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**OPERATIONALIZATION OF ICT FOR ENHANCING  
AGRITOURISM POTENTIALS OF ANIMAL HUSBANDRY  
PRACTICES IN INTEGRATED FARMS' IN NIGERIA**

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**ABSTRACT**

Information communication technology is being engaged by people for various reasons. There are different types of ICT that are used for meeting different needs. Agritourism essentially implies time bound leisure trips to farms or ex-farm houses. Agritourism in Nigeria is essentially in its potential stage as many farmers and investors are not engaging it yet. Thus, it is pertinent to examine how these agritourism potentials can be turned into full blown assets with available technologies. Data were elicited from farmers into integrated farming systems in Ibadan, Nigeria, with the aid of questionnaire and analysed both descriptively and inferentially. The result revealed that most of the farmers are aware of ICT facilities and use them for different agricultural engagements. The tourism potentials of the integrated farms based on the different engagements of the farmers that can enthuse agritourists like feed composition and milling, livestock pen, vaccination and medication services amongst others were highlighted. The result of the study further revealed that ICT components (radio, television and the internet) have significant relationship with the following indicators of animal husbandry; feed composition and milling, breeding of animals, sight of animals, livestock pens, animal slaughtering and animal dressing. However, ICT has the largest effect on animal slaughtering.

**Keywords:** *Agritourism potentials, animal husbandry, ICT.*

**INTRODUCTION**

Information Communication Technology (ICT) can be broadly categorized into Information Systems and Information Technology. Recently, ICT became a critical tool for most organizations, likewise, businesses of which education is part (Bingimlas, 2009). ICT devices aids the facilitation of farming activities and they include gadgets such as laptops, mobile gadgets application software and so on. Boell and Cecez-Kecmanovic (2015) examined four views in defining ICT and this has basis on major sections reiterated through specific defining characteristics: (a)

technology based section, which is inclusive of the process, storing and transforming of data; (b) social categories, reiterating that information systems are intrinsic in social methods; (c) social technical categories, with arguments that information system is inclusive of both societal and technology constituents that are interwoven; and (d) process categories – the conceptualization of information system with regards to the performance and support procedures and methods.

Agritourism involves welcoming visitors to farms for educational, leisure or business purposes. The concept of agritourism from the farmers perspective is essentially the synergy between the agricultural enterprises cum operations and tourism, in a bid to expand the farmers revenue generating base. Grillini *et al.*, (2022) asserted that visitors that make payments to sleep or/and eat on a farmland might aid the stabilization of a traditionally run farm via the creation of a connection between various business engagements, precisely, agriculture and tourism. From the perspective of tourist, the concept of agritourism involves visitors travelling to farm lands, for leisure, business, conferences and events. Agritourism can simply be conceptualized as different agriculture-based tourist engagements domiciled in rural areas, precisely, based on pleasurable/educational experiences (Gil *et al.*, 2013). Xiaowen *et al.*, (2022) opined that agritourism is a mix of agricultural practice with tourism premised on farm assets. It may involve business transactions by the famers and his/her customers that will necessitate the customer to spend considerable amount of time on the farm. It may also involve active participation of visitors in farming activities in a bid to lend a helping hand to the farmer. Based on reviewed literature, it is evident that a gap exists vis-à-vis operationalizing ICT to enhance agritourism potentials of animal husbandry activities in integrated farms. This study thus examined the operationalization of ICT in enhancing agritourism potentials of animal husbandry activities in integrated farms' in Nigeria.

### **Concept of Agritourism**

According to Tew and Barbieri (2012), academics have found it difficult to create a grading scheme that takes into account both the traits as well as the general concept of agritourism. So, different scholars have come up with different perceptions on agritourism but the indices that establish the nexus between these various perceptions are agribusiness, farm activities (direct or indirect) and leisure as shown in the figure below.

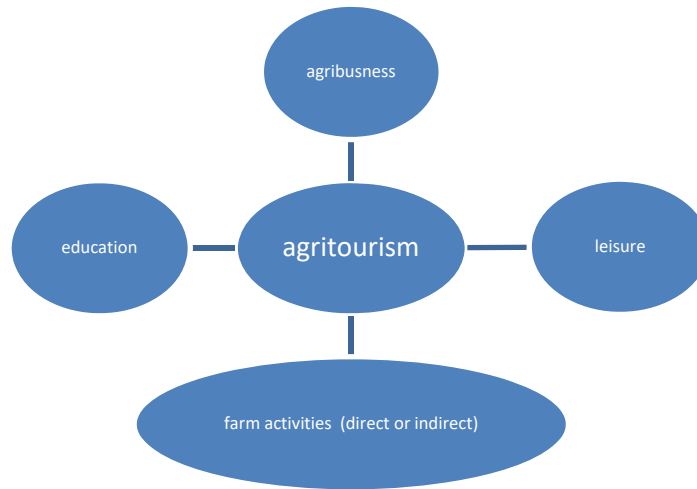


Figure 1. Various indices of Agritourism  
 Source: Tew and Barbieri (2012)

With respect to the above, agritourism trip is oftentimes underpinned by one or more farming engagements. Therefore, agritourism could be understood from the prism of specific farming activity that an agritourist engages. Karampela et al., (2016) noted that the product of agritourism services could be offered usually on the basis of small packages of agritourism experience and not necessarily from the same enterprise. Thus, an agritourist may essentially visit a farm for a specific agritourism product rather than because of all the agritourism products present in such farm.

Claudia *et al.* (2013:40) explain the inconsistencies in the various defining concepts of agritourism about three concerns that can be discovered with in literature, and they are highlighted below:

- (1) the form of setting (for instance agricultural land, farm environment found anywhere);
- (2) authentic nature of agricultural land’s facilities/experiences; likewise,
- (3) forms of activity engaged (for instance, lodging, education).

The settings of a typical agritourism destination have various indices that range from size of the farm, the social and financial settings for agricultural land, farms’ mechanization, the farmers’ experiences, how well the farm has been synergized with tourism and the likes. According to Sofia *et al.*, (2016) there are two issues that are of importance with regards to the social economic settings of agritourism and they are:

- (a) the size of operations of the businesses;
- (b) and associated nodes of the businesses on various categories, likewise the size of additional worth of activities earned on an indigenous basis.

Phillip *et al.*, (2010) observed from an academic standpoint, that sorting discrepancies inclusive of attempts to establish a general description of agritourism can assist in producing a better homogeneous study area, that allows for better

focused inputs in the long run. These various attempts at defining and explaining agritourism reveals that agritourism is a unique concept that various scholars want to profoundly understand and associate their research with. There are however, certain components that essentially serve as the buildup of Agritourism. These components include

the Farm,

on farm accommodation or nearby lodging facilities, relaxation huts/sheds, location for learning about the overview of the farm and for questions and answers and parking spaces.

Agritourism has immense advantage to country-sides as well as stakeholders involved in leisure trips to farm settlements and locations. Fagioli *et al.*, (2014:164) noted that agritourism serves as a catalyst promoting vital growth of tourism throughout country sides and encourages growth of rural areas, enabling the farmer's family to augment agricultural revenue through money from tourism-related operations. It has not only served as a driver for developing touristic activities in the country side, it has particularly served the purpose of driving enhancement and restructuring of the country sides. Rogerson and Rogerson (2014) noted that on the outer side of South Africa's major cities, tourism takes an equal important significance in subsidiary cities' attempts to diversify their economies and in the post-productivist rural areas that has accompanied restructuring of rural areas. Agritourism helps in generally developing agricultural activities such that it is done in a way that would be appealing and informative to the visitors.

To the farmer, the business aspect of agritourism is sacrosanct, so, the farmer packages his/her agricultural operation/venture in such a way that leaves long impressions on tourist minds. In this sense, agritourism has the potential to serve as a stimulus for boosting the value of such relevant industry to the nation's finances, that may be expanded by giving people the chance to live at or explore farmlands to take part in the gathering or harvests of farm produces (Ahmed and Jahan, 2013). Meanwhile, to the tourists the leisure and knowledge gained from agritourism is sacrosanct, which is why some of the tourists visit the farms with their recording or writing materials while some visit the farm with a mind of relaxation. So, when tourists that are naturally inclined to nature and rural environment embark on tourism to farm(s), they are being availed the opportunity to experience agricultural activities, both on-farm and off-farm operations, as the case may be.

It is established that agritourism is essentially leisure trip to farms or a site with traces of agricultural activities from the past, for a specific period of time. Vaugeois *et al.*, (2017) noted that agritourism events might be inclusive of the following:

- (i) Exhibition of heritages of agriculture on agricultural land;
- (ii) a visit to agricultural land, a lesson or exhibition across every or some of the agricultural operations carried out there, as well as any task related to any of the activities;

- (iii) a compromise of the farmlands as a result of riding cart, sleigh and tractor on farmlands;
- (iv) Events like exhibitions, cattle drives, and petting zoos which advertise or promote livestock on the farm, regardless of if the event also features livestock from different farmlands or otherwise;
- (v) Trial activities for dogs carried out on farmlands;
- (vi) harvesting celebrations as well as other season-based activities carried out on farms to advertise or promote agricultural produce made on farmlands;
- (vii) Maze of corns done via maize plantation on the farmlands.

Agritourism can be considered from its connection to the economy, society as well as the environments, which are major sustainability constituents (Muresan *et al.*, 2016). Similarly, Fanelli and Romagnoli (2020) noted that agricultural facilities with an instructive farm can exhibit substantial relevance in rural sustainable development, inclusive of cogent implications on the surrounding, farm heritage, culinary and the development of the economy. It is pertinent to note that sustainability in agritourism can be in two categories; it could be sustainability of the agritourism venture and it could be sustainability of certain quarters like cultural, social, environmental and economic, consequent upon the agritourism venture in a particular destination. Sustainability of the agritourism venture is all about ensuring that the venture does not fail or close down abruptly. This is categorically possible as long as the tourists are ready to pay for the agritourism product, so that the revenue accrued from such purchase will be channeled to effective management of the agritourism venture.

#### **Concept of ICT**

Audu (2022) Information Communication Technology (ICT) devices generally revolves around embracing a lot of media that are inclusive of telephones, television, videos, telex, voice information system, Global System for Mobile (GSM) as well as faxes and the ones that require usage of PCs that has contemporary technology which facilitates communicating, as well as transmitting information via electronical avenues that ranges from radios, televisions, telephones as well as the internet. Synowiec (2021) noted that ICT is usually engaged synonymously for information technologies (IT), whereas ICTs is a generic concept which reiterates roles of unified technological innovations as well as a fusion of telecommunication (phone line as well as wireless connection), computer, middlewares, software applications, storages as well as audiovisual system which give rooms for a user to establish and gain connection to information, as well as storage, transmission as well as edition. On a contrary note, IT is a component of ICT, and telecommunication, media broadcast, various forms of audio and video procedures, transmitting, as well as network functionalities of managing and monitoring (Kuzior and Lobanova 2020).

Agwu et al., (2008) noted that ICTs are of rarefied characteristics which make available privileges for harnessing them through diverse means which have clear difference from how orthodox media had been operationalized in terms of

developments. It basically enhances the capability of searching for information as well increasing available quantitative information, eventually ameliorating uncertainties, as well as improving markets involvement. Audrey and Charlotte (2016) noted that ICT is good and service with heterogeneity engaged in production, processing, distribution as well as transformation of information. ICT could have a multiplier effect of connecting different persons together, improvement of supply chain, facilitating business transaction, at the same time ensuring that the dynamism of prices is well managed.

Ranjita and Manju (2020) noted that ICT infuses different gadgets, computers or software applications which enable sharing of information or gathering via interactions as well as transfers. It could be used in form of advising a farmer, empowering the adult female gender, markets information, assessing the quality of soils as well as general development of the hinterland. William and Matern (2018) ICT as well as the Internet have generally been the main indicators that drive economic successes, premised on the fact that it aids in producing as well as disseminating knowledge in sporadic as well as effective means. Rahman and Bashir (2020) noted that ICT could be perceived as efficient communication means, precisely, when time and distance constitute major challenges.

### **ICT and agricultural practices**

William and Matern (2018) noted that ICTs engagement for agricultural practices is quite massive, premised on the fact that it could be engaged in monitoring threshold of pests in managing pests in an integrated form, provision of pertinent as well as contemporary news, likewise farming service, agri-biodiversity of maps for many crop systems, forecast disaster as well as prediction of outputs. Consolata (2015) noted that ICT could serve as efficient way to disseminate to a community, a plethora of pertinent market information, technologies, price, achieved experience, credit facility, governmental service and policy, climate, crops, livestock as well as preservation of natural resources.

Audu (2022) submits that higher efficiency with regards to time, costs, service and product qualities could be achieved in agricultural engagements via the usage of ICT. Audrey and Charlotte (2016) submitted that via contrast, ICT does not only have potentials of enhancing productivities in agriculture in Africa, they could likewise enhance productivity via the advancement of a “green” agricultural engagement in Africa. Adekunmi and Awoyemi (2017) noted that via the usage of ICT, a farmer could get in touch and obtain information from another farmer, researcher as well as scientist in different parts of the globe with ease. Owotogbe et al., (2019) noted that smart phones as well as similar technologies are regarded as being able to attract precise solutions, basically so as to aid farmers in gaining access to germane information. Ranjitha and Manthu (2020) noted that the role ICTs play in agricultural engagements are inclusive of agricultural activities based on sustainability, improvement of consumers access, managing risks associated with disasters, agricultural extensions and empowering old female as well as the youths.

## **Theoretical Framework**

### **Social Cognitive Theory**

Social cognitive theory was created by Bandura in the Mid 1970's. This theory has psychological inclinations that reveal the means through which people within social systems effect different human procedures, that includes the procurement and engagement of data and knowledge. The essence of social cognitive theory is learning of new things, ideas and concepts. It basically aids people to quickly conform with or adopt new norms and ideas in the society. It is all about the acquisition of new knowledge at specific point in time. Jenkins, Hall, and Raeside (2018) opined that in social cognitive theory the profound understanding of novel skill and knowledge are of more important interest over the output or goal of the educational procedures. This theory is specifically important for the adoption and adaptation of ICTs because, from time to time, new ones with their precise peculiarities are created and hence, they must be learnt and understood before they could be explored.

## **MATERIAL AND METHODS**

### **Description of study area**

The study area that captured the integrated farms are the Local Government Areas with vast rural areas that have farm settlements or a high concentration of farmers. This is because farmers into integrated farming systems were chosen from these Local Government Areas. The Local Government Areas are as follow; 1) Akinyele Local Government area, 2) Ido Local Government area, 3) Lagelu Local Government area, and 4) Egbeda Local Government area.

It is believed that Ido Local Government Area is the biggest Local Government Area (in terms of land area) in the city of Ibadan, because, the census population (National Population Commission, 2006) revealed that Ido has a population of 104,261 and it also has a land area of 986 km<sup>2</sup>. Akinyele Local Government Area is situated between latitude 7° 29' and 7° 40' N while its longitude ranges from 3° 45' to 4° 04' E. It is largely agrarian and residential. Egbeda town is the current political headquarter of Egbeda Local Government Area (LGA) of Oyo State. The town is located on latitude 7° 21'-8°N and longitude 4° 02' – 4° 28'E with a total land area of approximately 191km<sup>2</sup>. Akinbile and Ikechukwu (2017) submit that Egbeda Local Government Area currently has four urban and seven rural wards. Lagelu Local Government area has a total land area of about 355.50 hectares and falls between latitude 7°20' and 7°50' East of the Greenwich Meridian. This local Government area is divided into Lalupon, Olorunda, Igbo-Elerin and Iyana Offa. The Local Government Areas are captured in the figure below.

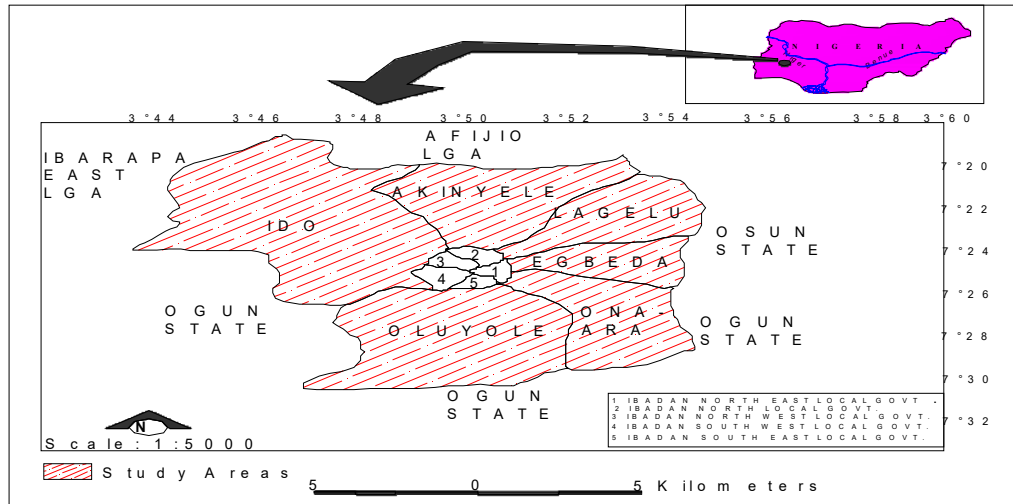


Figure 2. The five (5) Local Government Areas in the Agricultural Zone of Ibadan

### Sampling procedure

For this study all the farms that operate integrated farming system within these Local Government areas were visited and questionnaires were administered to them. Hence, no sampling frame was adopted for the quantitative aspect of this study. A total of two hundred and five (205) farmers that are essentially into integrated farming system were sampled. All the integrated farms in the study area were completely enumerated. Meanwhile, from these farmers, ten questionnaires were returned not filled while seven were badly filled, hence, one hundred and eighty-eight (188) valid data were retrieved.

### Reliability of the Research Instrument

Cronbach's alpha was engaged in determining reliability of the research instrument (questionnaire). Reliability of an instrument essentially depicts the internal consistency of such instrument. Internal consistency basically reveals the appropriateness of specific indicators engaged as components of the research instrument. Since, reliability is expressed in numerical terms as a coefficient, John (2015) opined that a coefficient index that is high implies high reliability that has less error, while, a correlation coefficient that is low implies low reliability with a lot of errors.

Table 1. Reliability Test for the Research Instrument

Cronbach's alpha	Number of items
0.823	12

\*Source: Author's field Survey (2020)



It is evident from the table above that the reliability index for the questionnaire is 0.823. This reliability index is high and it depicts a high internal consistency and the fitness of the questionnaire to elicit appropriate data.

### RESULTS AND DISCUSSION

It is evident from the table above that one hundred and seventy one (91%) of the respondents have heard of the term ICT and seventeen (9%) of the respondents have never heard of the term ICT. This simply means that most of the respondents have at one point or the other heard of the term ICT. It is pertinent. It was pertinent to inquire of the awareness of ICT by the respondents because most of the respondents are settlers in the farm settlements located in the rural and underdeveloped areas. It is however notable that most of these farm settlers had either retired from businesses and companies in the cities or they have their families in the cities, thus, ICT is trite to them. Chowhan and Ghosh (2020) noted that the extent at which mobile phones have penetrated the hinterlands has led to enhanced significant engagement of ICT in farming practices in Bangladesh.

Table 2. ICT components

Valid	Frequency	Percentage
<b>Have you ever heard of the term “ICT”</b>		
Yes	171	91.0
No	17	9.0
<b>The components of ICT that you are aware of?</b>		
Radio	3	1.8
Television	7	3.7
Internet	50	26.6
None of the above	16	8.5
All of the above	112	59.5
Total	188	100

\*Source: Author’s survey (2020)

The table also shows that three (1.8%) of the respondents noted that radio is a component of ICT, seven (3.7%) noted that television is a component of ICT, fifty (26.6%) noted that internet is a component of ICT, sixteen (8.5%) noted that none of the above is a component of ICT while one hundred and twenty one (59.5%) noted that all of the above are components of ICT. It is lucid that most of the respondents understand the components of ICT, which is why “all of the above” option has the highest percentage. The knowledge of old ICT components such as radios, print media, as well as television became increasingly common in the midst of farmers when compared with contemporary ICT components, for instance internet, cable television, social media (Ebisike et al., 2021). The engagement of

ICT components gives room for farmers to benefit via better earnings, during hike in the cost of food prices, likewise, management of farms on a sustainable basis. Farmers can use ICT for least important issues about their farming businesses and operations under the term e-agriculture. E-agriculture, which is a growing concept in terms of the innovativeness of ICT, is targeted at boosting the enhancement of agriculture and the hinterland via enhanced information and communication systems (LaiSolarin *et al.*, 2022).

### Tourism Potentials of Animal Husbandry

It is obvious from the above that 59.0% of respondents strongly agreed and 34.6% agreed that breeding of livestock is a tourism potential. 43.6% strongly agreed and 50.5% agreed that feeding of livestock is a tourism potential. 41.5% strongly agreed and 51.1% agreed that sight of animals is a tourism potential. 43.6% strongly agreed and 50.5% agreed that farm animal product such as cheese is a tourism potential. 35.1% strongly agreed and 61.2% agreed that livestock vaccination and medication are tourism potentials.

Table 3. Tourism Potentials of Animal Husbandry

Question items	SA	A	D	SD	Mean	SD	Rank
Breeding of animals	111 (59.0%)	65 (34.6%)	12 (6.4%)	-	1.47	0.62	9 <sup>th</sup>
Feeding of animals	82 (43.6%)	95 (50.5%)	11 (5.9%)	-	1.62	0.58	7 <sup>th</sup>
Sight of animals	78 (41.5%)	96 (51.1%)	14 (7.4%)	-	1.67	0.63	5 <sup>th</sup>
Farm animal products such as cheese	82 (43.6%)	95 (50.5%)	11 (5.9%)	-	1.62	0.59	7 <sup>th</sup>
Vaccination and medication services	66 (35.1%)	115 (61.2%)	7 (3.7%)	-	1.69	0.54	4 <sup>th</sup>
Livestock feed composition and milling	70 (37.2%)	100 (53.2%)	18 (9.6%)	-	1.72	0.63	2 <sup>nd</sup>
Livestock pen and houses	68 (26.2%)	108 (67.4%)	12 (6.4%)	-	1.70	0.58	3 <sup>rd</sup>
Veterinary care of animals	96 (51.1%)	84 (44.7%)	8 (4.2%)	-	1.54	0.59	8 <sup>th</sup>
Slaughtering of livestock	68 (36.2%)	95 (50.5%)	25 (13.3%)	-	1.78	0.68	1 <sup>st</sup>
Animal dressing	84 (44.7%)	91 (48.4%)	13 (6.9%)	-	1.63	0.63	6 <sup>th</sup>
Summary					16.44	6.07	

Source: Author’s survey (2020)

37.2% strongly agreed and 53.2% agreed that feed composition and milling is a tourism potential. 36.2% strongly agreed and 67.4% agreed that livestock pens and houses are tourism potentials. 51.1% strongly agreed and 44.7% agreed that veterinary care of animal is a tourism potential. 36.2% strongly agreed and 50.5% agreed that livestock slaughtering is a tourism potential. Lastly, 44.7% strongly

agreed and 48.4% agreed that animal dressing is a tourism potential. It is clear that all of the respondents strongly agreed, agreed and disagreed on each of the indicators in the table above, however, most of the respondents either strongly agreed or agreed. The missing systems, are essentially, for the indicators that the respondents chose no available option for, this might be either as a result of the fact that they are either undecided or not sure of their responses.

Meanwhile, the result reveal that the mean value of above is 16.44. Notably, predictors of tourism potentials of livestock farms were subjected to critical rating by their mean values. Likewise, the significance of the mean scores for the indicators above simply implies that the lower the mean score the lower the perception of the respondents about the variable that captures all the indicators and vice-versa. This is so because each of the indicators is meant to help properly justify the set variable. In that light, it is of utmost importance to measure each of these indicators in a bid to decipher their significant implications for the research.

Therefore, no statistical difference is evident amongst the predictors, their mean values as well as standard errors were used in rating them; animal slaughtering ( $1.78\pm 0.68$ ), Feed composition and milling ( $1.72\pm 0.63$ ), Livestock pen and houses ( $1.70\pm 0.58$ ), Vaccination and medication services ( $1.69\pm 0.54$ ), Sight of animals ( $1.67\pm 0.63$ ), Animal dressing ( $1.63\pm 0.63$ ), Feeding of animals ( $1.62\pm 0.58$ ), Farm animal products such as cheese ( $1.62\pm 0.59$ ), Veterinary care of animals ( $1.54\pm 0.59$ ) and Breeding of animals ( $1.47\pm 0.62$ ). This simply implies that tourism potentials of animal husbandry in an ascending order according to the farmers can be rated as follow; breeding of animals, veterinary care of animals, farm animal products such as cheese, feeding of animal, animal dressing, sight of animals, vaccination and medication, livestock pen and houses, feed composition and milling and animal slaughtering.

It is notable that there was no statistically significant difference amongst predictors of animal husbandry's activities, thus, mean scores as well as standard errors were used in rating them in descending order based on the following;

- 1) animal slaughtering ( $1.78\pm 0.68$ ),
- 2) Feed composition and milling ( $1.72\pm 0.63$ ),
- 3) Livestock pen and houses ( $1.70\pm 0.58$ ),
- 4) Vaccination and medication services ( $1.69\pm 0.54$ ),
- 5) Sight of animals ( $1.67\pm 0.63$ ),
- 6) Animal dressing ( $1.63\pm 0.63$ ),
- 7) Feeding of animals ( $1.62\pm 0.58$ ),
- 8) Farm animal products such as cheese ( $1.62\pm 0.59$ ),
- 9) Veterinary care of animals ( $1.54\pm 0.59$ ) and
- 10) Breeding of animals ( $1.47\pm 0.62$ ).

In the light of the above, it is evident that different operations of animal husbandry is capable of attracting visitors to farms. Winter (2020) stated that visitors have the prerogative of travelling to sight and engage vis-à-vis petting, swimming with, riding with and taking personal photographs with dolphins, tigers and different animals with charisma and animals at the edge of extinction. There are various

attractive phases in the tourism sector; for instance, tourists can participate in the observation of animals in the safaris, tourists can meet and cuddle with cats in cafes, tourists can volunteer to work with goats in farmlands and danger tourism that involves getting closer to fearful predating animals (Essien, Lindsjo and Berg, 2020).

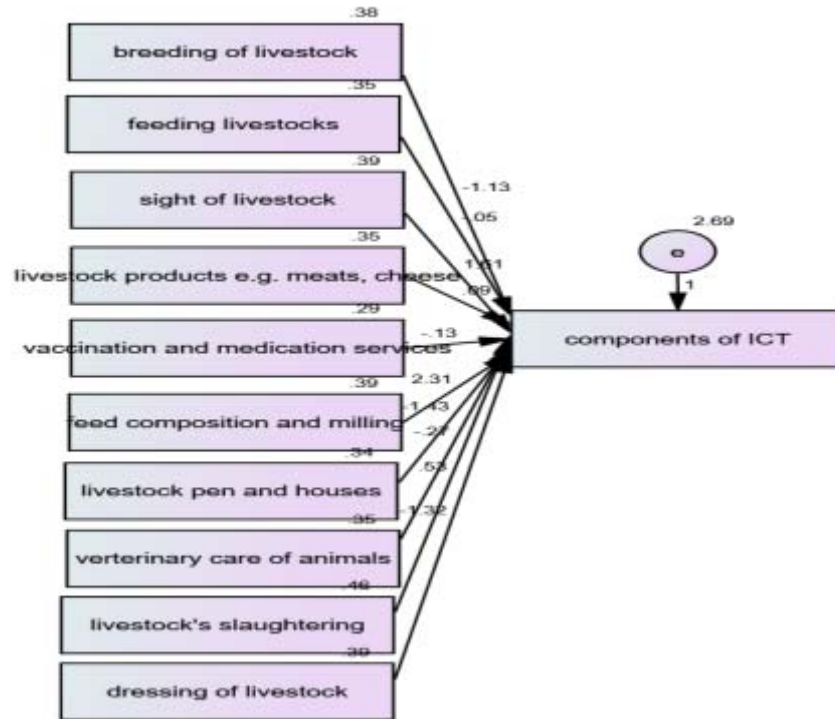


Figure 3: Path analysis

The above path diagram shows a regression analysis between ICT components and indicators of animal husbandry in integrated farms. The chi-square value is 1779.43, P-value of 0.000 and NFI of 0.226. It shows that ICT components have significant relationship with the following indicators of animal husbandry; feed composition and milling, breeding of animals, sight of animals, livestock pens, animal slaughtering and animal dressing. With respect to engaging indices of standardized estimates in deciphering the effects of the endogenous variable on the exogenous variables. It is evident that animal slaughtering has a large effect (S.E at 0.771), while feed composition and milling, breeding of animals, sight of animals, livestock pens and animal dressing have medium effects. This implies that ICT can be used to enhance more of slaughtering of livestock than other animal husbandry

activities in an integrated farm. Some of the integrated farms have sections where they slaughter, dress and package livestock, so that they may be directly sold off to consumers. Meanwhile, it is notable that with respect to the ranking of the potentials of animal husbandry that is evident in table 2, slaughtering of livestock animals as a tourism potential has the highest rank. Thus, it is no coincidence that ICT has the largest effect on vis-à-vis enhancing it as an agritourism potential.

ICT can showcase these agritourism potentials to prospective agritourist in other parts of the Country and the World. It is common knowledge that ICT has been engaged for tourism and agriculture at various levels. Anand (2013) noted that ICT is capable of empowering customers in identifying, customizing as well as purchasing tourism product and supporting the efforts of globalizing the business sector via the provision of facilities to develop, manage and distribute organizational products to the World. Khan and Hossain (2018) noted that E-tourism gives regulation to organizational competition via seizing intranets advantages in rescheduling internally driven procedures, extranets is for enhancing business dealings with reliable shareholders as well as the internet to interact with all shareholders and customers. Oke (2023) noted that essentially, tourism businesses may not be seemingly engaged if ITC is not engaged, right now, as a result of the extent of global creativity, ICT's engagement exceeds mere information dissemination, it has created privileges for business entities to connect with various consumers with the products information. ICT give room for the connection between consumers and management as well as control of supply chains to be synergized to one major source capable of facilitating various procedures- selecting products, making orders, fulfilments, tracks, payments and reports means to be engaged via single easy to use tools. Vujovic (2019) noted that summarily, ICT in the light of money and time is expected to significantly add to the reduction of cost, limiting process time as well as maximization of profit, at the same time adding to enhanced valuable services with reduced financial input and with real time from the trajectory of demand.

Thus, it is expected that ICT being able to enhance agritourism potential should be doable and realistic. ICT could also make agribusiness inclinations of agritourism seamless. This is premised on the fact that some of the agritourist may essentially be at the agritourism farm for business transactions. Olawuyi (2022) noted that among other types of individual(s) that can be referred to as agritourist(s), an agritourist is an individual that has travelled to a farm to transact agricultural business. However, these business transactions have elements of leisure because the agritourist must have temporarily disengaged from their workstations, offices or shops ab-initio. ICT is capable of transforming an agritourism destination into a heritage for the farm owner. ICT tools makes digitization of agritourism activities and components seamless. ICT makes it easy to pass the modus operandi of the agritourism business to the incoming generation and it further serves as a repository where agritourism information can be kept on a sustainable basis. Behera *et al.*, (2015) noted that e-agriculture adds good worth to farm owner's life as well as consumers premised on sustainable development via e-governance,

weblinks for managing knowledge, virtual kiosks as well as regular servicing locations in the categories of local communities. It is lucid that both the farm owners and the prospective customers can utilize ICT for their own benefit. Meanwhile, ICT transforming an agritourism destination into a heritage resource, makes sustainability of the agritourism venture quite easy, because the knowledge adopted in the first place to preserve the business and ensure profitability can be easily accessible by new generation. In the same vein, digitization can be employed to view sustainable practices used for agritourism business operationalized on different regions of the globe and these operations whose adoption is essentially premised in local agritourism business. With respect to the fact that most of the farmers noted that their awareness and usage of internet as a component of ICT, internet can be robustly engaged to enhance agritourism potentials of the selected integrated farms. For instance, Javeed et al., (2020) submitted that an electronic platform to transmit information to farm experts vis-à-vis broad issues that are connect to agricultural engagements, for instance, cultivating crops, forecasting of weather, making available farming input, financial companies connected to farming and agribusiness is called iKisan iKisan. Olawuyi *et al.*, (2017) noted that contacting agents of tourism destination by potentials customers becomes easy as messages can be sent to them through messaging platforms on their internet portal. In the same vein a similar e-platform can be created in enhancing the agritourism potentials of animal husbandry activities of the selected integrated farms.

### **CONCLUSION**

On the basis of ranking of the indicators, the findings revealed that animal slaughtering is the highest agritourism potentials of the selected integrated farms. Similarly, the results of the study reveal that ICT components (radio, television and the internet) have significant relationship with the following indicators of animal husbandry; feed composition and milling, breeding of animals, sight of animals, livestock pens, animal slaughtering and animal dressing. However, it has the largest effect on animal slaughtering.

The submission that ICT can easily enhance agritourism potentials of integrated farms is underpinned by the social cognitive theory that was adopted for this research. It basically underpins farmers awareness of ICT, which underscores their acceptability of ICT. While conceptualizing the knowledge of a farmer on ICTs agriculture's creativity's engagement, it can be averred that acceptability of users, integrating and engaging of recent technologies happens and get enhanced over a period as a result of the impacts of various interconnected matter (Mng'ong'ose and Victor, 2018). The social cognitive abilities of farmers about these ICT components can aid farmers to better showcase/advertise these agritourism potentials to people in different parts of the world, aid farmers in better packaging these potentials and also aid farmers to carry out seamless agritourism businesses.

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