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ABSTRACT

This research work undertook a look at the role of agric insurance in sustaining the development of cooperative societies in Enugu state with special reference to Nigerian Agricultural Insurance Corporation (NAIC), Enugu, Enugu state. The study was carried out using survey design method. The instrument for data collection was questionnaire distributed to the staff members of the insurance organization. The specific objectives of the study includes to discover the various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation, to find out if the cooperative societies do take insurance cover from Nigerian Agricultural Insurance Corporation for the sustenance of their development, to investigate the problems these cooperative societies encounter that hinder their efforts to take insurance cover and solutions to the problems. From these four research questions were raised and four hypotheses formulated which were tested with chi square ($\chi^2$). The total population is fifty five (55) and from that a sample was drawn using the Taro Yamane formulae and the number turned out forty eight (48). The study reviewed literature on insurance, agric insurance, cooperative societies, agric insurance products and services, problems of cooperative societies regarding agric insurance and solution to the problems. A few theories on insurance and an empirical review of some earlier research work on insurance were reviewed too. The findings of the study revealed that NAIC have agric insurance products and services for cooperative societies, cooperative societies do not key in well to the issue of taking an insurance cover, the biggest problem for the cooperative societies is ignorance, followed by lack of trust in the insurance industry and low standard of living. The biggest solution remains increased insurance education and awareness, followed by adequate budgetary policies and developing products to meet changing customers’ needs. The researcher recommended that there should be increased insurance education and awareness for the cooperative societies, NAIC should have offices in the local government so that they can be closer to the cooperative societies in the rural areas, NAIC should do more in assisting cooperative societies to secure loans and adequate legislation to make insurance a big part of the running of cooperative societies.

Keywords: Agriculture, Insurance, cooperative societies and Enugu State, Nigeria.
INTRODUCTION

Cooperative societies are business organizations that are set up and run with the intent that its existence will possibly be for all time. But like other business organizations, cooperative societies have to deal with unforeseen occurrences which can put its continued existence into jeopardy, this is where the issue of insurance comes in. [1], defines insurance as an arrangement with a company in which you pay them regular amount of money and they agree to pay the cost when you lose or damage something. This happens in times of unforeseen eventualities or emergency loss. Insurance companies exist to offer this service to individuals and organizations [2]. The services they offer ranges to insurance cover for life, properties and businesses. A lot of cooperative societies are engaged in the agricultural sector of the economy and unforeseen circumstances leads to loss or damage that needs to be insured. In Nigeria, National Agricultural Insurance Corporation exit as a specialized insurance company to offer service to individuals and organizations in the agricultural sector of our economy. A lot of cooperative societies are engaged in the agricultural sector that can access these services offered by the insurance company. But a lot of problems persist in the industry which will make accessing the service by cooperative societies a problem. [3], stated that the Nigeria market is doubtful of insurance companies to the poor attitude of the insurance companies as regards to non-payment of claims. This is a very big issue in our society, most individuals and organization prefer not have any dealings with the insurance companies because of the above maintained problem. Some insurance companies have become very notorious of defaulting in payment of claims, this has adversely affected the publicity or popularity of the industry among the populace. Cooperative societies as well will entertain fears to take insurance cover for their agricultural products because of all these problems [4]. Agricultural insurance cover are taken to protect against loss or damage to crops and livestock, and it is very important to guard against these loses, but cooperative societies becoming convinced to take this insurance cover is another issue. Agricultural insurance protects against loss and damage and have great potential to provide value to low income farmers and their communities when shocks occur, and also encourage great investment in crops. From the forgoing, it is obvious that some sensitization and education on the importance of insurance is needed for
Agricultural cooperative societies [6 7, 8, 9]. Despite the inherent problems in the insurance industry in Nigeria, it is still important for agricultural cooperative societies to insure their crops, livestock and other business. Taking insurance cover will help sustain their development, when losses or damages occur these insurance cover will help them to recover from the loss or damage from the indemnity which the insurance firm will pay them. Their development can be sustained through this. Rather than shying away from insurance cover, cooperative societies in the agricultural sector need to know and understand the variables involved in the insurance industry and what is involved in taking an insurance cover.

This research work intends to take a deep look and uncover the role of agric insurance in sustaining the development of cooperative societies in Enugu state, with Nigerian Agricultural Insurance Cooperation (NAIC) Enugu, Enugu State as area of study.

Statement of the Problem

Agricultural cooperative societies undertake a lot of activities in the agricultural sector of our economy, to help boost our agricultural produce and economy ultimately. In the course of their business activities loss and damages do occur from time to time. Insurance cover is very important for these losses or damages, National Agricultural Insurance Corporation is a specialized bank set up by the Federal Government of Nigeria for this purpose. But the insurance industries have a lot of problems to deal with; because of these agricultural cooperative societies will have issues taking insurance cover. The insurance companies suffer from low patronage; this is because confidence in the industry is low. There is also the issue of weak regulatory framework, there are no adequate laws to regulate the activities of the insurance companies. There have been cases of insurance companies not being able to pay the claims of their clients, this puts away organizations (cooperative societies) and even individuals from taking insurance cover for their businesses. All these issue not withstanding, cooperative societies need insurance cover for their businesses incase they encounter losses or damages. This work is an attempt to investigate the role of agric insurance in sustaining the development of cooperative societies in Enugu State, with special reference to Nigerian Agricultural Insurance corporation societies (NAIC), Enugu, Enugu state.

Objective of the Study
The general objective of this study is to investigate the role of agric insurance in sustaining the development of cooperative societies in Enugu State, with Nigerian Agricultural Insurance corporative societies (NAIC), Enugu, Enugu state as the area of the study.

**The Specific Objectives Include:**

To discover the various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation (NAIC), Enugu state, Nigeria.

To ascertain if cooperative societies do take insurance cover from Nigerian Agricultural Insurance Corporation for the sustenance of their agricultural business and development in Enugu state.

To investigate the problems that these cooperative societies in Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance societies (NAIC), Enugu, for their development.

To offer pragmatic solution to these problems.

**Research Questions**

This research work will be guided by the following research questions.

- Does Nigerian Agricultural insurance corporation (NAIC) Enugu have insurance packages available for the development of cooperative societies in Enugu, Enugu State?
- Are there any efforts by cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation for the sustenance of their agricultural business and development in Enugu state?
- What are the problems that hinder the efforts of these cooperative societies in Enugu state to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu for their development?
- What has the pragmatic solution to these problems?

**Research Hypotheses**

This research work will be guided by the following null and alternative hypotheses.
H₀: There are no various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State.

H₁: There are various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State.

H₀: There are no efforts from cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for the sustenance of their agricultural business and development in Enugu state.

H₁: There are efforts from cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for their agricultural business and development in Enugu state.

H₀: There are no problems that these cooperative societies in Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for development.

H₁: There are problems that these cooperative societies Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for development.

H₀: There are no pragmatic solutions to these problems.

H₁: There are pragmatic solutions to these problems.

**Scope of the Study**

This research work was focused on investigating the role of agric insurance in sustaining the development of cooperative societies in Enugu state. The study was concentrated on Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State.

**Research Design and Methodology**

This research work made use of descriptive survey method. The researcher sought for data for the research work through primary and secondary sources. The primary sources include questionnaire and interview, while the secondary data were collected from textbooks, journals and internet. The study was concentrated on Nigerian IDOSR JOURNAL OF BANKING, ECONOMICS AND SOCIAL SCIENCES 2(1): 19-42, 2017.
Agricultural Insurance Corporation (NAIC), Enugu, Enugu state. According to the official website of the corporation it was established through the National Agricultural Corporation Decree No 37 of 1993, through the laws of the federation of Nigeria. The parent organization is the Federal Industry of Agricultural and Rural Development. It is a wholly owned federal Government of Nigeria insurance company, set up specifically to provide agricultural risk insurance cover to Nigerian farmers.

Its specific functions include;

- To implement, manage and administer the agricultural insurance scheme established by section 6 of act No 37 of 1993
- To subsidize the premium chargeable on selected crops and livestock polices from the grants obtained from federal government
- To encourage institutional lenders to lend more for agricultural production serving as security for the loan
- To update other types of insurance business as may be permitted by the commission of insurance at competitive premiums
- To do anything or to enter into any transaction that is calculated to facilitate the due performance of all it functions.

The headquarters is located at plot 590 Zone AD Cadastral Zone, Central Business District FCT. Postal Address PMB 0178 Gariki Abuja, it has six zonal offices in Ibadan, Bauchi, Minna, Owerri, Delta and Kastina with offices in all the state capitals in the country. The current managing Director/CEO is Mr. Bashir HaliruBinji (www.nic.gov.ng).

The total population of the study comprised the staff of the corporation in Enugu, which is a total of fifty five (55) staff members. A sample size was drawn from the population using the Taro Yamane formulae. The instrument used to collect data for the study was a questionnaire. The instrument was validated by an expert in the department of Cooperatives and Rural Development (CRD), ESUT.

To determine the sample size the researcher employed the Taro Yamane formulae given thus.

\[ n = \frac{N}{1 + N (e)^2} \]

\( n = \text{sample size} \)

N = total population
I = constant
e = tolerable error which is 5%

Thus

\[ n = \frac{55}{1 + 55(0.05)^2} \]

\[ n = \frac{55}{1 + 55(0.0025)} \]

\[ n = \frac{55}{1.1375} \]

\[ n = 48.3516484 \]

The sample size is 48

The researcher distributed a total of forty eight (48) questionnaires to the respondents during the survey exercises, a total of forty (40) questionnaires were returned. The researcher now made the following analysis from the returned questionnaires.

RESULTS

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of returned questionnaires</td>
<td>40</td>
<td>83.33</td>
</tr>
<tr>
<td>No of questionnaires not retrieved</td>
<td>8</td>
<td>16.67</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017
Table 1 above shows that forty questionnaires representing 83.33% were returned, while eight respondents representing 16.67% were not returned.

Table 2 Do you have an in-depth knowledge of agric insurance and the products available on the policy?

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>32</td>
<td>80</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Little idea</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017

Table 2 above shows that thirty-two respondents representing 80% indicated yes, none of the respondents representing 0% indicated No, while eight respondents representing 20% indicated little idea.

Table 3 what are the agric insurance products and services available to cooperative societies in your organization?

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidized Livestock</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Subsidized Crops</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Multi - Peril Cover</td>
<td>16</td>
<td>40</td>
</tr>
</tbody>
</table>
Table 3 above shows that eight respondents representing 20% indicated subsidized livestock, twelve respondents representing 30% indicated subsidized crops, sixteen respondents representing 40% indicated multi-peril cover, two respondents representing 5% indicated assistance on agric loans while two respondents representing 5% indicated farm asset and investment cover.

Table 4 the products and service are enough to ensure the growth and development of the cooperative societies?

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017
Table 4 above shows that thirty respondents representing 75% indicated strongly agree, four respondents representing 10% indicated agree, four respondents representing 10% indicated disagree, while two respondents representing 5% indicated strongly disagree.

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Agree</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Disagree</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017

Table 5 above shows that eight respondents representing 20% indicated strongly agree, six respondents representing 15% indicated agree, sixteen respondents representing 40% indicated disagree, while ten respondents representing 25% indicated strongly disagree.

Table 6 what do you think is the problem of the cooperative societies regarding taking insurance cover?
<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignorance</td>
<td>12</td>
</tr>
<tr>
<td>Lack of trust in the insurance industry</td>
<td>8</td>
</tr>
<tr>
<td>Delayed payment of compensation</td>
<td>4</td>
</tr>
<tr>
<td>Non payment of the total amount of compensation</td>
<td>4</td>
</tr>
<tr>
<td>Low level of IT in the industry</td>
<td>4</td>
</tr>
<tr>
<td>Weak regulatory finance</td>
<td>-</td>
</tr>
<tr>
<td>Short fall of skilled professional</td>
<td>-</td>
</tr>
<tr>
<td>Low standard of living</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
</tr>
</tbody>
</table>

**Source: field survey, 2017**

Table 6 above shows that twelve respondents representing 30% indicated Ignorance, eight respondents representing 20% indicated Lack of trust in the insurance industry, four respondents representing 10% indicated Delayed payment of compensation, four respondents representing 10% indicated Non payment of the total amount of compensation, four respondents representing 10% indicated Low level of IT in the industry, none of the respondents representing 0% indicated Weak regulatory framework, none of the respondents representing 0% indicated Short fall of skilled professional, while eight respondents representing 20% indicated Low standard of living.
Table 7 this problem has seriously affected the level of the cooperative societies involvement?

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>Agree</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017

Table 7 above shows that twenty eight respondents representing 70% indicated strongly agree, six respondents representing 15% indicated agree, four respondents representing 10% indicated disagree, while two respondents representing 5% indicated strongly disagree.
Table 8 what do you think is the solution to the problem?

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased insurance education and awareness.</td>
<td>17</td>
<td>42.5</td>
</tr>
<tr>
<td>Developing products to melt changing customers needs</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Engage adequate staff with professional background</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Improved information technology</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Adequate budgetary policies</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Effective leadership</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>
Source: field survey, 2017

Table 8 above shows that seventeen respondents representing 42.5% indicated increased insurance education and awareness, five respondents representing 12.5% indicated Developing products to meet changing customers needs, three respondents representing 7.5% indicated engage adequate staff with professional background, three respondents representing 7.5% indicated Improved information technology, nine respondents representing 22.5% indicated Adequate budgetary policies, while three respondents representing 7.5% indicated Effective leadership.

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>Agree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017

Table 9 above shows that thirty respondents representing 75% indicated strongly agree, two respondents representing 5% indicated agree, four respondents representing 10% indicated disagree, while four respondents representing 10% indicated strongly disagree.

TEST OF HYPOTHESES

The following hypotheses were tested using chi - square, ($\chi^2$)
Hypotheses one

Ho: There are no various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation (NAIC), Enugu, Enugu state.

Hi: There are various insurance products and services available for the development of cooperative societies by Nigerian Agricultural Insurance Corporation (NAIC), Enugu, Enugu state.

Test statistics

$$x^2 = \sum \left( \frac{0^i - 0^e}{0^e} \right)$$

Where;

$$0^i = \text{Observed frequency}$$

$$0^e = \text{Expected frequency}$$

The level of significance = 5% = 0.05

Using responses from table 4
Response Variables | Distribution | Percentage
---|---|---
Strongly Agree | 30 | 75
Agree | 4 | 10
Disagree | 4 | 10
Strongly Disagree | 2 | 5
Total | 40 | 100%

**Source:** field survey, 2017

Expected frequency = \( \frac{40}{4} = 10 \)

The degree of freedom is given

\[ \text{df} = (\text{Row total} - 1) \]
\[ \text{df} = (4 - 1) \]
\[ \text{df} = 3 \]

Determination of the critical value using the statistical table at the degree of freedom 3 and 5% level of significance \( x^2 = 7.81 \).

**Decision Rule**

If the computed \( x^2 \) is more than the critical value 7.81 the null hypotheses Ho should be rejected and the alternative hypotheses Hi accepted.

Computation of the test statistics. It should be noted that expected frequency = \( \frac{40}{4} = 10 \)

Using \( x^2 = \sum \left( \frac{O_i - E_i}{E_i} \right)^2 \)
Decision
Since the calculated value of $x^2$ is greater than the critical value 7.81 we reject the null hypotheses and accept the alternative hypotheses and therefore conclude that there are various insurance products and service available for the development of cooperative societies by Nigerian Agricultural Insurance Cooperation, Enugu, Enugu state.

Hypotheses two

1. Ho: There are no efforts from cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for the sustenance of their agricultural business and development.

H$_1$: There are efforts from cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for the sustenance of their agricultural business and development.

Test statistics

$$x^2 = \sum \left( \frac{0^i - 0^e}{0^e} \right)^2$$

Where;

$0^i$ = Observed frequency

$0^e$ = Expected frequency

The level of significance = 5% = 0.05
Using responses from table 5
<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Agree</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Disagree</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: field survey, 2017

\[
df = (\text{Row total} - 1) \\
df = (4 - 1) \\
df = 3
\]

Determination of the critical value using the statistical table of the degree of freedom 3 and 5% level of significance \( \chi^2 = 7.81 \).

Computation of the test statistics. It should be noted that expected frequency = \( \frac{40}{4} = 10 \)

Using \( \chi^2 = \sum \frac{(O-E)^2}{E} \)

\[
\chi^2 = \left( \frac{8-10}{10} \right)^2 + \left( \frac{6-10}{10} \right)^2 + \left( \frac{16-10}{10} \right)^2 + \left( \frac{10-10}{10} \right)^2 \\
\chi^2 = \left( \frac{-2}{10} \right)^2 + \left( \frac{-4}{10} \right)^2 + \left( \frac{6}{10} \right)^2 + \left( \frac{0}{10} \right)^2 \\
\chi^2 = \frac{-4}{10} + \frac{36}{10} + \frac{0}{10} \\
\chi^2 = 0.4 - 0.8 + 3.6 + 0
\]

\( \chi^2 = 3.6 \)
\[ x^2 = 3.2 < 7.81 \]

**Decision**

Since the calculated value of \( x^2 \) is less than the critical value 7.81, we accept the null hypothesis and reject the alternative hypothesis and therefore conclude that there are no efforts from cooperative societies to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for the sustenance of their agricultural business and development.

**Hypotheses three**

1. \( H_0 \): There are no problems that these cooperative societies Enugu, Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for development.

   \( H_1 \): There are problems that these cooperative societies Enugu, Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State for development.

**Test statistics**

\[ x^2 = \sum \left( \frac{0^i - 0^e}{0^e} \right)^2 \]

Where;

\( 0^i = \) Observed frequency

\( 0^e = \) Expected frequency

The level of significance = 5% = 0.05

Using responses from table 7
<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>Agree</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: field survey, 2017

\[ df = (\text{Row total} - 1) \]
\[ df = (4 - 1) \]
\[ df = 3 \]

Determination of the critical value using the statistical table of the degree of freedom 3 and 5% level of significance \( \chi^2 = 7.81 \).

Computation of the test statistics. It should be noted that expected frequency = 40 / 4 = 10

\[ x^2 = \sum \left( \frac{O_i - E_i}{E_i} \right)^2 \]

\[ x^2 = \left( \frac{18-10}{10} \right)^2 + \left( \frac{6-10}{10} \right)^2 + \left( \frac{4-10}{10} \right)^2 + \left( \frac{2-10}{10} \right)^2 \]

\[ x^2 = \left( \frac{18}{10} \right)^2 + \left( \frac{-4}{10} \right)^2 + \left( \frac{-6}{10} \right)^2 + \left( \frac{-8}{10} \right)^2 \]
Decision
Since the calculated value of \( x^2 \) is greater than the critical value 7.81 we reject the null hypotheses and accept the alternative hypotheses and therefore conclude that there are problems that these cooperative societies in Enugu state encounter that hinder their efforts to take insurance cover from Nigerian Agricultural Insurance Corporation (NAIC) Enugu, Enugu State.

Hypotheses four

1. \( H_0 \): There are no pragmatic solutions to these problems.
   
   \( H_1 \): There are pragmatic solutions to these problems.

Test statistics

\[
x^2 = \sum \left( \frac{0^i - 0^e}{0^e} \right)^2
\]

Where;

\( 0^i \) = Observed frequency

\( 0^e \) = Expected frequency

The level of significance = 5% = 0.05
Using responses from table 9

<table>
<thead>
<tr>
<th>Response Variables</th>
<th>Distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>Agree</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>
Source: field survey, 2017

df = (Row total - 1)
   df = (4 - 1)
   df = 3

Determination of the critical value using the statistical table of the degree of freedom
3 and 5% level of significance $x^2 = 7.81$.

Computation of the test statistics. It should be noted that expected frequency = $40 = \frac{4}{10}$

Using $x^2 = \sum \left( \frac{O_e - O^e}{O^e} \right)^2$

\[
x^2 = \left( \frac{30 - 10}{10} \right)^2 + \left( \frac{2 - 10}{10} \right)^2 + \left( \frac{4 - 10}{10} \right)^2 + \left( \frac{4 - 10}{10} \right)^2
\]

\[
x^2 = \left( \frac{20}{10} \right)^2 + \left( \frac{8}{10} \right)^2 + \left( \frac{-6}{10} \right)^2 + \left( \frac{-6}{10} \right)^2
\]

\[
x^2 = \frac{400}{10} - \frac{64}{10} - \frac{36}{10} + \frac{36}{10}
\]

\[
x^2 = 40 - 6.4 - 3.6 + 3.6
\]

\[
x^2 = 26.4 > 7.81
\]

Decision
Since the calculated value of $x^2$ is greater than the critical value 7.81 we reject the null hypotheses and accept the alternative hypotheses and therefore conclude that there are pragmatic solutions to these problems.

**DISCUSSION**

The finding of the study shows that the respondents do have an in-depth knowledge of agric insurance. The major product and services that cooperative societies access is multi peril cover, then subsidized crops, followed by subsidized livestock. Cooperative societies do not patronize the product and services of NAIC very well. These products and services are enough to ensure the sustenance of the development of cooperative societies. The major problem of the cooperative societies is ignorance, followed by lack of interest in the insurance industry, then low standard of living. The major solution is increased insurance education and awareness, followed by adequate budgetary policies then, developing of products to meet changing customer’s needs. Cooperative societies will benefit a lot by patronizing the insurance products and services offered by Nigerian Agricultural Insurance Corporation (NDIC) Enugu, Enugu state. The insurance cover will help them reap the fruits of their business ventures, even when they experience losses due to disaster. So they should be encouraged to take insurance cover for their business.

**CONCLUSION**

Cooperative societies in Enugu, Enugu state have made tremendous progress and developed well, despite not taking insurance cover increase of unforeseen circumstances. Surely they will do better in terms of development when they patronize the insurance products and policies of Nigerian Agricultural Insurance Corporation.

**RECOMMENDATIONS**

The researchers do hereby put forward the following recommendations

- There is need for increased insurance education and awareness for the cooperative societies for them to understand the need and benefits of insurance.
- There is need for adequate budgetary provisions for NAIC to have more funds to reach out more to cooperative societies.
• There is need for NAIC to develop more products to the changing needs of the cooperative societies in our society.
• The office of Nigerian Agricultural Insurance Cooperation are located in the state capital and FCT, offices in the local government are needed for easy for corporate societies.

REFERENCES