

Satisfaction of Registered Farmers to Crop Insurance in Selected Municipalities of Aklan

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ABSTRACT

This study evaluates the satisfaction of registered farmers to crop insurance in selected municipalities of Aklan. It aimed to determine the demographic profile of registered farmers and evaluate their level of satisfaction regarding insurance coverage. A descriptive research design was used involving 150 farmer-respondents registered and availed crop insurance, with data analyzed using weighted mean and chi-square test. Findings revealed that most respondents were high school graduates, owners, and nine years registered farmers. Results indicated that registered farmers were extremely satisfied with the benefits of the crop insurance in which it improves the livelihood of the registered farmers in terms financial aspect against crop losses. The chi-square indicates a high positive correlation between the extent of benefits and the levels of registered farmer's satisfaction. The study concludes that there is a significant relationship between the extent of benefits received and the satisfaction level of registered farmers, this implies that as the benefits provided increase, the satisfaction of registered farmers also tends to increase.

Keywords: Satisfaction, registered farmers, crop insurance, benefits, financial aspects, selected municipalities, descriptive research

Introduction

A Government Owned and Controlled Corporation (GOCC), the Philippine Crop Insurance Corporation (PCIC) was created by virtue of PD 1467 (June 11, 1978), later on amended by PD 1733 (October 21, 1980) and further amended by RA 8175 (December 29, 1995), as implementing agency of the Department of Agriculture. The principal mandate of PCIC is to provide insurance protection to farmers against losses arising from natural calamities, plant disease and pest infestation of their rice and corn crops as well as other crops. The PCIC shall ensure that all identified beneficiaries are duly registered under the Registry System for Basic Sectors in Agriculture (RSBSA), giving priority to the farmers located in areas classified as critical geo-hazard zones or no-build zones by the Mines and Geosciences Bureau.

Crop insurance provides security for farmers for their crops. It ensures that whatever happens there will be a return of their investment, if there is an unexpected major natural calamity that will occur. It also covers not only natural calamities but also pests and diseases that the farmers could not prevent to affect the yield of their crops. The government is providing free insurance programs to its eligible farmers and fisherfolks which are listed to its Registry System for Basic Sectors in Agriculture (RSBSA). This system was provided by the National Statistical Office (NSO) forwarded to the Department of Budget and Management (DBM) to fund the Crop Insurance

The Philippines is primarily an agricultural country with a large portion of Filipinos living in rural areas and supporting themselves through agricultural activities. Agriculture is considered the backbone of the

Philippine economy. According to Statista Research Department, figures suggest that about a quarter of employed Filipinos work in the agricultural sector which is made up of four sub-sectors: farming, fisheries, livestock and forestry.

Aklan Province is well-known for its beaches, especially the world known Boracay Beach, but aside from its booming and vibrant tourism industry, farming is the major livelihood in the interior while fishing is the basic livelihood on the coasts. The province post potential in the production of rice, high valued and fiber crops, such as glutinous corn and abaca fiber. Aklan depends greatly on agriculture for its everyday staple food and source of income. The massive and sustained education and research in agriculture production, the implementation of national program in agriculture, well-established marketing strategies, as well as the support of the agribusiness industry and other private and non-government sectors, result in better production and higher income of the farmers.

As the world continues to experience climate change, the heavier the impact in the agriculture industry worldwide and that includes the Province of Aklan. Natural calamities such as drought, floods and typhoons, especially super typhoons, alongside pests and diseases affect the yield of the farmers thus might lead them to financial loss. In connection with that, the government as part of its program in aiding the big and small farmers by providing crop insurance services to subsistence farmers as part of the mitigation of the Disaster Risk and Reduction Management. Mitigation provides the farmer with the security in their crops that they planted.

RESEARCH METHODOLOGY

This chapter discusses the research design, the study population and sampling procedure, preparation and validation of the research instrument, data gathering procedures, and the statistical analysis used.

The Research Design

This study adapted the descriptive research method. It is a design that aims to describe the nature of the situation as it exists at the time of study and to explore the cause of a phenomenon. It involves the collection of data in order to test the hypothesis or to answer questions concerning the current status of the subjects of the study.

Respondents of the Study

The respondents of this study were the registered farmers in selected municipalities of the Province of Aklan, Philippines.

There are 17 Municipalities in the Province of Aklan and the selected municipalities are, Altavas, Batan, Kalibo, Libacao and Nabas respectively. For every Municipalities, the number of farmers that will receive their indemnity checks in Altavas, were 245 farmers, Batan 165 farmers, in Kalibo 115 farmers, for Libacao 165 farmers and in Nabas only 60 farmers. The total number of farmer beneficiaries was 750, of which only 150 respondents are needed for the sample. Convenience sampling is a non-probability sampling method where data is collected from an easily accessible and available group of people. The individuals in the sample are selected not because they are most representative of the entire population, but because they are most easily accessible to the researcher.

(Gather the farmers who will be receiving the Indemnity checks. Due to voluminous farmers receiving the Indemnity Checks, Convenience Sampling and Purposive Sampling are non-probability sampling techniques that a researcher uses to choose a sample of subjects/units from a population. It can also be

used when the researcher does not aim to generate results that will be used to create generalizations pertaining to the entire population (J. Ajtas 2016)

Table 1. Population and Sample of the Study

Municipalities	Number of Farmers	Sample
Altavas	245	49
Batan	165	33
Kalibo	115	23
Libacao	165	33
Nabas	60	12
Total	750	150

Validity and Reliability of the Questionnaire

The instrument was validated by professionals with first-hand knowledge of the impact and significance of crop insurance to registered farmers. Face validation was utilized by the validators when the researcher presented his instrument. Their recommendations were considered in the revision of the final questionnaire.

The questionnaire was pre-tested to ensure that the contents were clearly understood by the respondents. According to Borro, 2015, the minimum number of people to be pretested in a study is 30. Hence, pre-testing was conducted to 30 qualified registered farmers who were not included as the respondent. These registered farmers were chosen so as not to threaten the validity of the scaling questionnaire. Result of the pre-test was also considered in the revision of the interview guide.

Data Gathering Procedure

After asking the permission from the Municipal Mayors, Municipal Agriculture Officer and as well as the Regional Manager of the Philippine Crop Insurance Corporation, Region VI, the questionnaires were distributed to the registered farmers during the release of their indemnity checks. Municipalities involved were informed before the scheduled date of release in their respective Municipal Agriculture Office.

After the completion of the data, questionnaires were collected, data were categorized and tallied and submitted to the statistician for statistical treatment.

Statistical Treatment of Data

Data was collected and subjected for statistical treatment analysis and interpretation using statistical tools such as frequency count, weighted mean, and chi-square (X^2) test of correlations will be gathered and will be subjected for statistical analysis using the following statistical tools; frequency count, mean, percentage, analysis of variance and the Pearson moment correlation coefficient.

Frequency count.

The frequency count was used to determine the distribution of the respondents according to selected variables. It also determines the number of responses to each item in the Questionnaire.

The formula below was used for computation:

Percentage Formula:

$$P = \frac{f}{N} \times 100\%$$

Where: P = percentage

n = number of sample

f = frequency of response

Weighted Mean. The weighted mean was used to describe the degree of significance and the extent of the impact of crop insurance to registered farmers. The formula below was used to compute the weighted mean.

Weighted Mean Formula:

$$\bar{x} = \frac{\sum f X}{n}$$

Where: $\bar{x}$ = weighted mean

x = scores

n = total number of samples

f = weight

For relationship between profiles and the extent of the impact between profiles and the extent of the impact; between profiles and degree of its significance; between extent of the impact and degree of significance, Chi-Square test of Correlation was used. The Cramer's V was conducted with results with significant findings. The succeeding formula below was used to compute the Chi-Square (χ^2) and the Cramer's V.

Formula:

$$\chi^2 = \sum \frac{(o - e)^2}{E}$$

Where: χ^2 = Chi-square

o = observe cell frequency

e = expected cell frequency

Formula for Cramer's V:

$$V = \sqrt{\frac{\chi^2}{N(k-1)}}$$

where: V = Cramer's V

χ^2 = Chi-square

n = number of respondents

The extent and level of the impact of crop insurance to registered farmers were measured using this scale below;

Likert Scale	Range	Verbal Interpretation
5	4.21-5.00	Extremely Satisfied
4	3.41-4.20	Very satisfied
3	2.61-3.40	Satisfied
2	1.81-2.60	Slightly Satisfied

1	1.00-1.80	Not Satisfied
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On the other hand, to measure the degree of correlation between the variables the following scale is used;

1	Perfectly Positive (Negative) Correlation
0.91 - $\pm$ 0.99	Very High Positive (Negative) Correlation
0.71 - $\pm$ 0.90	High Positive (Negative) Correlation
0.51 - $\pm$ 0.70	Moderately Positive (Negative) Correlation
0.31 - $\pm$ 0.50	Low Positive (Negative) Correlation
0.01 - $\pm$ 0.30	Very Low Positive (Negative) Correlation

All statistical analyses were set at 0.05 level of significance.

PRESENTATION, ANALYSIS, AND INTERPREATION OF DATA

This chapter provides the presentation of statistical data related to the problems as earlier posited. Corresponding analysis and interpretation of these data are likewise incorporated in this portion.

1. Socio-Demographic of Respondents

Table 1. 1 Age of Respondents

Age	Frequency	Percentage
31-40	19	13
41-50	28	19
51-60	61	40
61-70	23	15
71-80	15	10
80 & above	4	3
Total	150	100

Presented in Table 1 is the age of the respondents. It shows that the highest frequency is the age between 51 to 60 years old having 61 or 40 percent of the respondents, followed by age bracket between 41 to 50 years old with 28 or 19 percent respondents, then ages from 61 to 70 years old with 23 or 15 percent of respondents, followed by 31 to 40 years old with an 13 percent or 19 respondents, next was ages 71 to 80 years old with 15 or 10 percent of the respondents, and followed by the age above 80 years old with 4 or 3 percent respondents.

Majority of the respondents are aged between 51 to 60 years old, followed by 41 to 50 years old respondents. These findings imply that people who are 51 years old and above prioritize farming especially if they own the land. It is also a fact that young people aim for a white-collar job, reason why most of them leave their provinces and prefer to live in the city.

Table 1.2. Gender of Respondents

Gender	Frequency	Percentage
Male	86	57
Female	64	43

Total	150	100
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Majority of the respondents are males with a frequency of 86 and percentage distribution of 57 percent are males.

As deduced in the table, majority of respondents are male, this is due to the fact that male respondents are actually the farm workers and also the members of the registered farmers; hence, they can provide reliable assessment on the problems being studied for the impact of crop insurance.

Table 1. 3. Educational Attainment of Respondents

Education	Frequency	Percentage
Elementary Level	38	25
High School Level	88	59
College Level	24	16
Total	150	100

Majority of the respondents are high school level with the highest frequency of 88 and percentage of 59 percent; followed by the elementary level with a frequency of 38 and percentage of 25 percent and last was the college level and above with a frequency of 24 and percentage of 16.

The table shows that high school level registered farmers are the ones who farm and benefits the crop insurance.

Table 1.4. Civil Status of Respondents

Civil Status	Frequency	Percentage
Single	4	3
Married	127	85
Widow/er	19	12
Total	150	100

Generally, the respondents are all married in terms of status, the highest frequency of 127 and percentage distribution of 85 percent; and followed by widow/er with a frequency of 19 and percentage distribution of 12 percent. And lastly, there are single people who obtained a frequency of 4 and percentage distribution of 3 percent.

As deduced in the table, majority of respondents are married. Hence, they are more knowledgeable enough and more exposed when it comes to farming.

**Table 1.5.
Tenure Status of Respondents**

Tenure Status	Frequency	Percentage
Owner	72	48
Tenant	47	31
Rent/Lessee	31	21
Total	150	100

With a frequency of 72 and percentage distribution of 48 percent are the Owners of their rice land; followed by tenants with a frequency of 47 and percentage distribution of 31 percent are Tenants. And lastly, are rent who obtained a frequency of 31 and percentage distribution of 21 percent.

As deduced in the table the majority of the respondents are Owners which shows that they have the full ownership rights to secure and control of their land use.

Table 1.6. Period of Being Registered Farmer

Years of Being registered Farmer	Frequency	Percentage
1-3 years	19	13
4-6 years	46	31
7-9 years	74	49
10 years & above	11	7
Total	150	100

Being registered farmer for more than 7 years but not less than 9 years shows that the respondents have great knowledge and expertise in crop insurance. Most of the respondents are very aware of the benefits of crop insurance and could have the experience of what crop insurance is. One of the least respondents are registered 10 years and above showing that the crop insurance was already in the market but only few have the knowledge and expertise. Also, registered farmers for more than just 1 year but not exceeds 3 years shows that farmers are willing to be registered farmers to avail crop insurance program.

2. Extent of the Benefits of Crop Insurance on Registered Farmers.

Table 2

Extent of the Benefits of Crop Insurance to Registered Farmers

Indicators	5	4	3	2	1	WM	VI
I am satisfied							
1. with the great benefits availed as a registered farmer.	150	0	0	0	0	5	ES
2. that the crop insurance improves my livelihood as a registered farmer.	150	0	0	0	0	5	ES
3. with the crop insurance services extended to registered farmers.	55	87	8	0	0	4.3	ES
4. with the services and productivity of the management of the crop insurance.	48	94	5	0	0	4.3	ES
5. with the insurance coverage availed.	150	0	0	0	0	5	ES
6. with the claims and payout received on time.	62	85	3	0	0	4.4	ES
7. with the customer service extended by the crop insurance provider.	89	57	4	0	0	4.6	ES
8. with premium cost offered.	101	40	12	0	0	4.7	ES
9. with the compensation to the loss of our crops.	52	98	0	0	0	4.4	ES
10. with the compensation to the loss of our crops during natural calamities.	78	72	0	0	0	4.5	ES
Overall Weighted Mean						4.62	ES

Legend: ES – Extremely Significant

Table 2 shows the distribution of the number of respondents' extent of satisfaction on the scale of 1 to 5. It presents that all 150 respondents are insured farmers and availed the crop insurance without paying. In terms of loss, 48 farmers answered extremely significant, 87 farmers were very satisfied, and 8 are satisfied with how the crop insurance helped them with their farm expenses. Moreover 48 farmers are extremely satisfied, 97 are very satisfied, and 5 are satisfied with how the indemnity compensates for their loss. Being a registered farmer, all 150 respondents are extremely satisfied that they enjoyed the benefits of their insurance. In terms of sustainability in farming 62 respondents are extremely satisfied, 85 are very satisfied and 3 are satisfied that the crop insurance helped them. As a registered farmer 89 respondents are extremely satisfied, 57 are very satisfied and 4 are satisfied that crop insurance improved their point of view as a farmer.

For the premium cost of farmers, 101 respondents are extremely satisfied, 40 are very satisfied and 9 are satisfied that they availed the premium with no cost. In relation to the services offered 52 respondents are extremely satisfied, and 98 are very satisfied that crop insurance lessens their problems on their damage crops. Lastly, 78 respondents are extremely satisfied and 72 are very satisfied that crop insurance helped improve their livelihood as insured farmers.

3. Degree of Satisfaction of Crop Insurance to Registered Farmers.

Table 3
Degree of Satisfaction of Crop Insurance to Registered Farmers

Indicators	5	4	3	2	1	WM	VI
1. Crop insurance improves the livelihood of registered farmers.	137	13	0	0	0	4.91	VS
2. Compensation from the insurance company compensates the losses of your crop.	113	31	6	0	0	4.71	VS
3. Services and productivity of the management of crop insurance has impact towards financial enhancement of registered farmer.	109	36	5	0	0	4.69	VS
4. Crop insurance encourages registered farmers to invest more in their farm.	109	36	5	0	0	4.69	VS
5. Claims processing of crop insurance and payout to registered farmers released on time.	97	4	10	0	0	4.58	VS
6. Customer service provided by crop insurance providers improves economic situation of the registered farmers.	150	0	0	0	0	5	VS
7. Registered farmers are satisfied with the compensation of loss in crops.	142	8	0	0	0	4.79	VS

Legend: VS – Very Significant

Table 3 shows that all registered farmers have received financial assistance in crop insurance when their crops were damaged based on the weighted mean of 4.79 interpreted as very significant. All the respondents stated that crop insurance significantly improves the livelihood of the registered farmers with the weighted mean of 4.91. Some of the registered farmers were significantly compensated with the losses of the crops with the weighted mean of 4.71. The services of the crop insurance provider have a significant impact towards the financial enhancement of registered farmers by settling the losses of crops so that they could utilized it to their next cropping. The registered farmers have significantly invested to their farm because of the crop insurance assistance that have a weighted mean of 4.69. As for the claims processing

and payout, registered farmers significantly agree that the payout was timely released with a weighted mean of 4.58, so that they could use it for their next cropping season. Customer service provided by crop insurance improves the economic situation of registered farmers significantly, by eliminating them to loan to unregistered institution that will result to collapse in their livelihood. Registered farmers were significantly satisfied with the compensation of their losses in their crops because there are assured that they could be shielded against natural calamities and pest and disease by the crop insurance.

Table 4
Relationship Between Extent of Benefits and Level of Registered Farmers' Satisfaction

Relationship Between Extent of Benefits and Satisfaction	Stat'l Test	X ² VALUE	Df	Critical Value	Cramers' V	Verbal Description	Decision	Conclusion
	X ²	34.732	45	61.63	0.792	High + Correlation	Reject Ho	S

T-V – Table Value

The analysis involves 150 registered farmers that was selected from selected municipalities of Aklan. The computed Chi-square value of 34.732 with 45 degrees of freedom is associated with a Cramers' V of 0.792, which indicates a high positive correlation between the extent of benefits and the level of registered farmers' satisfaction. Since the null hypothesis (Ho) was rejected, the study concludes that there is a significant relationship between the extent of benefits received and the satisfaction level of registered farmers. This implies that as the benefits provided increase, the satisfaction of registered farmers also tends to increase.

Summary of Findings

The following summary of findings were obtained:

1. The profile of the respondents as to years of being registered farmers, that is, highest to lowest: 74 or 49% have seven to nine years as registered farmers, next was four to six years registered (46 or 31%), while the least experienced one to three years was 19 or 13% and for the most experienced registered farmer only 11 or 7% were 10 years and above, as for the educational attainment, 88 or 59% were high school graduate, next was elementary level (38 or 25%) and some were college level with 24 or 16%, as for tenurial status, most of the respondents were all owners, and also the male that were married with ages of 51 to 60 years old followed by 41 to 50 years old.
2. For the extent of the benefits of crop insurance to registered farmers, all 150 respondents were extremely satisfied with the crop insurance (weighted mean of 4.62), that registered farmer being extremely satisfied with the great benefits in crop insurance (WM=5). Registered farmers by engaging crop insurance extremely satisfied that it improves the livelihood especially in financial aspect in farming (WM=5). Extended crop insurance services that were provided to registered farmers were extremely satisfied with the extended crop insurance services that were provided such as application of insurance, filing and adjustment of damages, settlement and payouts or distribution of indemnity (WM=4.3). Also, registered farmers were extremely satisfied with the service and productivity of the management of the crop insurance, especially on the claims adjustment and settlement of losses (WM=4.3). Registered farmers were extremely satisfied with the availed insurance coverage every

cropping season (WM=5). In terms of claims and payouts received on time, the registered farmers were extremely satisfied (WM=4.4). The crop insurance provider extended its customer service, which the registered farmers were extremely satisfied with (WM=4.6) by giving orientation and information disseminations in the programs of crop insurance. Registered farmers were extremely satisfied with the premium cost offered because it was free and only the personal insurance was paid (WM=4.7). In terms of compensation for the loss of crops of the registered farmers, they were extremely satisfied to receive (WM=4.4). When natural calamities occur, the compensation to the losses of registered farmers was just and reliable, that is extremely satisfied (WM=4.5).

3. The degree of satisfaction of crop insurance to registered farmers, that were very satisfied with the financial assistance provided by the crop insurance with the weight mean of 4.79. In which that the registered farmers were very satisfied that their livelihood have improved since they were registered (WM=4.91), they were very satisfied with the compensation from insurance company compensates the losses of their crops (WM=4.71), they were very satisfied for the services of the crop insurance provider that impacts towards the financial enhancement (WM=4.69), they were not afraid that for the next cropping they could not finance the inputs for farming and could lend to borrowing of finances to individuals with high appraisal, they were also very satisfied with the crop insurance that they were willing to invest more in their farms or crops, they were also very satisfied with the processing crop insurance and payout that was timely released (WM=4.58), they were also very satisfied with the customer service provided by the insurance provider that could improve the economic situation (WM=5), in which after the assessment of their crops, they could call the insurance provider for the updates of their claims, lastly, they were very satisfied with the compensation of their crop losses (WM=4.95), overall registered farmers were very satisfied with the benefits and services received from crop insurance .

Conclusions

From the above findings, the following conclusions were deduced:

1. Most of the respondents were experienced registered farmers which were already registered for seven to nine years, with an educational attainment of high school level, in which these were all male, and married, also owners of their farm. This shows that registered farmers have knowledge, and experience of the crop insurance.
2. Registered farmers were very satisfied with the benefits from crop insurance such as improvement of their livelihood, the services extended to them, the coverage, premium cost, and compensation/claims and payout, that help to continue farming because of the security, stability and long-term benefits from crop insurance. In terms of the financial assistance, the registered farmers were very satisfied with what they received from the crop insurance program.
3. The hypothesis that there is no significant relationship between the extent of benefit and the degree of satisfaction of crop insurance to registered farmers was rejected.

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