



# Inclination to Superstitious Knowledge in Decision Making among the Annangs in Farming Communities of Akwa Ibom State, Nigeria

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## Authors' contributions

*This work was carried out in collaboration between both authors. Both authors designed the study, performed the statistical analysis and wrote the protocol. Author IDE wrote the first draft of the manuscript, while author VAS managed literature searches. Both authors read and approved the final manuscript.*

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## ABSTRACT

The study analyzed the inclination to superstitious knowledge in decision making among the Annangs in farming communities of Akwa Ibom State, Nigeria. Primary data from 150 randomly selected respondents from Ikot Okoro, Ikot Ubo, Ikot Ekeang and Ikot Okubara villages of Abak and Oruk Anam Local Government Areas were collected using questionnaires and key informant interview guide. Data were analyzed using descriptive statistics and multiple regression. The study revealed that 94% of the respondents were aged between 21-60 years, 94% had acquired some formal education, all respondents were Christians, 61.3% of the respondents were married, 92% earned at least NGN 50, 000 monthly (about \$250) and about 52% of the respondents have farming as their primary occupation. Three indexes of luck, malevolence/benevolence, and omens/soothsaying were used to measure the belief in superstition. The study revealed that respondents believed less in luck (with a mean score of 22.9533) than they did in malevolence/benevolence (24.9332) and omens/soothsaying (27.3066). The study recommends that education with a focus on the enlightenment, re-orientation, and counseling of individuals on the

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subject matter be initiated effectively by agents of social change to reduce the levels of inclination to superstition in decision making among respondents. This will support the adoption of innovations to bring about increased agricultural productivity, rural development and a smooth rural transition.

*Keywords: Superstition; decision making; annangs; farmers; akwa ibom.*

## 1. INTRODUCTION

Man has evolved and has been part of history and modernization and has also acquired knowledge and is enlightened about how events take place. Science in particular has enabled him to understand why such events take place when they do but, having evolved from different socializations, man sometimes finds himself consciously or unconsciously doing things that could be deemed "irrational" which defy scientific knowledge and are associated with superstitious knowledge and beliefs he may hold to be true. People all over the world, hold irrational beliefs that an object, action or circumstance not logically related to a course of an event, influences its outcome such as astrology, religion, omens, witchcrafts, prophecies, etc, which contradicts natural science and arises from curiosity with regard to unknown things or things in the future.

Superstition is a behaviour that has no rational basis / history or a history that is long – lost. A few specific folk traditions such as the efficacy of amulets have been found in most periods of history and in most parts of the world but other superstitious beliefs may be limited to geographical locations or developed by a person [1]. In agriculture, such is the importance of these beliefs that strong adherence to superstitions influence important decisions and may even cause a life-saving innovation to be overlooked as they may not be compatible with the belief system of the farmers. For example, some areas or fields that would have been better suited for cultivation or the establishment of agricultural projects have remained uncultivated and untouchable as they are deemed sacred and reserved for gods. Adherence to supernatural healing measures rather than medical care, refusal to adopt improved cultivating methods, rejection of improved/ disease free planting materials and seed varieties, overlooking of technological innovations in favour of crude, primitive/rudimentary practices and fatalism/expectations of events to occur by chance or magic; have ultimately led to stagnated, impoverished and underdeveloped

agriculture and rural communities [2] and [3]. Agriculture in Nigeria is a major branch of the economy, providing employment for about 70% of the population. While this appears like an achievement, Nigeria's agricultural sector is endowed with abundant land and water resources and has the potential to grow further, but this potential has not been realized; owing to strong resistance from such things as the values and superstitious beliefs of farmers. The introduction of improved planting materials or crop varieties to increase productivity have often been rejected in favour of age long practices and traditional beliefs and superstitions compatible with their struggles with nature. There is no documentary evidence of how superstitious or otherwise the Annang people of Akwa Ibom state are. This research is aimed at bridging this gap by identifying the personal characteristics of the Annang people, their inclination to superstition, and the implications of such practices and beliefs to agricultural production in the area and to social sciences as a whole. A relationship between selected personal characteristics of respondents and their inclination to superstitions is assumed.

## 2. RESEARCH METHODOLOGY

### 2.1 Social and Geographical Setting

The Annang (also spelt Anaang) is an ethnic group that live in the Coastal Southeast of Nigeria and Southwestern Cameroon. The Annang people are the second largest ethnic group in Akwa Ibom State, occupying eight (8) of the thirty-one (31) Local Government Areas in Akwa Ibom State, Nigeria viz: Ikot Ekpene, Obot Akara, Essien Udim, Abak, Etim Ekpo, Oruk Anam, Ika and Ukanafun. The population of about 1.2 million, is evenly distributed with 570,573 males and 530,587 females [4]. Geographically, the Annang territory lies between latitudes 4.25° and 7° north, and longitudes 7.15° and 9.30° east. The landscape is predominantly plain and deep-lying with no point rising to 300 feet above sea level. Two main seasons exist - the rainy which runs from April to October and the dry lasting from November to March. The typical pattern of rainfall is bi-modal with a two-

week break in August generally referred to as “the August break”. Strong harmattan winds occur between December and January, and the land is generally humid – typical of a rainforest zone, aiding the growth of Raphia palm and oil palm trees, commonly seen in the area.

## 2.2 Population of the Study

The population of study included all adults living in farming communities in the study area from 18 to 100 years. The unit of observation and analysis were all Annang indigenes in the study area between 18 and 80 years.

## 2.3 Sampling Procedure and Sample Size

Multi-staged random sampling procedure was used to select samples. In this method, first all Annang speaking local government areas were selected, and 2 local government areas were randomly selected from this number. Then 2 blocks were selected from each of the local government areas and 2 cells were selected from each block (using the AKADEP enumeration list as a guide), and finally some households were selected for interview in those cells. In all these stages, the selection was performed randomly. Since the population of the cells were not the same, the number of the respondents selected from each block was proportional to its population (using the proportionate stratified random sampling technique). This was also randomized and the distance between households taken into consideration (using the systematic sampling technique). Two key informants – 1 male and 1 female were selected per block for in-depth interview. Age, occupation, sex and the formal position of authority within the community’s social structure was used as the criteria for selection. Primary data were collected using interview schedules and key informant interview guide.

## 2.4 Analytical Technique

Statistical tools such as frequency distribution, percentages, means and standard deviations were used for analysis and presented in form of tables. Three indexes (luck, malevolence and benevolence, and omens or soothsaying) were designed on a Likert scale and certain statements reflecting each of the indexes were presented, to measure the respondents’ inclination to superstition. This was analyzed

using the weighted mean score values from the Likert scale. Multiple regression was used to test the assumptions of the study. This is given by:

$$\text{Assumption 1: } y_i = b_0 + b_1x_i + b_2x_2 + b_3x_3 + b_4x_4 + u_i$$

Where:  $y_i$  = inclination to superstition

$b_0$  = Intercept

$b_1, b_2, b_3, b_4$  = slopes at points 1 to 4 respectively

$x_1, x_2, x_3, x_4, x_n$  = variables 1 to n respectively

Given Inclination index =  $f(x_1, x_2, \dots, x_n)$

Where:

$x_1$  = Age (in years)

$x_2$  = Sex (of the respondent)

$x_3$  = Education level (in years of formal schooling)

$x_4$  = Income level (in Naira)

$x_n$  = other selected variables

## 3. RESULTS AND DISCUSSION

### 3.1 Selected Personal Characteristics of Annang Farmers in Farming Communities of Akwa Ibom State is Presented on table 3.1

**Sex:** The study consciously mainstreamed gender as shown in Table 3.1, by selecting equal number of men and women for the study. Consequently, from a total of 150 respondents, there were 75 (50%) males and 75 (50%) females.

**Age:** Thirty four percent of the respondents were aged between 21-30 years, a further 24.7% were 31-40 years old, with 13.3% within 41-50 years of age. Of the 16.0% between ages 11-20, respondents in that age range were at least 18 years of age. Only 4% of the respondents were above 60 years. This results show that majority (about 96%) of the respondents were within the economically active age range of 21-60 years. With the mean age of respondents at 33.7years and low dependence ratios, this will imply that labour will be readily available for agricultural activities in the study area, as respondents are expected to be employed and to employ their human and non-human resources to gain income.

**Table 3.1. Personal Characteristics of Respondents**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>		
Male	75	50.0
Female	75	50.0
Sub Total	150	100
<b>Age (in years)</b>		
11-20	24	16.0
21-30	51	34.0
31-40	37	24.7
41-50	20	13.3
51-60	12	8.0
61-70	06	4.0
Sub Total	150	100
<b>Educational Status</b>		
Formal	141	94
Non-Formal	02	1.3
No Education	07	4.7
Sub Total	150	100
<b>Years of Formal Schooling</b>		
1-5	14	9.9
6-10	40	28.1
11-15	76	58.5
16-20	12	8.5
Sub Total	142	100
<b>Monthly Income (NGN)</b>		
<50,000	138	92
50,001-100,000	9	6
100,001-150,000	3	2
Sub Total	150	100
<b>Marital status</b>		
Single	43	28.7
Married	92	61.3
Widowed	13	8.7
Separated/Divorced	2	1.3
Sub Total	150	100
<b>Household headship</b>		
Yes, I'm my household head	68	45.3
No, I'm not the household head	82	54.7
Sub Total	150	100
<b>Household size</b>		
1-10	120	80
11-20	29	19.33
21-30	1	0.67
Sub Total	150	100
<b>Religion</b>		
Christianity	150	100

Source: Field Survey, 2015

**Educational status (expressed in total number of years of formal schooling):** As indicated by Table 3.1, about 94% of the respondents had acquired some form of formal education, 1.3% had non-formal education, while 4.7% had no education. By implication, 6% of the

respondents for the study had no formal education. From the 94% who had acquired formal education, 8.5% of the respondents had between 16-20 years of formal schooling, 53.5% had between 11-15 years of formal schooling, and 28.1% spent 6-10 years in school, while

9.9% spent between 1-5 years in school. This result shows that majority (62%) of the respondents had at least attended senior high school level of education. The mean number of years of formal schooling is 9.6, implying that respondents had at least acquired junior high school level of education. This high level of literacy agrees with [5] report that Akwa Ibom State is generally regarded as an educationally advantaged State because of the availability of various educational institutions and opportunities in the State. With this high literacy level, respondents will be expected to be less inclined to superstition.

**Estimated average monthly income:** Table 3.1 also shows 92% of the respondents estimated their monthly incomes to be between ₦50, 000 and below, 6% of the respondents received 50,100-100,000 monthly, while 2% received 100100-150,000 as monthly incomes. This data reveals that respondents were low income earners. Some of these values were not direct incomes from the employment of productive resources; they included transfer payments to relatives who were not gainfully employed (e.g. monthly allowance given by husband to the wife). Also, some of the respondents, particularly the women, never had a real estimate of how much they earned monthly, since these changed depending on the needs to be satisfied and the funds the household head gave as allowance.

**Religion:** All respondents (100%) in the study were Christians. This is so, because the predominant religion in the area is Christianity. And though some traditional worshippers exist within the population, they will describe themselves as Christians as Christianity is the predominant religion in the area and they view Christianity as their official religion even though they still practice traditional religion in the background.

**Marital Status:** About 61.3% of the respondents were married. The high percentage of married respondents in the study area is consistent with [3] Ekong (2003), who noted that getting married is a highly cherished value among ruralites in Nigeria not only because of the need for children and the continuation of the family name, but also because in some areas, the woman forms a vital source of unpaid family labour. The remaining 38.7% of the population were either single (28.7%), widowed (8.7%) or separated/divorced (1.3%). of the population that were married (61.3%), 58.7% of them were in their first

marriages, while 41.3% had remarried or were never married but had a child for another individual before marrying someone else. This is so because the cultural environment permits a woman to be married only to one man at a time, while the men could be polygamous if they had the ability. of the 75 males in the study, 34.7% had no wives at the time of data collection (and though some had women with them, they were not formally married), 58.7% had one wife, while 6.6% of them had more than one wife. Men with families will think differently and be more concerned about farming, as it provides more food for the family. Consequently, when responsibilities grow and incomes do not grow proportionately, there is a tendency that the rural man will become fatalistic, more reliant on luck and hence superstitious.

**Household Headship:** Only 45.3% of respondents were household heads while 54.7% were not. This can be better understood when one considers that the study was carried out in a rural area, wherein family members live in nucleated settlements around each other. This provides for more than one generation of offspring to live together within the same habitat, while the eldest or most efficient member of the family is regarded as the family head. This implies that it is common within the area to find men with families, describing their own older parents who live with them as the household head. Again, the rural-urban migration of able-bodied youths to cities in search of better jobs, leaves only their aged parents at home to take care of the wives and children they have, making them the household heads. Should the aged members of the household be the household heads, the stories and education they give to succeeding family members will be based on their own wealth of knowledge and experiences with nature, which are largely based on the superstitious beliefs they hold to be true.

**Household Size:** Table 3.1 indicates that 80% of the respondents had households with about 1-10 members, 19.33% had 11-20 members, while 0.67% had 21-30 members. [6] stated that the probability of being poor increases, with household size. [7] also reported that the higher the household size in rural farming households in Akwa Ibom State, the higher the likelihood and intensity of poverty in the households. The relatively low household size reflects a high level of literacy among the respondents to rear only the number of children they can cater for, but if we remember that we are dealing with a rural

population, with low income levels, low outputs, low savings and low investments, then it can be argued that such relatively low number of children may be too large for certain individuals within the population.

### 3.2 Livelihood Activities of Respondents

Farming was the primary source of livelihood for about 52.0% of the respondents while 48.0% had other primary sources of income, in addition to also farming. This result is in consonant with [8] who stated that Agriculture is the mainstay of people's livelihood in rural sub-Saharan Africa. For respondents (including those to whom farming is primary), who worked off farm, 26.0% engaged in trading, 10.7% were involved in government salaried jobs, 43.3% had private salaried jobs, and 20.0% were artisans. This result is in agreement with [2] who noted that households engaged in only one occupation (farming) are poorer than those engaged in other occupations in addition to farming. However, as shown in Table 3.2, all respondents were into one farming area or the other (mainly to provide food to supplement that provided by their incomes). Sixty four percent were into food crops production, 22.0% kept livestock, 12.0% cultivated cash crops, while 2% planted tree crops.

### 3.3 Respondents' Inclination to Superstitions

Three indexes were employed to help determine the inclination to superstition of the respondents. These were luck, malevolence and benevolence, and omen and soothsaying. Information was gathered with respect to respondents' agreement with these three indexes on a four-point Likert scale.

From the Table 3.3.1, options B (3.4067), A (3.2067) and E (3.0600) had the highest mean scores. of great interest in the options is the fact that the three options were centered on tasks. If we are discussing low agricultural productivity and we take cognizance of these mean scores, one will readily admit that respondents may have to forego some hard work while expecting events to take place in their favour. Such beliefs, actually encourage laziness and promotes fatalism. The options with the lowest mean scores were options J (1.5400) and D (1.6933).

**Table 3.2. Livelihood activities of respondents**

Activity	Frequency	Percentage
Primarily farming		
Yes	78	52.0
No	72	48.0
Sub total	150	100
<b>Type of farming</b>		
Food crops	96	64.0
Livestock keeping	33	22.0
Cash crops	18	12.0
Tree crops	03	2.0
Sub total	150	100
<b>Off-farm occupation</b>		
Trading	39	26.0
Government salaried job	16	10.7
Private salaried job	65	43.3
Crafts and artisans	30	20.0
Sub total	150	100

Source: Field Survey 2015

From Table 3.3.2, option A stands out as the option with the highest mean score (3.0133). Such a strong perception will encourage respondents to stay back from essential seminars, lectures, field trips organized by extension agencies to help them. This will make them miss out on relevant information and other benefits they would have derived from such meetings. More so, as a result of such perceptions, farmers do not effectively employ their productive resources into creating more outputs. Some farmers may just decide to forego working on certain days as they feel those days are not good for business. The other options had more or less even mean scores, with options B (2.0200) and F (2.0333) having the lowest mean scores. In general, it can be said that respondents had greater inclination to malevolence and benevolence, as no more score was less than 2.0.

As shown in the Table 3.3.3, the inclination to omens and soothsaying are very high among the respondents. Option E, with a mean score of 3.3133 ranked first. This too, is an important factor for discussion. Inklings could be explained

medically, but strong adherence to inklings and attaching meanings and relevance to them by the respondents may not always mean well for agricultural and rural development. A farmer on his way to the research institute for any essential purpose may mistakenly hit his left foot on the way and opt to return home because he feels a bad thing awaits him should he continue the journey. Options B (3.2533), F (3.0600), and G (3.0600) had the next high mean scores

respectively. The option with the lowest mean scores were options I (2.0333) and H (2.0600) respectively.

Of all three indexes, luck had the least number of high mean scores, which will imply that respondents believed in luck a bit less than they did malevolence and benevolence, and omens and soothsaying. The analysis confirms that the Annangs are generally superstitious.

**Table 3.3.1. Inclination of respondents to superstition**

S/N	Statements for index 1: Luck	Mean scores
A	Belief in good and bad luck is true most of the times	3.2067
B	In every task I also believe in luck for accomplishment	3.4067
C	If I wear amulets, cross or birth stones, I'll have good luck	2.0600
D	Sweeping my house in the night will bring bad luck	1.6933
E	Sometimes luck helps, not just hard work	3.0600
F	Nowadays luck has no place in human life	1.9800
G	Whenever I fail at a task, it is because of bad luck	2.0200
H	Some numbers are lucky numbers	2.1133
I	It is a good luck sign if a bird poops on me	1.8733
J	A rabbit's foot is a good luck charm	1.5400

**Table 3.3.2. Inclination of respondents to superstition**

S/N	Statements for index 2: Malevolence and benevolence	Mean scores
A	Some days and hours are malevolent and some are benevolent	3.0133
B	One shouldn't cut ones hair at night because it is malevolent	2.0200
C	If somebody calls my name in the forest, it is malevolent	2.7533
D	Whistling at night is malevolent	2.2667
E	Witches have malevolent powers	2.8533
F	When I sneeze suddenly, it is malevolent	2.0333
G	Itching of my right palm is benevolent	2.4400
H	Physical contact with witches can lead to bad fortunes	2.7133
I	I stay away from the village/communal engagement because of witches	2.3000
J	If I give, my gift can be used to harm me or my family	2.5400

**Table 3.3.3. Inclination of respondents to superstition**

S/N	Statements for index 3: Omens and soothsaying	Mean scores
A	Bees visiting your home means presence of evil spirits/ death	2.9800
B	A vulture landing on your roof or an owl hooting in your compound is a sign of death	3.2533
C	If I'm going to a function and I hit my left foot on the way, it's a warning of danger	2.6000
D	If a black cat crosses my path in the morning, it is a sign of evil	2.3267
E	I believe in prophecies and I take my inklings seriously	3.3133
F	Sometimes man reaches a dead end and then a soothsayer or a fortuneteller can be of help	3.1133
G	Sometimes it is reasonable to get help from a soothsayer or a prophet	3.0600
H	Only weak-hearted people go to soothsayers, spiritists and fortunetellers	2.0600
I	I have never thought of going to a soothsayer/a prophet	2.0333
J	When you bite your tongue, someone has mentioned you in a conversation	2.5667

**Table 3.4. Factors affecting inclination to superstition**

Variables	Coefficients	Standard error	T	Decision
Sex <sub>(x1)</sub>	-1.800	2.227	-0.808	Not significant
Age <sub>(x2)</sub>	-0.153	0.093	-1.684*	Significant
Years of formal schooling <sub>(x3)</sub>	-0.665	0.202	-3.292***	Significant
Marital status <sub>(x4)</sub>	0.108	1.683	0.064	Not significant
Household headship <sub>(x5)</sub>	-3.530	2.419	-1.459	Not significant
Household size <sub>(x6)</sub>	-0.089	0.230	0.384	Not significant
Livelihood activities <sub>(x7)</sub>	-0.813	1.756	-0.463	Not significant
Monthly income <sub>(x8)</sub>	2.314 E-005	0.000	0.624	Not significant
Position of leadership <sub>(x9)</sub>	2.882	2.357	1.223	Not significant
Constant	87.662	3.974	22.056	Significant

Note: \* and \*\*\* = significant at 10% and 1% levels

Source: SPSS version 20.0 computer printout

### 3.4 Hypothesis Testing

Multiple regression was used to predict how much of the respondents' inclination to superstition can be explained by their personal characteristics. The result is presented in above Table 3.4. A relationship between inclination and personal characteristics was assumed.

From the Table above, age and years of formal schooling were statistically significant at 10% and 1% levels respectively. This means, an individual's inclination to superstition changes with level of awareness/education acquired and with age. As age increases, tendency to be superstitious increases and it shows that as time goes by and people grow older, their degree of believe in superstitions increase. Other factors tested were not significant.

### 4. SUMMARY AND IMPLICATION OF FINDINGS FOR AGRICULTURE AND THE SOCIAL SCIENCES

Data gathered from the research established the following:

**Education:** About 94% of the respondents have acquired one form of formal education or the other. Data gathered from the field revealed that respondents with 1-5 and 6-10 years of schooling were more inclined to superstition than respondents with 11-15 and 16-20 years of formal schooling. This proves that as education increases, levels of inclination reduce and this is in agreement with [9] who considers superstitions as some news, attitudes, ideas, habit and non-

scientific and unreasonable behaviors and actions which are withholding in nature and keep the less literate and less experienced people ignorant. With about 61.8% of individuals with higher educational levels, one will expect that this group (being the majority) will influence and encourage other individuals to lay their beliefs in superstitions to rest, but the exact reverse has been the case because as [10] puts it, "by not observing the superstitions or by observing them only selectively, individuals bring dishonor to their ancestors and can find themselves socially alienated from the community". Every social phenomenon needs some cognitive and concrete requirements to exist and to come into being. Development is a social phenomenon; reaching the goals of development is among the primary goals of every society and reaching development needs concrete and cognitive requirements, without which development cannot be made manifest. These beliefs have left us with individuals without cognitive requirements in the society to aid development strives and it is not because education itself is not doing enough to enlighten these individuals but because the socio-cultural environment imbibes in these individuals different values and orientations to the ones given in classrooms. For example, in the previous generations, the socialization process was accompanied with some superstitions, and though in the new generation this process does not care a lot for the supernatural and superstitious issues and ideas, these ideas have still been transferred to individuals in this generation, making even the educated ones to succumb



to their influence. It has been made difficult for the highly educated individuals to hold political offices and positions of leadership in the community as they are seen by the locals as being ignorant of the customs, taboos and traditions of the community. Again, higher educational status according to [2] increases the likelihood of getting paid jobs other than farming in rural areas, but with all the respondents involved actively in farming, it may not be far from the truth to say that the society disregards education and scientific information, making higher educational attainments irrelevant, while still holding ancient and interpretations on the causes and effects of certain strange phenomena to be true. The cognitive and the cultural elements of the society are the infrastructure for any kind of economic growth and development and if we must reach the level of other developed and industrial societies in the shortest time possible from the technical and economical points of view, then such a movement requires highly motivated people with a high level of knowledge and high cultural growth. Should the current trend continue, then the problem of agriculture and rural development will never be overcome. As [11] puts it, when a society is entangled in superstitions, it does not have necessary cognitive requirements for the true development.

**Religion:** About 56% of the respondents were extremely religious, while a further 42.7 were religious. About 93.3% of the respondents agreed that religion influenced their lifestyles more than any other thing, and 59.3% attended religious functions more than once a week. Culturally, individuals within the Annang ethnic group are highly religious and this statistics highlights that with frequent religious activities, production is deprived of required man hours of labour. Also, with consistent participation in religious functions, an individual's level of inclination and reliance on supreme beings and deities increases. It is as [12] postulated, that there seems to be a certain concurrence between religiosity and superstitious beliefs. Cognizance has to be taken of the health, vigor and stability of the individual who has to hurriedly finish the day's work, rush to a religious function continuously, with little or no time to rest in between, and then resumes work again. He definitely cannot work efficiently.

#### **4.1 Low Income Levels, Poor Standard of Living and Poor Infrastructural Development**

These are almost related, as one cannot acquire certain basic amenities with his/her low income level, let alone develop public buildings or provide necessary infrastructures in the community. The primary occupation of the respondents determines the incomes earned by each respondent, and the number of individuals living within family houses is a reflection of the low income level of the people. When accruable monthly income is too low to satisfy household consumption demands, there comes low savings, with low savings low investments, with low investments low productivity, with low productivity low incomes, and this viscous cycle of poverty keeps individuals in the area within poverty lines. While in this state, individuals within the community will continually lack certain basic amenities, Public structures and town halls will be out-modern and not properly taken care of, Good roads will be notably absent in most parts of the area, water and electricity will be in inadequate supply, and general standard of living was low; as evident in the study area.

#### **4.2 Low Agricultural Productivity**

Though all the respondents were involved in one form of agriculture or the other, most of such farming activities were carried out on a subsistence level, with the main aim of providing an additional source of food where monthly income is not sufficient enough, and selling only after satisfying household food demands have been satisfied. With about 59.4% of the respondents consuming 61-100% of their farm outputs, this point is further clarified. With good climate and available land, one will expect that agricultural productivity in the study area will be high and such things as hunger and poverty will be eliminated. One will expect bumper harvests season in-season out, mechanized large scale agriculture in most areas, increased productivity (especially as the government and different NGO'S have shown interest to redevelop the agricultural sector in the country) and increased income from farming activities which will increase agriculture's contribution to the country's GDP, but this has not been the case owing to high levels of inclination to superstitions already determined in this work. The high mean scores for all three themes and continuous reliance on supernatural forces to bring certain events to

place reflects a high level of fatalism, laziness in carrying out specific responsibilities and duties, and inefficient employment of available human and material resources into producing outputs. Those people who just wait for the invisible and heavenly hands, magicians and sorcerers to help and consider diligent attempts useless could not be good soldiers for the development process.

If increased agricultural productivity and overall rural development in the area is to be achieved, then it is important that such strong inclinations be addressed. But this in itself is a challenge. However, quality and effective education and enlightenment on these beliefs can address this challenge. And one will wonder, has education not failed in performing this task already? Clearly it has, and it only failed because the education received was not directly targeted on the subject matter. Little or nothing has been done in classrooms, lecture halls, field meetings, churches, seminars etc, to try to sway the rural man and even the elites from being inclined to superstitions, and until the subject matter is addressed, we cannot have positive results. This should be a big bother for us researchers and extension officers, as we are the group who make recommendations to the government of the day and often call for the allocation of resources for developments and growth of the agricultural sector (some of which do not meet pre-determined objectives). If we require quality results from all of the investments made by the government and private individuals in the agricultural sector, then we cannot ignore the perception and inclinations of the people which will ultimately determine whether or not they adopt an innovation or use the facilities and services we have worked so hard to put in place. Education that will provide good exposure to how results are achieved in the outside world, counseling, enlightenment, address inclinations to superstition properly, provide re-orientation on why, how and when events occur in nature backed up by effective means and media through which such education can be delivered to great effect, can help reduce the level of inclinations of farmers in the study area to these beliefs. If the causes and effects of the somewhat supernatural and mystical occurrences can be explained and demonstrated scientifically to farmers, they may come to accept the new knowledge with the proves they have received, and change their attitudes and perceptions towards such things. This will help check their levels of inclination to superstitions. This too, will aid the adoption of innovations in agriculture which will in turn help

increase productivity, raise income levels and set the platform for rural development. What remains therefore, is for the agricultural research institutes, Extension agencies, Governmental and Non-Governmental Organizations and Stakeholders to make considerable efforts in finding the right education packages and means of disseminating such information to the farmers in the study area and other farmers in the state, to help bring about desired changes in attitude and behaviour, and reduce the levels of inclination to superstitions from farmers and farming households in the state in particular and the country at large.

## **5. CONCLUSION AND RECOMMENDATIONS**

Superstitions stem from ignorance, fear, and curiosity about strange situations, scenarios, or events in the future. The Ignorant and less educated individuals, who do not have enough ability to analyze such phenomena resort to superstitions, relying on fate, chance, luck, magic, destiny, fortune telling and mystical powers to provide explanations for such strange happenings. Such explanations may not be accurate, but they believe them and make others believe them too, thereby spreading the beliefs. These too, are sensitive parts of culture and tradition, with some of them bearing heavy punishments and taboos if violated.

Strong inclinations to superstitions contribute to the low agricultural productivity and poor rural development in the study area. But just as we cannot take away culture, traditions, taboos, myths etc from our social and cultural backgrounds, we can't also afford to let such distinct attributes affect agriculture and rural development negatively. There has to be a common ground, a common platform, upon which both factors can operate, without being detrimental to the other. Since inclinations relate to reasoning, thoughtfulness and mental tendency, then efforts to reduce levels of inclination to superstitions should be targeted at capturing the thoughts and psyche of individuals in the study area, and the country at large. One such medium capable of capturing the reasoning, thoughts, motives and tendencies of individuals is Education. The following recommendations were presented:

1. Agricultural Research Institutes, Universities of Agriculture, Extension Agencies and NGO's should organize

learning situations and environments that will pay particular attention to the causes, origin and effects of these inclinations to agriculture and rural development, enlighten individuals on the adoption of improved agricultural practices, and provide counseling, orientation and sensitization programmes that will reduce the levels of inclination to spirituality, superstition and legends.

2. Individuals must be encouraged to feel more confident, creative, accepted and recognized as an important member of the society and the feeling of powerlessness must be reduced by taking their ideas and thoughts into consideration in making decisions in schools, churches, town halls and social environments in order to tackle isolation and self-alienation.
3. Individuals should also be encouraged to participate in scientific research activities and demonstrations. The reasons and causes of lack of self-satisfaction should be identified and rational actions/thoughts encouraged as opposed to emotional and traditional actions. Measures must be put in place to curb the activities of the media propagating the superstitious beliefs and instead use them as teaching platforms to help individuals desist from such thinking and belief patterns.
4. If all the above is achieved and there is still no change in standard of living for the better, the people are likely to fall back to their old ways of doing things. As a result, these activities must be backed up by agricultural projects that will help bring increased productivity and rise in income levels. For example, the ministry of Agriculture can execute projects in the area that will support the commercial cultivation of *gnetum africanum* (*afang*) as most farmers in the area have cultivated this but in small scales. Extension agencies within the study area must be armed too with trained professionals and resources to guide and provide solutions to agricultural problems in the area.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Valeed. What are superstitious beliefs? Why do people believe in superstitions? Hubpages and Hubbers; 2014.
2. Omonona BT. Poverty and its correlates among rural farming households in Kogi state, Nigeria. PhD Thesis, Department of Agricultural Economics, University of Ibadan. 2014;262.
3. Ekong EE. An introduction to rural sociology (2nd Edition), Dove Educational Publishers, Uyo, Nigeria. 2003;341-395.
4. National population commission. Constitution of the federal republic of Nigeria; 2006.
5. Foundation for economic research and training. Poverty profile of Akwa Ibom State, Uyo, Akwa Ibom State. 2001;120.
6. Federal office of statistics. Profile for Nigeria 1980-1996; 1999.
7. Udoh EJ, Omonona BT. Adoption and welfare impact of improved rice varieties on rural farming households in akwa ibom state of Nigeria. Integrated Workshop on Rice Policy and Food Security in Sub-Saharan Region, Cotonou, Benin Republic. 2005;14.
8. Berth SA. From subsistence to sustainable agriculture in Africa. Mexico City. Sasakawa Africa Association; 2004.
9. Fazaei Y. Sociological Illusions and Superstitions. Tehran: Chesta. 2005;6(7): 482-483.
10. Ruud J. Taboo: A Study of Malagasy Customs and Beliefs. Oslo: Oslo University Press; 1960.
11. Sepehr M. Ways to combat superstition and calcification. Surveys in Social Research. Allen and Unwin. 2005;169.
12. Torgler B. Determinants of superstition. The Journal of Socio-Economics. 2007;36(5): 713-733.

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