

Cattle Rearing Business: Challenges and Prospects for Post-Covid-19-lockdown Economic Recovery and Sustainable Development of South-East Nigeria



Emeali, Chris C.¹



Idemobi, Ellis I.²



Oganezi, Bethel U.³



Mgbemena, Gabriel C.⁴

This study looked at the business of cattle rearing in the 21st century Nigeria with particular reference to the southeast region. The broad objective of the study is to critically assess cattle rearing business in Nigeria vis-à-vis its challenges, prospects and implications for post-covid-19-lockdown recovery and sustainable development of the southeast region. The study was subjected to empirical test using regression analysis with the aid of SPSS version 21 to find out the contribution of the cattle rearing business to post-covid-19-lockdown economic recovery and sustainable development of the southeast region using data sourced from a sample of 400 respondents drawn from the five states that constitute the Southeast region. The regression analyses show that beta (standardized coefficients) is 0.959, $r = .959$, while $r^2 = 0.929$, which is about 92.9% contribution. This implies that cattle rearing business will contribute significantly to economic recovery and sustainable development of the southeast region in the post covid-19-lockdown era & beyond. In order to achieve this feat, the study recommended ranching of cattle; the reintroduction of local breed (known as Efi-Igbo) where they have gone into extinction in the region; and involvement of the youths of the region in the cattle business as a veritable means of employment creation; post-covid-19-lockdown economic recovery; and sustainable development of the region.

Keywords: *Cattle Business, Covid-19, Economic Recovery, Sustainable Development*

1.0 INTRODUCTION

In Southeastern Nigeria, with over 18,713,600 population, spread across five states; ninety-five local government areas; and numerous communities east of the Niger (south east Nigeria), evidently, there appear to be an abundant market for beef (cattle business) in the

¹ Faculty, Department of Management, Coal City University Enugu, chris.emeali@ccu.edu.ng

² Faculty, Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University Igbariam, ellisidemobi@gmail.com

³ Faculty, Department of Business Administration, Alex Ekwueme Federal University Ndufu-Alike, venbethelogan@gmail.com

⁴ Faculty, Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University Igbariam, gabmgbemena@yahoo.com

region. South east Nigeria accounts for a greater percentage of the Nigerian population with the five states having (as mentioned earlier) over 18,713,600 people (according to 2006 population enumeration of the National Population Commission), which include 4,112,230 for Abia state; 4,177,828 for Anambra state; 2,176,947 for Ebonyi state; 3,267,837 for Enugu state; and 4,978,758 for Imo state, respectively. (National Population Commission, 2006)

This teeming population depends largely on beef for their meat consumptions on daily basis; this indeed is a huge market for cattle rearing business in Nigeria. However, demand for beef offers both challenges and prospects to Nigeria in general and rewards and risks for herders/farmers in particular especially in this covid-19 lockdown era where the economy was shut down for nearly five consecutive months.

Generally, for Nigeria as a country, with over 200 million people, and an emerging middle class, Nigeria is witnessing a boom in demand for meat that offers potential but also risks for the semi-nomadic herders who provide most of its beef. According to Umar (2007), as at 2007, the number of cows that exchanges hand in the meat market in Nigeria was put at 15.3 million per annum. This is grossly inadequate to meet the beef-needs of over 200 million Nigerians, let alone, exporting beef-products to other nations. In fact, available records have shown that Nigeria is not even among the top 20 nations in the global cattle business.

According to Rob Cook (2020), world cattle inventory ranking of countries, published on the 19 July, 2020 on Beef2live webpage, the global cattle inventory as at 19 July 2020 stood at 987.5 million. Top Five Nation Cattle Inventory include: India (303,200,000 cattle), Brazil (244,144,000 cattle), USA (94,413,000), China (91,380,000), and EU with 86,594,000 million cattle; Top Five Milk Exporters include: New Zealand (\$4.4b USD), Germany (\$2.6b USD), Netherlands (\$1.9b USD), France (\$1.5b USD), and the fifth nation is USA with \$1.4 billion USD; and Top Five Beef Exporting Nations include: Australia (\$5.6B USD), USA (\$5.2b USD), Brazil (\$4.3b USD), India (\$3.7b USD) and the fifth nation is the Netherlands with an export value of \$2.7 billion USD. (Rob Cook, 2020)

Now, with all the noise in Nigeria about Cattle and with all the tensions it creates unnecessarily, sadly, Nigeria is not even in the top 20 nations in the global cattle business. In fact, Nigeria still imports about 30% of her beef-needs from the neighbouring Niger Republic, Cameroon, Chad and Mali. And according to CBN report), Nigeria still spends about 1.5 billion USD on milk importation annually and the CBN attributed the low milk

proactivity that gave room for heavy milk importation to cattle mobile pastoralism. (Bello, 2019; Nwosu 2019)

All of these figures are disheartening, alarming and indeed a bad omen for this nation, which supposedly prides herself on cattle rearing. But then again, opportunely, that is also how huge the prospect for the market is, and with these figures we can imagine what Nigeria would have been losing in the African Continental Free Trade Area if these areas are not leveraged upon.

In the Nigeria cattle business today, most of the demand is met by pastoralists from the ethnic Fulani group, who follow time-honoured techniques of raising cattle, driving them south to pastures and taking them to market. During the dry season, the herders come down from the arid Sahel to the fertile plains of central and southern Nigeria, seeking water and pasture for their livestock.(Mercy Corps NGO, cited in Vanguard Nigeria News online, June 26, 2019)

The tension this old practice is generating in this 21st century Nigeria is that the millennia-old activity has been thrust into the spotlight in the recent years because of worsening confrontations with sedentary farmers over access to land and water. Clashes have claimed 7,000 lives over the past five years and cost the Nigerian economy \$13 billion (11.57 billion euros) annually, this is according to a report by an NGO, Mercy Corps as published in the vanguard news online of June 26, 2019. The feud has roots dating back more than a century. Droughts, population growth, the expansion of sedentary farming into communal areas but also poor governance have all played a role. Also, many markets and outdoor slaughterhouses (abattoirs) lack basic sanitary conditions, such as running water, animal shelters and cold storage rooms.

On the other hand, also, opportunities and prospects and even more challenges for cattle rearing abound. As Nigerians clamour for meat, can this ancient practice — with its long supply chains, climate risks and social tensions — compete against sedentary farming, which has high productivity and lower risks? There are varied opinions for answer to that poser. Many Nigerians and veterinary experts have been clamouring for global best practices in rearing of animals in Nigeria, which according to them is simply by method of *Ranching*. While this appears to be the majority view of many Nigerians (that is, adopting global best practices of rearing animals such as ranching) some other public commentators such as Jimmy Smith (director of the Institute for International Research on Livestock Farming (ILRI), based in Nairobi) holds a contrary view.

Jimmy Smith, director of the Institute for International Research on Livestock Farming (ILRI), based in Nairobi, cited in Vanguardngr (June 26, 2019) argues that the system can not only survive but also flourish — in the right conditions. He opines that the model can prosper if the right support is put in place. He suggested for example, that it is possible to grow more forage and grain in sub-humid zones to create and develop feed markets for livestock based in northern areas, where it is dry and that one animal which can give two litres (3.6 pints) of milk today could give 10 litres in the future.

In the recent times, government is mulling several plans to boost rearing of cattle and ease tensions over access to land. They include initiatives for the creation of “cattle colonies” — dedicated areas where pastoralists can graze their animals and have access to veterinary and other care and more recently, the establishment of RUGA settlement (*RUGA* is a Hausa term that means cow settlement) all over the 36 states of the country which did not go down well with many Nigerians and was massively resisted, and has since been suspended by the federal government after its meeting of 2nd July, 2019, chaired by the vice president, Prof Yemi Osibanjo, as reported in the national dailies. (Itodo, July 24, 2019, Dailypost News-online; Punch Nigeria News online July 3, 2019)

Nonetheless, Nigeria’s hunger for meat is likely to be replicated across Africa, if expectations of population and income rise hold true. The UN’s Food and Agriculture Organization (FAO) quoted in Vanguard Nigeria News (June 26, 2019) estimates the continent will experience a doubling in consumption of beef, pork and chicken between 2015 and 2050.

Nigeria has considerable livestock — nearly 20 million cattle, 40 million sheep and 60 million goats — but about 30 percent of slaughtered animals are purchased from abroad, mainly from neighbouring Cameroon, Chad, Mali and Niger. Often the herds are driven for hundreds of kilometres (miles) to be sold at border markets like Illela, a trading post between Niger and Nigeria. The animals are then trucked to the cities, where they are sold again, slaughtered and butchered. (Vanguard Nigeria News, June 26, 2019)

With the foregoing, looking at these prospects and challenges, the study critically examined how to leverage the massive prospects that abound in rearing of cattle, while still eliminating the bottlenecks of cattle business for sustainable economic development of the southeast region.

1.1 OBJECTIVES OF THE STUDY

The broad objective of this study is to critically assess cattle rearing business in Nigeria, its challenges and prospects for post-covid-19-lockdown economic recovery and sustainable development of southeast Nigeria. Specifically, the paper sought to:

- 1.1.1 Determinet he extent to which the quantum of market-share available for cattle rearing in the southeast can enhance post-covid-19-lockdown economic recovery and sustainable development of the region.
- 1.1.2 Assess the viability of reintroduction of the local *Igbo* breed of cattle (*Efi-Igbo*) through ranching as a way of eliminating incessant longstanding feud between herders/farmers.
- 1.1.3 ascertain the extent to which southeast youths are ready to embrace cattle rearing business for post-lockdown economic recovery and sustainable development of southeast region.

1.2 RESEARCH QUESTIONS

- 1.2.1 To what extent does the quantum of market-share available for cattle rearing in the southeast enhance post-covid-19-lockdown economic recovery and sustainable development of the region?
- 1.2.2 To what extent is reintroduction of the local *Igbo* breed of cattle (*Efi-Igbo*) through ranching as a way of eliminating incessant longstanding feud between herders/farmers viable?
- 1.2.3 To what extent are southeast youths ready to embrace cattle rearing business for post-lockdown economic recovery and sustainable development of the region?

1.3 HYPOTHESES

- H₀₁:** The quantum of market-share available for cattle rearing in the southeast does not significantly enhance post-Covid-19-lockdown economic recovery/ sustainable development of the region.
- H₀₂:** Re-introduction of the local *Igbo* breed of cattle (*Efi-Igbo*) through ranching as a way of eliminating incessant longstanding feud between herders/farmers is not significantly viable.

H₀₃: The extent of Youths readiness in southeast to embrace cattle rearing business as a means for post-lockdown economic recovery/sustainable development of the region is significantly not encouraging.

2.0 METHODOLOGY

2.1 RESEARCH DESIGN

The study adopted survey design.

2.2 AREA OF STUDY

The geographical area of study is southeast Nigeria. Southeast region consists of five (5) states, which include: Abia, Anambra, Ebonyi, Enugu, and Imo state, with a total of ninety-five (95) local government areas and a total population of 18,713,600 people. This population includes: 4,112,230 for Abia state; 4,177,828 for Anambra state; 2,176,947 for Ebonyi state; 3,267,837 for Enugu; and 4,978,758 for Imo state. (National Population Commission, 2006)

2.3 POPULATION OF THE STUDY

The population is infinite. The population of the study consists of all the people involved in one way or the other in cattle business such as butchers at the abattoirs; cattle husbandmen (ie., people in charge of animal husbandry) and so on. Most of these people are uneducated and do not have accurate record (data) about the number of people involved in the business. However, the number of abattoirs in the southeast is estimated at about 760. Generally, two main characteristics of population are that it can either be finite or infinite. A population is finite when the population figure is known and the population is infinite when the figure is unknown (Nkamnebe, Ogwu, & Ezejelue, 2008). Thus, the population of the study is therefore, infinite because the figure of the population of beef consumers is unknown

2.4 SAMPLE SIZE DETERMINATION

For populations that are large, Cochran (1963:75) developed an equation to yield a representative sample for proportions, which is stated hereunder:

$$n_0 = \frac{Z^2 pq}{e^2}$$

This is valid where:

- n_0 : is the sample size
- Z^2 : is the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$ equals the desired confidence level, e.g., 95%)
- e : is the desired level of precision (error margin)
- p : is the estimated proportion of an attribute that is present in the population.
- q : is $1 - p$
- α : is the area that corresponds to the shaded area in the sampling distribution of *means* for repeated samples.
- Z : value of z is found in the statistical tables which contain the area under the normal curve.

Thus, since we wish to evaluate a region wide (southeast region) programme in wish cattle rearing/business men were encouraged to adopt a new global best practice such as ranching, the formula above is appropriate. Since there is a large population but that we do not know the variability in the proportion that will adopt the ranching practice, therefore, we assume $p=0.5$ (maximum variability). Furthermore, since we desire a 95% confidence level and $\pm 5\%$ precision, the resulting sample size will now be as stated hereunder:

$$n_0 = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} = 385 \text{ respondents}$$

However, to account for possible missing and uncompleted copies of the questionnaire, 5% of 385 were also added, so that we now have $0.05 \times 385 = 19$ additional copies, added to the original 385 which will now sum it up to **404 copies**.

3.0 DATA PRESENTATION AND ANALYSIS

The data garnered from the field survey are hereunder presented and analysed.

3.1 DATA PRESENTATION

3.1.1 DESCRIPTIVE DATA

The following descriptive data as garnered from the field survey is tabulated and presented hereunder:

Table 3.1.1: DESCRIPTIVE DATA

S/N	DATA ITEM	DESCRIPTION
1.	Region Studied	Southeast Nigeria
2.	Population of the entire region	18,713,600 (2006 census)
3.	Number of states	Five states make up the southeast region, which include: Abia; Anambra; Ebonyi; Enugu; and Imo.
4.	Number of local government areas for the entire region	95 LGAs
States/ their various individual populations and their various individual LGAs		
5.	Abia state	Population: 4,112,230 (2006 census) LGA's: Aba-North; Aba-South; Arochukwu; Bende; Ikwuano; Isialangwa-North; Isialangwa-South; Isiukwuato; Obingwa; Osisioma; Ohafia; Ukwa-East; Ukwa-West; Umuahia-North; Umuahia-South; Ugwunnagbo; and Umunneochi. Total number of LGA's: 17 Predominant Occupation: Trading/Farming
6.	Anambra state	Population: 4,177,821 (2006 census) LGA's: Aguata; Awka-North; Awka-South; Anambra-East; Anambra-West; Anaocha; Ayamelum; Dunukofia; Ekwusigo; Idemili-North; Idemili-South; Ihiala; Njikoka; Nnewi-North; Nnewi-South; Ogbaru; Onitsha-North; Onitsha-South; Orumba-North; Orumba-South; and Oyi. Total number of LGA's: 21 Predominant Occupation: Trading/ Farming
7.	Ebonyi state	Population: 2,176,947 (2006 census) LGA's: Abakaliki; Afikpo-North; Afikpo-South; Ebony; Ezza-North; Ezza-South; Ikwo; Ishielu; Ivo; Izzi; Ohaozara; Ohaukwu; and Onisha. Total number of LGA's: 13 Predominant Occupation: Farming/Trading
8.	Enugu state	Population: 3,267,837 (2006 census) LGA's: Aninri; Awgu; Enugu-East; Enugu-North; Enugu-South; Ezeagu; Igbo-Etiti; Igbo-Eze-North; Igbo-Eze-South; Isi-Uzo; Nkanu-East; Nkanu-West; Nsukka; Oji-River; Udenu; Udi; and Uzo-Uwani. Total number of LGA's: 17 Predominant Occupation: Trading/Farming
9.	Imo state	Population: 4,978,758 (2006 census) LGA's: Aboh-Mbaise; Ahiazu-Mbaise; Ehime-Mbano; Ezinihitte-Mbaise; Ideato-North; Ideato South; Ihitte-Uboma; Ikeduru; Isiala-Mbano; Isu; Mbaitoli; Ngor-Okpala; Njaba; Nkwerre; Nwangele; Obowo; Oguta; Ohaji/Egbema; Okigwe; Onuimo; Orlu; Orsu; Oru-East; Oru-West; Owerri-Municipal; Owerri-North; and Owerri-West. Total number of LGA's: 27 Predominant Occupation: Civil Service

Degree of Measurement and Weighing of Cattle		
10.	One (1) Cow	An average cow measures 1500pounds (lbs)
11.	2205pounds (lbs)	2205lbs = 1(one) metric ton
12.	Uses of cow in the southeast	Daily food consumption: an average household in the southeast has unquenchable hunger for beef and therefore use beef (ie, meet from cow) to prepare the daily meal. Ceremonies: Apart from the normal daily household consumption, at least one cow is slaughtered for ceremonial merriments(although this depends on the celebrant's affluence) at every ceremony such as traditional marriages; church weddings; burials; naming ceremonies; child-dedications; house-openings; rallies; Ofala's, Ozo Titles, Other chieftaincy titles, Christmas; New-year days Easter days and so on.
13.	Number of cows slaughtered (region-wide) in the abattoirs per day	Standard abattoir slaughters 50 (fifty) cows (on the average) the number rises on weekends and festive periods such as Christmas, New-year days, Easter days and so on.
14.	Number of Abattoirs	Southeast has about 285 standard abattoirs scattered all over the 95 LGA's
15.	Number of Metric-tons of beef produced per day in the southeast region	= 1500lbs x 50 cows per day = 75,000lbs 75,000lbs ÷ 2205lbs = 35 metric-tons. This is then multiplied by the number of abattoirs in the region. Therefore, we have: 35 metric tons x 285 abattoirs = 9,975 metric tons per day.
Market-share in PRODUCTION		
16.	Monthly market-share for beef	Using average of 30days 9975 metric tons x 30 days = 299,250 metric tons per month.
17.	Market-share for beef per Annum	Using 12 months per annum 299250 tons x 12 months = 3,591,000 metric tons per annum.
18.	Volume of cows slaughtered per annum in the region	= 3,591,000 metric tons x 2205 lbs = 7,918,155,000 lbs. 7,918,155,000 lbs ÷ 1500 lbs (that make up a cow) = 5,278, 770 cows per annum.
Market-share in NGN& USD		
19.	Value/volume of the market share in NGN per annum	A standard weighed cow sells for NGN200,000 Therefore, NGN200,000 x 5,278,770 cows = NGN 1,055,754,000,000 per annum.
20.	Value/volume of the market share in USD per annum	In US Dollars we have: NGN 1,055,754,000,000 ÷ NGN360 (USD1 exchanges for NGN360 as at 1st March, 2020) = USD2, 932,650,000 per annum.
21.	Summary	Volume of markets that exchange hand: USD2,932,650,000 per annum NGN 1,055,754,000,000 per annum. 5,278, 770 cows per annum.

(Source: Field Survey, 2020)

3.1.2 DATA FROM QUESTIONNAIRE DISTRIBUTION

The initial sample size was put at 385, however, to account for possible missing, badly filled and or uncompleted copies of the questionnaire (usually anticipated), 5% of 385 was also added, so that we now have $0.05 \times 385 = 19$ additional copies, added to the original 385 which now brought the figure (sample size) to 404.

Therefore, a total of 404 copies of questionnaire were distributed. Out of these 404 copies of questionnaire distributed, three (3) copies were not returned while one (1) copy was not duly completed (that last copy was uncompleted), leaving us with only four hundred (400) copies which were duly completed and returned.

3.2 REGRESSION ANALYSIS

Here in testing the hypothesis, we regressed cattle business and sustainable economic development of southeast region using the three predictor-variables. This regression analysis was done to find out the contribution of cattle business to post-covid-19 economic recovery and sustainable development of the southeast region of Nigeria.

Table 3.2.1: Descriptive statistics for the regression

Descriptive Statistics			
	Mean	Std. Deviation	N
Economic Recovery & Sustainable Development	184.5300	27.00857	400
Market-share	60.5300	8.07230	400
Reintroduction of Local Breed	60.8200	9.76555	400
Youths readiness for cattle business	61.4900	10.77684	400

Table 3.2.2: Correlations for: Economic Recovery & Sustainable Development, Market-share, Reintroduction of Local Breed and Youths readiness for cattle business

Correlations					
		Sustainable Economic Development	Market-share	Reintroduction of Local Breed	Youths readiness for cattle business
Pearson Correlation	Economic Recovery & Sustainable Development	1.000	.936	.925	.941
	Market-share	.936	1.000	.931	.898
	Reintroduction of Local Breed	.925	.931	1.000	.938
	Youths readiness for cattle business	.941	.898	.938	1.000
Sig. (1-tailed)	Economic Recovery & Sustainable Development	.	.000	.000	.000
	Market-share	.000	.	.000	.000
	Reintroduction of Local Breed	.000	.000	.	.000
	Youths readiness for cattle business	.000	.000	.000	.
N	Economic Recovery & Sustainable Development	400	400	400	400

	Market-share	400	400	400	400
	Reintroduction of Local Breed	400	400	400	400
	Youths readiness for cattle business	400	400	400	400

Table 3.2.3: Model Summary for the regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.964 ^a	.929	.928	7.24210	.929	1717.802	3	396	.000

a. Predictors: (Constant), Market-share, Reintroduction of Local Breed, Youths readiness for cattle business

Table 3.2.4: ANOVA table for test of significance

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	270286.208	3	90095.403	1717.802	.000 ^b
	Residual	20769.432	396	52.448		
	Total	291055.640	399			

a. Dependent Variable: Economic Recovery & Sustainable Development
b. Predictors: (Constant), Market-share, Reintroduction of Local Breed, Youths readiness for cattle business

Table 3.2.5: Correlations Coefficients for: Economic Recovery & Sustainable Development, Market-share, Reintroduction of Local Breed and Youths readiness for cattle business

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.220	2.882		3.199	.001
	Market-share	1.578	.125	.472	12.616	.000
	Reintroduction of Local Breed	.004	.132	.002	.032	.974
	Youths readiness for cattle business	1.294	.099	.516	13.066	.000

a. Dependent Variable: Economic Recovery & Sustainable Development

3.3 INTERPRETATION OF THE RESULTS

The model summary table shows whether the model is a good fit:

- R is the correlation coefficient measuring the strength of the linear relationship (whether it is perfect, very strong, strong, fair, weak, very weak or not correlated at all) and the direction of the linearity (whether it is positively correlated or negatively correlated). In this case the result shows that the two variables are positively correlated and very strong too, $r = .964$. This simply means that Post-covid-19 Economic Recovery & Sustainable Development of the southeast region and the three

variables of cattle business measured (i.e., Market-share, Reintroduction of Local Breed(*Efi-Igbo*) and Youths readiness for cattle business) are all positively correlated.

- R-squared is the coefficient of determination, more usually expressed as a percentage. Here, it tells us that 92.9% (adjusted r-squared is 92.8%) of Economic Recovery & Sustainable Development of the southeast region (for meat market) is explained by the variability in the cattle business variables measured which are: Market-share, Reintroduction of Local Breed(*Efi-Igbo*) and Youths readiness to adopt cattle business.
- The standard error of the estimate can be thought of as a typical residual; the difference between what is predicted by the model and what is observed.

The *ANOVA table* above shows a significant value of .000. This indicates that the regression is significant, which shows a useful linear model. The *coefficients table* tells us that the equation that models the line has a slope of .929 and an intercept of 14.665. We need to also know if this is actually significant. This is indicated by the significant column on the right. Sig value of 0.000 indicates that the coefficients is significant ($p < .0005$). The t-value column has done a t-test to test if the probability coefficient is zero given the sample data, and the sig column is the p value for the test which is .000 ($p < .0005$). Therefore, our coefficients are ok, so going by the regression formula: $y = bx + a$, our regression line would now be: Post-covid-19 Economic Recovery & Sustainable Development of the southeast region = $0.929 \times \text{cattle business} + 14.665$.

The regression analyses show that beta (standardized coefficients) is .959. Hence, we have ($r = .959, r^2 = 0.929, \% = 0.929 \times 100 = 92.9\%$)

The above interpretation simply shows that those three variables of cattle rearing business measured which are: Market-share, Reintroduction of Local Breed(*Efi-Igbo*) and Youths readiness to adopt cattle business explain and account for 92.9% of Economic Recovery & Sustainable Development of the southeast region in the area of meat market while the remaining 7.1% can be attributed to other meat products such as: chicken, pork, goat, etc.

4.0 IMPLICATIONS & DISCUSSION OF FINDINGS

4.1 First Objective

The first specific object of the study is to determine the extent to which the quantum of market-share available for cattle rearing in the southeast can enhance Covid-19 Post-

lockdown Economic Recovery & Sustainable Development of the region. In doing this, the study found that almost all household consumes beef every other day which cater for their daily meat need. The study found that about 5,278,770 cows are slaughtered per annum in the southeast region and deals of about NGN1, 055,754,000,000(USD2,932,650,000)exchanges hands. With these volume and degree of business, southeast, indeed, has a huge market-share in the Nigeria Meat Market. This further validated the contribution of 92.8% total contribution.

4.2 Second Objective

The second specific object of the study is to assess the viability of reintroduction of the local *Igbo* breed of cattle (*Efi-Igbo*) through ranching as a way of eliminating incessant longstanding feud between herders/farmers. The study found that it will not only be viable, but also that, Ndi-Igbo pride the use of Efi-Igbo as the rich cultural heritage of Ndi-Igbo. In fact, some respondents expressed sadness that after the war, the entire southern Nigeria appeared to have given up on agriculture as a business allowing the North to take the initiative. They argued that while they were growing up, they learnt of the Obudu Cattle Ranch and other ranches from where local varieties of livestock such as cows, goats and sheep were reared. These varieties which were indigenous to the evergreen vegetation zones were much more nutritious and highly prized than their lean and long-legged Sahelian counterparts.

For instance, Ohanaeze Youth Council, OYC, leader, Comrade Igboayaka O Igboayakastatedthat “*when you hear an Igbo chief hailed “Ogbuefi” the cow so referred to, is not Sahelian, the long-legged cows which today trample our farmlands and gorge on our crops. It refers to the shorter but heavier forest oxen which you do not find on the roadside butcher’s table. It is a delicacy for specialized ceremonies reserved for titled chiefs and those around them. Before the war, people kept those local varieties of livestock as subsistent business behind their backyards. It is time we went back to this practice”*”.

4.3 Third Objective

In examining objective number three which was to find out the extent to which southeast youths are ready to start cattle rearing business for Post-lockdown Economic Recovery & Sustainable Development of the region, it was found that the youths of the southeast region are evidently and significantly ready for cattle rearing business if given the necessary and required support and assistance.

This finding collaborated with the recent statement released the 4th of July, 2019(see maazi.online of 5th July 2019) by Ohaneze Ndigbo (youth wing) that they are ready to commence cattle rearing business in the region. Ohanaeze Youth Council (OYC),in a bid to find a lasting solution to herdsmen/farmers' clashes in the Southeast, has passionately appealed to governors in the region to provide funds for farmers in the zone to invest in cattle business and other livestock farming. In a press statement issued by the national president of OYC, Igboayaka O Igboayaka, and made available to newsmen in Owerri, the group contended that if such assistance was rendered by the governors, it would not only encourage indigenous cattle rearing in the zone but also reduce unemployment .He also noted that the idea would end the constant herdsmen and farmers' incidents in the zone. (Seemaazi.online of 5th July 2019, @ www.maazi.online)

According to the Ohanaeze Youth Council 'sstatement, "in view of the raging war in these past years arising from settling of cattle herders in the South East and South-South regions, the Ohanaeze Youth Council, OYC, ably led by Comrade Igboayaka O Igboayaka, has seen reasons to urge governors of the Igbo extraction, to mobilise funds and empower indigenous farmers in the region to embark on a large-scale rearing of cattle and other livestock, using the ranching method for adequate production of milk and meat to meet the agricultural needs of our people.

5.0 CONCLUSION AND RECOMMENDATION

5.1 CONCLUSION

Evidently, the teeming population of Ndi-Igbo depends largely on beef for their daily meat consumption every other day and obviously this hunger for beef has proven unquenchable. Of course, indeed, southeast region is a huge market for cattle rearing business in Nigeria. However, this hunger for beef offers both challenges and prospects to Nigeria in general and rewards and risks for herdsmen/farmers in particular especially in this post-covid-19 lockdown era. To this end, the study concluded that for there to be a Post-covid-19 Economic Recovery & Sustainable Development and peace in the region (in terms of cattle/meat market), ranching is advocated and the indigenous youths of the region should be encouraged to embrace cattle rearing business especially the reintroduction of Efi-Igbo.

5.2 RECOMMENDATIONS

- 5.2.1** Ranching of all forms of animal (livestock) as a global best-practice is recommended. State houses of assembly in the southeast region should enact laws that will check mobile-pastoralism by way of legislating against open-grazing and firmly ensuring the enforcement of same in the region. This will in turn quench the longstanding feud between farmers and herders and increase food production and sustainability.
- 5.2.2** Reintroduction of the local *Igbo* breed of cattle (*Efi-Igbo*) where it has gone into extinction through ranching is recommended. In addition to *Efi-Igbo*, mix-breeding, cross-breeding, and rearing of different varieties of cattle species that account for attainment of business objective-function is advocated. This will particularly help the youths of the region and by extension, the entire region in general in the post-lockdown economic recovery and sustainable development.
- 5.2.3** Since it has been proven that the youths of southeast region are ready to embrace cattle farming as a veritable means of employment creation and sustainable development of the southeast region, it is recommended that the state governments in the southeast region should aid the indigenous youths/farmers to invest in cattle rearing and drive innovation in the agricultural sector as this high demand for beef in the states guarantees good returns on investment. This aid could be in form of; grants, soft-loan, agricultural microcredit loans, cooperative-society type of funding, provision of ranches and so on.

All of these recommendations will help cushion and mitigate the effect of the lockdown on the region in the post-lockdown era and beyond when implemented cautiously.

REFERENCES

- Cochran, W.G. (1963). *Sampling Techniques*, 2nd Ed., New York: John Wiley and Sons, Inc.
- Cook, R. (2020). *World Cattle Inventory: Ranking of Countries (USDA) as at July 19, 2020*. Published by beef2live. Available online at; www.beef2live.com.
- Itodo, Y.(July 24, 2019). Buhari reportedly suspends RUGA settlement scheme. Daily Post Nigeria News online. Retrieved on the 3rd of July, 2020 from Daily Post Nigeria News online website: www.dailypost.ng.
- Nwosu, A. (July 24, 2019). CBN explains why it is banning other dairy products. Daily Post Nigeria News online. Retrieved on the 24th of July, 2020 from Daily Post Nigeria News online website: www.dailypost.ng.
- Bello, P. (July 24, 2019). MAN, LCCI kick against CBN's planned forex restriction for imported milk. Daily Post Nigeria News online. Retrieved on the 24th of July, 2020 from Daily Post Nigeria News online website: www.dailypost.ng.
- Jimmy Smith, director of the Institute for International Research on Livestock Farming (ILRI), based in Nairobi, cited in Vanguardngr (June 26, 2019). Hunger for beef offers rewards and risks for Nigeria's pastoralists. Vanguard Nigeria News online. Retrieved on the 16th of June, 2020 from vanguardngr website: www.vanguardngr.com.
- Mercy Corps NGO, cited in Vanguard Nigeria News (June 26, 2019).Hunger for beef offers rewards and risks for Nigeria's pastoralists. Vanguard Nigeria News online. Retrieved on the 16th of June, 2020 from vanguardngr website: www.vanguardngr.com.
- National Population Commission (2006).Federal Republic of Nigeria 2006 population and housing census volume iv. Population distribution by age & sex (state & local government area), Abuja, Nigeria.
- Nkamnebe, A.D., Ogwu, F.O. &Ezejelue, A.C. (2008). *Basic Principles in Managing Research Project*. 93 Azikiwe Road, Aba, Abia, Nigeria: Afritowers ltd Publishers.
- Punch Nigeria News online (July 3, 2019). Breaking News: FG suspends Ruga. Punch Nigeria News online. Retrieved on the 3rd of July, 2019 from Punch Nigeria News online website: www.punchng.com.
- Umar, A.S.S. (2007). *Financial analysis of small scale beef fattening enterprise in Bama local government area of Borno state Nigeria*. MSc Thesis, Ahmadu Bello University Zaria, Nigeria.
- Agbakwuru, J. (July 3, 2019). Breaking: Buhari suspends RUGA Programme. Vanguard Nigeria News online. Retrieved on the 3rd of July, 2019 from vanguardngr website: www.vanguardngr.com.