Nigeria. According to Nigerian Tanners Council (2009), over 85% of the tanneries in Nigeria are found in these states. The value chain actors in hides and skins processing include the butchers, tanners, hides and skins wholesalers (dealers) and leather wholesalers. As processing and marketing of hides and skins is very important to the industrial activities of the region, effort is required to investigate the level of participation in local leather industry to hides and skins processing into leather and their marketing in Sokoto State.

Youth has been defined as individuals male or female, above the age of ten but below thirty years of age (Alao, 1978; Olujide, 2008). The youth has also been viewed as a concept, defined as the period in an individual's life which runs between the end of childhood and entry into the world of work (Onuekwusi and Effiong, 2002). Youths are one of the greatest assets that any nation can have (Federal Republic of Nigeria, 1999). Not only are they legitimately regarded as the future leaders, they are, potentially and actually the greatest investment for a country's development (Federal Republic of Nigeria, 1999; Olujide, 2008). According to Nigeria's National Youth Development Policy (2001), the youth comprises all young persons of ages 18 to 35, who are citizens of the Federal Republic of Nigeria. This category represents the most active, the most volatile and yet the most vulnerable segment of the population. The global population of young people aged 12-24 is currently 1.3 billion. The youth population is projected to peak at 1.5 billion in 2035 and it will increase most rapidly in Sub-Saharan Africa (SSA) and South East Asia (by 26 percent and 20 percent respectively between 2005 and 2035) (FAO, 2004).

Youth is the time of life when one is young, but often means the time between childhood and adulthood (maturity) (UNESCO, 2005). Youths constitute a formidable force for sustainable agricultural development of any nation particularly the agrarian ones including Nigeria (Ogunremi, 2012). This is because youths possess a lot of energies and other inestimable assets for productivity and general sustainable socio-economic development (Iwala 2006; Ogunremi, 2012). A major concern of the Federal Government in Nigeria is how to tackle the problem of unemployment among the youths in the country. Many Nigerian states have designed and execute several self-empowerment programmes to enhance the economic empowerment of their youths (Umeh and Odo 2002; Ogunremi, 2012). Youths are rightly seen as leaders of tomorrow. Hence, the kind of education (formal or informal) that youth are exposed to or have access to will determine the nation's overall development. It has been observed that if we meet up with the challenge of the rural sector, the youth that constitute part of the population that makes up the rural areas, have certain roles to play in the process of rural development. These include social, economic, political and civil roles, which will aid the development of rural areas and the nation in general. However, these young people do not know how they can contribute their best to the development of their areas.

Hides and skins are a renewable resource of national and international significance. They provide scope for exploitation on a sustainable long-term basis. More particularly, production and marketing of hides and skins provide opportunities to support and sustain livelihoods especially in rural areas. In order to operate successful ventures, however, there must be a suitable business structure and the hides and skins must be treated as commercial assets. The Sokoto Central Abattoir, designed as a full-fledged mechanized plant, was established in 1966 with a rated capacity to slaughter up to 150 head of cattle and 500 small ruminants per day (UNIDO, 2005). At present the daily kill is about 40-60 heads of cattle and some 200 sheep and goats. The actual slaughter operation takes place on the floor by employing some rudimentary methods, also the flaying of hides is carried out on the floor, making it very difficult to avoid flay cuts and holes. It seems the damages afflicted to the hide is of minor concern to the hide owner as nearly 80% or more of the hides produced are taken up by the “pomo market” a ready uncomplicated outlet for fresh hides at attractive returns (Naira 700-1500/hide – the number of holes and cuts is of no concern as the hide will be cut into strips anyway) (UNIDO, 2005).

The research study targeted to describe the socio-economic characteristics of the youth participating in hide and skin processing and marketing in the study area; and to describe the level of youth participation in hide and skin processing and marketing; with view to determine the cost and return in hide and skin processing and marketing; as well as to evaluate the constraint encountered by youth involved in hide and skin processing and marketing in the study area.

## 2. MATERIALS AND METHODS

### 2.1 The Study Area

The study was carried out in Sokoto State. The State is located in the extreme North-western part of Nigeria. It is located between latitudes 4°- 6°40N and longitudes 11°30- 15°50E. The state has an estimated population of 3, 696, 999 (NPC, 2006). The projected population of 4, 761, 734 people in 2015 at a growth rate of 3.2 percent per annum makes the state populous. There are two distinct seasons in the state; the rainy season which starts around May and lasts till September, and the dry season from October to April. The annual rainfall is frequently erratic, poorly distributed and varies from 500mm to 1300mm. There are two temperature extremes; the hot period (March to May) which is as high as 39°C and the cold harmattan months of December to January, when cold, dust-laden winds blow from across Sahara bringing down the temperature to as low as 15°C averaging about 27°C (SMANR, 1998). The climate of the state is largely controlled by two recasting air masses. The moist tropical maritime from the south which blows from the Atlantic Ocean and the tropical continental wind from the north across the Sahara which is dry and dusty that brings the harmattan (SMANR, 2007). The rainy season is from June to October, The mean annual rainfall is 750 mm and potential evapotranspiration rate has been reported to be 102cm.

The major occupation is farming followed by trading and local rearing of animals. Livestock include cattle, sheep, goats and poultry which provide food for human consumption with potentials of providing raw materials for industries. Sokoto is predominantly a Muslim community. Fulani and Hausa are the main ethnic groups in the state. However, there is considerable number of Fulani cattle herders, whose males rear livestock, while the females hawk locally prepared fermented milk in towns and villages and majority of the youth involves in working at local tanneries.

### 2.2 Sampling Technique and Sample Size

Two-stage sampling procedure was employed for the study. The first stage, two communities was purposively selected in two Sokoto based on the intensity in leather production namely: Majemar Karaye and Majemar Unguwan Rogo. Secondly thirty percent (30%) of leather producers and 30% of marketers in each community were selected using simple random techniques. A total of one hundred respondents were selected for the study as indicated in Table 1.

**Table 1: population and sample size of youth involved in leather processing**

SELECTED COMMUNITY	Processor Sample Frame	Sample Size (30%)	Marketer Sample Frame	Sample Size (30%)
Majemar Karaye	102	31	54	16
Majemar Unguwan Rogo	121	36	60	18
Total	223	67	114	34

Source: reconnaissance survey,

### 2.3 Method of Data Collection

Primary data were used for this study. Having collected with the aid of structured questionnaire, the information were collected on (a) respondents socio-economic characteristics such as age, household size, educational status, marital status and gender of household youth head. (b) Processing method practiced by respondents (c) Constraints faced by the processor in study area.

#### 1. Analytical Techniques

The tools used in the analysis include, descriptive statistics and gross margin analysis

#### 2.4.1 Descriptive statistics.

Descriptive statistics was used to achieve the study objectives. It involved the use of measures of central tendency such as means, frequency distributions and percentages to describe the socio-economic characteristics of leather processors in the study area and the constraint confronting the leather processing and marketers.

**1. Gross Margin Analysis**

The Gross margin (GM) was adopted from the work of Olukosi and Erhabor (1988). It was used to estimate the costs and returns of leather production. The formula for the gross margin model is stated as follows:

$$GM = GI - TVC \text{ -----I}$$

Where,

GI= Gross income (₦);

TVR= total variable revenue (₦);

TVC= total variable cost (₦) and

The gross income was obtained by multiplying, while the total variable cost comprised of costs of input and output

Returns per naira invested (RNI) was obtained by dividing the gross income (GI) by the total cost (TVC).

Therefore,

$$RNI = \frac{GI}{TVC} \text{ ----- II}$$

$$RNI = \frac{GI}{TVC} \text{ ..... ii}$$

Where,

RNI = returns per Naira invested

GI = gross income and

TVC = total variable cost.

Decision Rule:

$RNI > 1$ , it implies the enterprise is profitable;

$RNI = 1$ , it implies that the leather tanners is operating at breakeven point and

$RNI < 1$ , the leather tanners is at loss

**3. RESULTS AND DISCUSSIONS**

**3.1 Socio-economic characteristics of the respondents**

**3.1.1 Age of the respondents**

One of the socio-economic characteristics this study investigated is age. In the study, results from Table 1 shows that the majority of the youths interviewed (66%) were between 30 and 49 years, 19% were between 20-29 years. While during the survey, some respondents stated that they started the business of hide and skin processing and marketing as early as age 7years (Table 2). This coincides with the findings of Daniel et al (2017), who reported highest percentage of tanning participation among respondents of

age range between 30 years and above. This may probably be as a result of engagement into productive stage by middle-aged individuals at Northern Nigeria, where youths participate in tanning to get income for the sustainability of their livelihoods.

**Table 2 Age of Respondents**

Age	Frequency	Percentage
20-29	19	19
30-39	47	47
40-49	23	23
Total	100	100

**3.1.2. Marital status**

The result in Table 3 shows that 78% of the respondents were married and they engage in hide and skin processing and marketing so as to make optimum profit to support their families, 22% of the respondents were single. This shows that positive relationship between married and single respondents in the marketing of hide and skin processing (Table 3). This finding is close to the findings of Anil and Suraiya (2014), who reported that predominant (65.9%) people who engage in hide and skin processing are married, while the remaining 34.1% are not married. This may be due to the struggle by the married couples in order to cater for their home needs.

**Table 3. Marital Status**

	Frequency	Percentage
Single	22	22
Married	78	78
Total	100	100

**4.1.3 Educational Level**

The importance of education cannot be overemphasized. Education is an effective tool in running a business. An educated business businessman has little or no difficulty in recording his business activities. The result of the data from the entire respondents shows that 83% had formal education and 17% has no formal education. This shows that out of all the hide and skin processors and marketers, 20% had primary education, 43% had secondary education, 20% had tertiary education while 7% had adult education (Table 4). This concurs with the study of Anil and Suraiya (2014), who documented highest percentage (53.3%) of tannery workers with secondary school certificates, with least percentage of the tannery workers who graduated from higher institution. This may probably be as a result of high expectations of white collar jobs by the graduates at Northern Nigeria, that sometimes belittle most businesses that are not formal, as most graduates prefer to be in civil service.

**Table 4. Educational Level**

	Frequency	Percentage (%)
Non formal	10	10
Primary	20	20
Secondary	43	43
Tertiary	20	20
Adult education	7	7
Total	100	100

**3.1.4. Tanning Experience**

The result shows that 48% of the respondents have 10-20 years tanning experience while 5% of the respondents have 30 and above years tanning experience. Others are 32% have 1-10 years experience and 15% have 20-30 tanning experience of hide and skin processing and marketing (Table 5). This is not in agreement with the findings of Anil and Suraiya (2014) conducted at Dhaka, Bangladesh, who reported highest percentage of tannery working experience among tanners that have 2-6 years of experience. Almost about 75% of the workers have been working in the tannery for not more than 11 years in their study. This may be due to the idea of getting into hide and skin processing to sustain one's life, after which the tanners look for other alternative sources of income at Bangladesh, but in Nigeria, some tanners take the tanning business as a profession, as such

individual tanners tend to stay in the business for a long period of time in order to build up a career in it despite the challenges associated with the business.

**Table 5. Tanning Experience**

Year	Frequency	Percentage (%)
1-10	32	32
10-20	48	48
20-30	15	15
30 and above	5	5
Total	100	100

### 3.2 Level of Youth Participation in Hide and Skin Processing and Marketing

#### 3.2.1 Types of Tanning Methods in which Respondents are Involved

The result showed that majority of the respondents engage in vegetable tanning which represented 95%, while minerals, aldehyde and oil representing 3%, 2% and 1% (Table 6). This may be due to the low cost of tannery effluent treatment when tanners use vegetable method for tanning process, as most countries impose a critical sanction to the industries that discharge their effluent without proper treatment as recommended by Umar *et al.* (2017).

**Table 6. Frequency of Tanning Methods involved by the Respondents**

Training	Frequency	Percentage (%)
Vegetable	95	95
Minerals	3	3
Aldehyde	2	2
Oil	1	1
Total	100	100

#### 3.2.2 Sources of Tanning Labour

The respondents based on hide and skin processing and marketing were represented in table 7. The result shows that majority of the respondents; 32%, 48%, 12% and 7% with respect to hired, family, communal and others respectively (Table 7). This coincides with the findings of Anil and Suraiya (2014), who reported majority of the tanning business as family business and some hired workers with long period of experience.

**Table 7. Sources of Tanning Labour**

	Frequency	Percentage (%)
Hired	32	32
Family	49	49
Communal	12	12
Others	7	7
Total	100	100

#### 3.2.3 Leather processing

The study shows that majority of the respondents (18%) were engaged in tanning and soaking followed by (15%) marketing. Bating is the least in the process representing 6% than dying (9%) (Table 8). Umar *et al.* (2015) indicated that varied purchase costs but having the same selling value of the finished leather depending on the cost of the processes involved. The modern tanneries purchases goatskin at ₦ 1500, the value addition were ₦ 800 and sheepskin ₦ 550 and ₦450 per finished leather respectively. This is as a result of soaking the hides to reduce the cost of processing, as such majority of tanners adopt soaking of hides during processing.

**Table 8. Leather processing**

Activities	Frequency	Percentage (%)
Soaking	18	12
Unhairing	12	12
Deliming	10	10
Pickling	12	12
Training	18	18
Bating	6	6
Dying	9	9
Marketing	15	15

### 3.3 Determining the Cost and Return in Hide and Skin Processing and Marketing

#### 3.3.1 Distribution of Respondents according to Level of Monthly income

Out of the total number of tanners assessed in relation to level of income, it was discovered that the level of income fall into the categories with high frequency (36-39%) of tanners who earn ₦ 151, 000 to above ₦ 201, 000 (USD 1= ₦ 460) (Table 9). This is comparable to the study conducted at Pakistan, where the researchers reported that majority of the workers (48.7%) had monthly income of 3000-5000 rupees (1 USD = 60.25 Pak rupees) (Shahzad *et al.*, 2006). It showed that Nigeria paid high salaries among the tannery workers than that of Pakistan.

**Table 9. Distribution of Respondents according to Level of Monthly income**

Income (₦)	Frequency	Percentage (%)
50,000-100,000	12	12
101,000-150,000	13	13
151,000-200,000	36	36
201,000 and above	39	39

#### 3.3.2 Cost in Hide and Skin Processing and Marketing

The scale of skin was measured to be 7 square feet. A square feet was said to cost ₦1140. Cost of raw skin was realized to ₦800 in processing. The total labour cost per square feet consist of family, hired communal was said to ₦28. The total cost of chemical used in processing per square feet was said ₦42.85. Therefore, the total cost of 7 square feet of raw skin was realized to be ₦800, the total cost of labour was realize to ₦200.2 while that of chemicals was ₦300. The total cost of processing 7 square feet of raw skin to leather was ₦1300. This is in contrast to the findings of Umar *et al.* (2015) who documented that the business is profitable, with the net profit per week (TR -TC) found to be ₦34, 524.7 while gross margin was ₦52,050 per week. The value of fixed costs components constituted only 23.2% of the total cost of production, indicating small scale operation of the business.

#### 3.3.3 Return on Skin processing

The cost of sale per square feet was ₦300. The total cost of 7 square feet of processed skin was ₦2100. The estimated value of total return was ₦2100; Gross margin of processed skin was ₦800. This indicates that processed skin is profitable in the study area. A return per square feet of skin invested is ₦114.28, this implies that for every ₦100 invested in skin processing in the study area, there will be a gain of ₦14.28 kobo this shows that skin processing is profitable (Table 10). This deviates from the study of Ismail (2005), who reported that the cost of skin constituted 63% in leather tanning and finishing stages, value added were 26.1% and 38.7% respectively. The value of skin transformed into finished leather increases to 113% this value increases from 22 million Naira for salted goatskin to 34.6 million Naira tanned leather to 46.8 million naira finished leather.

Table 10. Cost and Return of Processing Hide and Skin

	Average quantity per sq feet	Unit price	Value (₦)
A Raw skin	114.29	7	800
Labour	28.57	7	200
Chemical	42.85	7	300
Total cost			1300
B Return	300	7	2100
C Gross margin			800
Return per Naira invested			0.62

3.4 Constraint Encountered by Youth Involved in Hide and Skin Processing and Marketing in the Study Area

3.4.1 Respondents constraints to hide and skin processing and marketing.

The result indicated that the majority (56% and above) of the respondents agreed that all marketing with the exception of limited demand of market for hide and skin with 21 respondent representing 21%. Notable among the constraints were inadequate transportation, poor extension services and lack of protective wear e.g. hand glove, rain boot, laboratory coat, no quality control of product which represented 89%, 88% and 84% respectively (Figure 1). The work of Umar et al (2015) supported this present findings, by pointing out the major problems faced by tanners include poor protective gears, inadequate quality assurance and poor road networks for prompt transportation of processed hides.

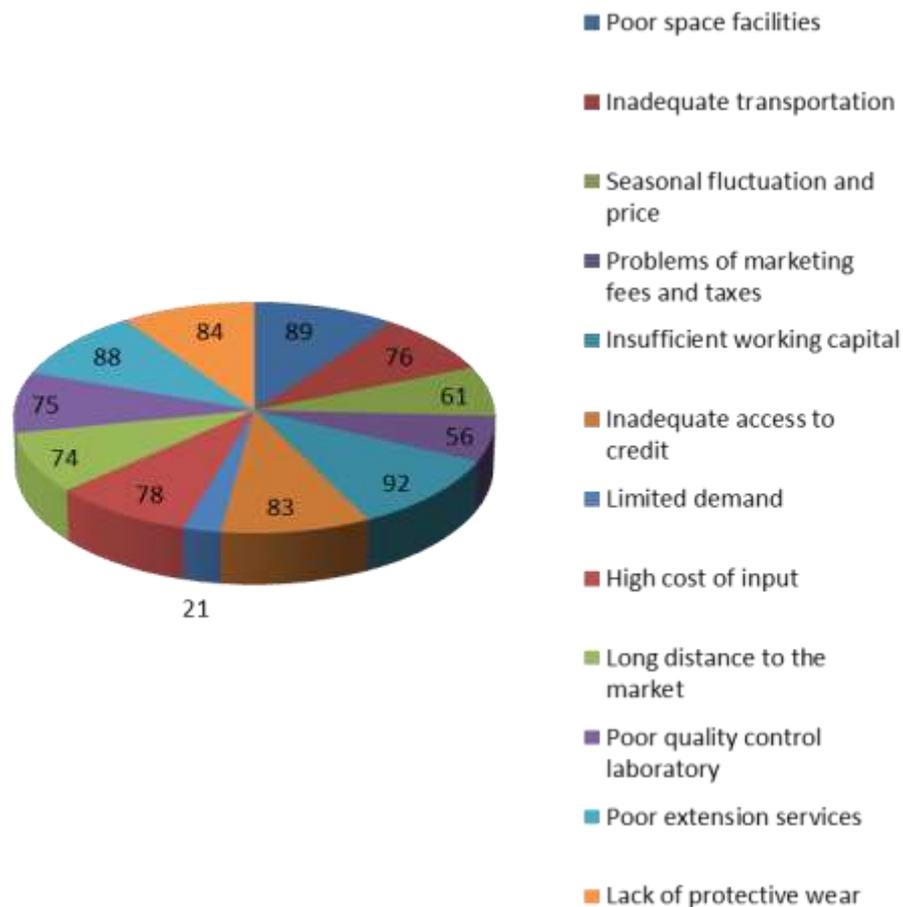


Fig. 1. Constraints faced by youth in level of hide and skin processing marketing

4. CONCLUSION

This study has attempted to capture the relationship between socioeconomic characteristics of youths and participating in hide and skin processing and marketing based on their income. From the study, Quality control assessment of product, poor extension services, lack of protective wears, expose to dangerous chemical were seen to have significant effect on the participation of youth

in hide and skin processing and marketing. Age, marital status, household size and training experience had no effect on the youths participation in the hide and skin processing and marketing. The study also found that despite the constraint youth experienced in the study area, they still contributed greatly to tanning activities and were willing to continue with tanning activities as a profession.

#### **4.1 Recommendation**

1. Youth should be encouraged to form and to be part of the youth cooperative society in the Sokoto metropolis area; this will help in alleviating any of the problems faced by the youths in relation to financial commitment.
2. Tanning inputs such as hide and skin improved chemicals should be available at the right time and at subsidized rate. Government at various level should make more effort in monitoring the activities of their officials in order to make sure that all the necessary tanning input/ aids get to the beneficiaries.
3. Government/NGOs should provide adequate credit facilities to the youths, low capital bases in order to encourage their involvement in tanning activities.
4. The Nigerian institute of Leather and Science Technology (NILEST) should be the supervisory of institution that will shoulder the responsibility to check the activities of tanners and tanneries.
5. State and Local Governments should involve in infrastructural development, construction of tannery sites, construction of effluent treatment plants, and provision of water supply and enhance the social life of youth and encourage them in the tanning activities.
6. Adequate market outlets for leather commodity should be established in Sokoto metropolis area to enable tanner to get a good price for their commodity.

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