

Efficiency and Effectiveness of the Philippine Crop Insurance Corporation's Rice Crop Insurance Program: The Case of Laguna Province, Philippines

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ABSTRACT. The performance of the Rice Crop Insurance Program (RCIP) of the Philippine Crop Insurance Corporation (PCIC) was assessed to explain the low number of insured farmers and suggest ways to improve the program's efficiency and effectiveness. Documents were reviewed and primary data were collected through survey of participating rice farmers and key informant interview of the officers and staff of PCIC Region 4 and National Irrigation Administration Region IV Employees Multipurpose Cooperative (NEMCO). Descriptive statistics, gap analysis, and Likert scale scoring were used in data analysis. Results of the study revealed gaps in enrollment in the program, duration of filing of application for cover, number of days in team of adjusters' response, damage estimates, and delays in receipt of indemnity, which resulted in a low efficiency score of the program. Data analysis also revealed that the RCIP was moderately effective. Hence, to boost its efficiency and effectiveness, this study recommends that the PCIC should: a) intensify technical capacity-building training for the team of adjusters; b) deputize officers and staff of the municipal agricultural office as members of the team of adjusters; c) provide stronger and more hands-on assistance to participating farmers; and d) increase the incentives and number of personnel involved in RCIP implementation.

Keywords: *crop insurance, program efficiency, program effectiveness, program management*

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INTRODUCTION

The Philippines is highly vulnerable to bad weather and is branded as a natural disaster hotspot. Half of its total area and about 81 percent of its population were being vulnerable to natural disasters (World Bank, 2008). It had a Risk Index of about 28 percent, making it the third most disaster risk country in the world (United Nations University Institute of Environment and Human Security, 2012). From 2000 to 2012, natural disasters in the country resulted to the death of 12,899 people and injury of 138,116 persons. More than 71 million individuals and almost 375,000 became homeless because of natural disasters. Furthermore, the total cost of socio-economic damages reached an estimated amount of US\$3.37 billion, with an average of US\$251.58 million annually (Senate Economic Planning Office, 2013). These socio-economic damages include those in the agriculture sector, which is very much dependent on the weather.

Agricultural crop production is highly vulnerable to natural disasters. The viability of agricultural enterprises is affected with a bad harvest, particularly for small farmers who could not recover their investments (Magno & Bautista, 1989). However, there are risk management tools or adaptation strategies that could reduce the economic problems encountered by farmers when losses are incurred due to natural hazards (Reyes, Mina, Reneli, & Mercado, 2015). The Philippine government recognizes the need for a risk management program for its farmers through the creation of the Philippine Crop Insurance Corporation (PCIC), which provides the Rice Crop Insurance Program (RCIP).

The PCIC, created under Presidential Decree No. 1467, as amended by Republic Act No. 8175, is a government organization that is mandated to “provide insurance protection to the country’s agricultural producers particularly the subsistence farmers, against loss of their crops and/or non-crop agricultural assets on account of natural calamities such as typhoons, floods, droughts, earthquakes and volcanic eruptions, plant pests and diseases, and/or other perils.” It also provides guarantee cover for production loans extended by lending institutions for crops not yet covered by the insurance (PCIC, 2016b).

The existence of the insurance program could protect farmers from financial losses. Regarded as a risk-pooling instrument, crop insurance involves the collection of individual premiums and assessment and payment of indemnity claims for all or part of financial losses (Bangsal & Mamhot, 2012).

In a study conducted by Reyes, Mina, Reneli, and Mercado (2015), farmers' participation rate in the RCIP had been below 10 percent from 1981 to 2013. Despite the inclusion of the budget in the General Appropriations Act (GAA), RA 10651, which was used exclusively for the full (100%) cost of insurance premiums of subsistence farmers and fisherfolk listed in the Registry System for Basic Sectors in Agriculture (RSBSA), the number of insured farmers was still low. Evidences on the reasons why farmers do not participate in the crop insurance program are narrow.

This study assessed the performance of the PCIC's RCIP in the Province of Laguna. Specifically, the study aimed to: 1) describe the status of implementation mechanism of the RCIP; 2) analyze the efficiency of program implementation; 3) assess the program implementation effectiveness; and 4) recommend strategies to improve the performance of the RCIP implementation.

METHODOLOGY

The study covered the rice-growing municipalities in the Province of Laguna namely, Bay, Calauan, Victoria, Pila, Santa Cruz, and Nagcarlan. Aside from their accessibility, the coastal municipalities of Bay, Calauan, Victoria, Pila, and Santa Cruz are vulnerable to climatic hazards such as typhoons and floods, while the lowland municipality of Nagcarlan is vulnerable to typhoons.

Serving as key informants were selected officers of the National Irrigation Administration Region 4 Employees Multi-Purpose Cooperative, Incorporated (NEMCO) and PCIC Regional 4 manager and selected officers. They were asked about the issues on the implementation of the RCIP and their perspectives on program efficiency and effectiveness. NEMCO also provided the names of rice farmer-participants in the study sites. Meanwhile, the PCIC Region 4 office provided secondary data on the farmers' participation rate as well as the income and expenses of PCIC Region 4.

Thirty (30) rice farmer-respondents (five per municipality) who were all insured by the PCIC's RCIP served as respondents in the farm survey using pre-tested interview schedule. The Small Sample Theory (Lehmann, 1999) states that when the population is homogenous, a sample of 30 can already characterize the population. In this study,

all respondents were rice farmers, NEMCO members, enrolled in the RCIP, and doing farming activities in Laguna province. Given these, the population can be considered as homogenous.

The farmer-respondents were randomly selected from NEMCO's list using a random start. Data collected from the respondents covered the following: socio-economic characteristics (i.e., sex, age, years of education, farm size, and production cost/ha), premium paid during the latest cropping season, indemnity received from the latest crop damage, differences between farmers' own damage estimates with the estimates of the team of adjusters, knowledge about the program in terms of enrolling in the program, process of filing damages, and their knowledge about the insurable damages.

The farmer-respondents were also asked to evaluate the efficiency of the program in terms of number of days it took: to process admissions to the program, to finish filing of damages, to receive indemnity payments, and for team of adjusters to arrive in the damaged farm. Furthermore, they were asked to rate the PCIC's services, helpfulness of the staff, income loss reduction of indemnity payments, expectations met, and the overall efficiency and effectiveness of the RCIP.

Descriptive statistics such as means, frequency counts, and percentages were computed and used to describe the socio-economic characteristics, problems encountered by the respondents in the RCIP and by the PCIC personnel, as well as their suggested solutions to address the problems. Using means and percentages, helpfulness of the program in reducing income loss during times of extreme events was also determined.

The Gap Analysis developed by Parasuraman, Zeithaml, and Berry (1985) was used to assess the efficiency of the RCIP. The Gap Analysis seeks to define the current state of a company or organization and its target state. In this study, the gaps between the ideal services of the RCIP and the actual services given to the farmer-participants were determined. Particularly, these include: 1) days of processing of application for admission (gap = PCIC ideal days – average actual days); 2) days of filing for damage claims (gap = PCIC ideal days – average actual days); 3) days it took before the team of adjusters came on-site (gap = PCIC ideal days – average actual days); 4) estimation of damages (gap = average team of adjusters' estimate – average farmers' estimate); and 5) days before indemnity payment was received (gap = PCIC ideal days – average actual days).

To determine the critical fit between the tasks of the program and the competency of the PCIC Region 4, the overall efficiency scores for each were computed. Using a scale from 1, being the lowest, to 5, being the highest, each score was computed as the percentage of rice farmer-participants who did not experience gaps multiplied by the highest score. The overall efficiency score is the average of each computed scores as they consisted of equal weights.

The overall effectiveness of the program was identified through the Likert scale scoring, a method of ascribing quantitative value to qualitative data (see also Dunn-Rankin, Knezek, Wallace, & Zhang, 2004). To determine the knowledge of the respondents regarding the enrollment, damage filing, and insurable damages, the scale used includes: 1 = no knowledge, 2 = low knowledge, 3 = moderate knowledge, 4 = high knowledge, and 5 = very high knowledge. In terms of program accessibility, the scale used includes: 1 = no access, 2 = low access, 3 = moderate access, 4 = high access, and 5 = very high access. Furthermore, PCIC staff's helpfulness was also assessed using a 5-point scale: 1 = not helpful, 2 = sometimes helpful, 3 = helpful, 4 = most of the times helpful, and 5 = always helpful. Lastly, the extent to which the expectations of the respondents were met was measured by this scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, and 5 = always.

The data were treated as ordinal. Likert responses were collated into bar charts and central tendencies wherein the mean rating, median, and mode were identified. The relationship between the indicators used and overall effectiveness of the program was identified through scatterplots. Meanwhile, the Spearman's rank correlation coefficient was used to determine the strength of relationship between sets of data. The variable of helpfulness of the program was measured by the perception of income loss reduction due to indemnity payments received using a 3-point scale: 1 = not effective, 2 = moderately effective, and 3 = effective.

RESULTS AND DISCUSSION

Socio-demographic Profile of the Respondents

Majority of the farmer-respondents were male, representing 73 percent of the total sample. The mean age of the respondents was 58.97 years ranging from 34 years to 83 years, while 7.63 was the average

years the respondents attended school. Further, the farmer-respondents' production cost per hectare amounted to PhP31,833.33 on an average of 2 ha of farm area (Table 1).

Status of Implementation of the Rice Crop Insurance Program in Region 4

An upward trend was seen in terms of the number of rice farmers and area insured from 2011 to 2016 (Table 2 and Figure 1) for the RCIP Region 4. An increase in farmers' participation of 108 percent and area insured of about 40 percent were seen in 2013 and 2014, respectively. These were caused by strong typhoons and monsoons such as Haikui which induced a southwest monsoon (locally known as Habagat) in 2012 and Typhoon Haiyan (locally known as Yolanda) in 2013. Meanwhile, the Registry System for Basic Sectors in Agriculture-Agricultural Insurance Program contributed to a 4-percent increase of the total area insured in the Region from its implementation in the 2015 fiscal year. However, the total rice land area insured was still low because it was only 14 percent of the total rice farm area (398,474 ha) in the Region (Rola, 2017).

The PCIC Region 4 also increased their financial operations from 2011 to 2016 (Figure 2). As a result of the increase in farmers' participation, there was a massive increase in net income of PCIC Region 4 of PhP120 million from the same years. The income from individual premiums also increased from PhP43 million to PhP233 million in 2015 while it decreased by PhP10 million in 2016. Meanwhile, the claims paid by the PCIC Region 4 increased by PhP100 million from 2011 to 2015, while it lessened in 2016 by PhP46 million as the Region was not affected much by risks unlike the previous years.

Analysis of the Efficiency of the Rice Crop Insurance Program

Table 3 summarizes the identified gaps in the enrollment in the program, filing of applications for cover, response of the team of adjusters, and the days before indemnity payments were received. These "gaps" describe the quality of the service the RCIP gave to its beneficiaries. A positive to zero gap implied that RCIP was giving quality service while a negative gap indicated poor service. To illustrate, the ideal days of enrollment in the program and the application for cover takes only a day, according to the PCIC (2016a). However, it took an average of four days for the farmer-respondents to complete the enrollment

Table 1. Socio-demographic characteristics of the respondents

CHARACTERISTICS	NO. (n=30)	%
Sex		
Male	22	73.3
Female	8	26.7
Average no. of years in school	7.63	
Average age (years old)	58.97 (34-83)	
Average production cost/ha (PhP)	31,833.33	
Average farm size (ha)	2.00	

Table 2. Participation rate of rice farmers in Region 4, 2011-2016

YEAR	NUMBER OF FARMERS	% INCREASE FROM PREVIOUS YEAR	INSURED RICE AREA (ha)	% OF TOTAL RICE AREA (ha)
2011	6,216		12,065.03	3.03
2012	9,234	48.55	15,779.58	3.96
2013	19,224	108.19	29,743.68	7.46
2014	26,849	39.66	42,548.12	10.68
2015	31,421	17.03	57,066.07	14.32
2016	33,633	7.04	57,900.07	14.53

Source of basic data: PCIC Region IV Office

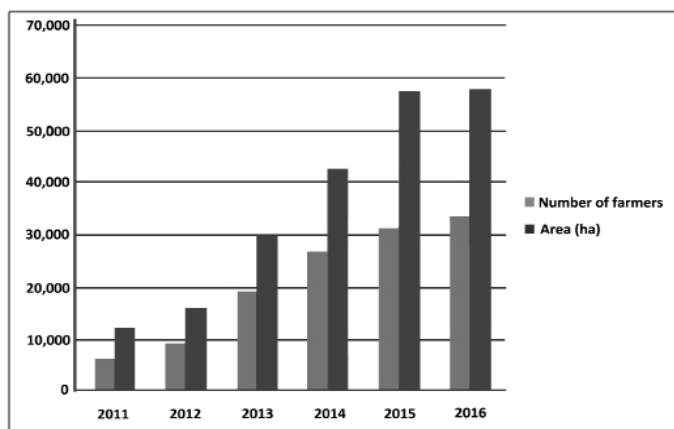


Figure 1. Participation rate of rice farmers in the Rice Crop Insurance Program in Region 4, 2011-2016 (Source of basic data: PCIC Region IV Office)

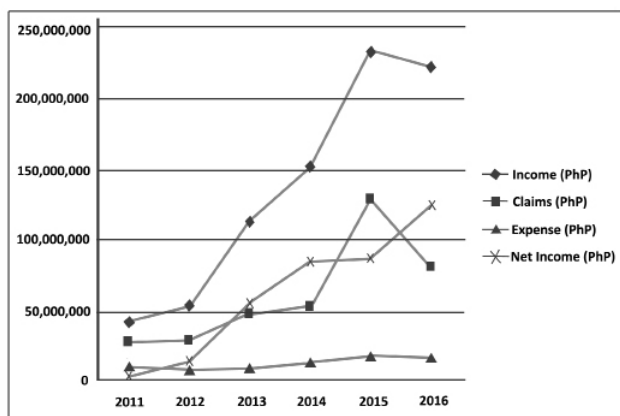


Figure 2. PCIC Region 4 financial operations, 2011-2016
(Source of basic data: PCIC Region IV Office)

Table 3. Gaps identified on the efficiency of the Rice Crop Insurance Program in Laguna, 2016

TASKS	PERCEIVED COMPETENCE	IDEAL	GAP
Enrollment in program (days)	4	1	3
Filing of applications for cover (days)	3	1	2
Team of adjusters' response (days)	36	5	31
Indemnity received (days)	103	60	43
Damage estimate gap (PhP)	20,727.27		

processes which gives a gap of three days. Filing of cover for damages was usually completed in one day but it took an average of three days for the respondents to file for cover. These gaps were results of the difficulty of farmer-respondents in undertaking the tedious processes of enrolling in the program and filing for cover.

The team of adjusters (TAs) would ideally go into the damaged farm within five days, while the rice farmer-participants would receive their indemnity payments within 45 days. A three-day gap was identified on program enrollment, while a gap of two days was observed in terms of filing applications for cover. A huge gap is recognized in terms of the

TAs' response (31 days) and days before indemnity received (43 days). This implies that the quality of services the RCIP provided to their beneficiaries was very low in terms of the TA's response and delivery of indemnity payments.

On another aspect, a massive gap involving the estimation of damages was identified due to inaccurate estimates of the TAs. The farmer-respondents claimed that they should have received an average of PhP20,727.27 more when their farms were hit by extreme events. The massive gap was the result of the farmer-respondents and TAs not meeting half-way. The farmers stated that majority of the TAs were not trained well enough to estimate damages. On the other hand, the PCIC staff and TAs claimed that the farmers overestimate their crop damages most of the time. There seems to be no standard criteria to assess damages.

The key informants of the PCIC Region 4 explained the reason why there were gaps identified on most aspects of the services they provided. The processing of filing for cover of damages and late reimbursements of the indemnity payments were not consistent with the PCIC's desired timetable as set by top management. Some places in the Region were located in remote areas. The area without roads and those on the islands are very difficult to reach. In addition, the PCIC Region 4 lacked adequate personnel and those in service lacked proper training. The Region 4 office has 14 permanent positions only as of this writing and not all are filled up, according to the key informants. In addition, other personnel are on a job-order status and most likely leave once they found higher paying jobs. These affected the program's efficiency in handing out indemnity payments in times of widespread calamity as the Region 4 staff could not reach all the beneficiaries at once, especially those located in areas that are difficult to access.

According to the key informants, the TAs' late response in times of widespread calamities in the Region could be attributed to their job-order status and the low wages they receive (PhP491 per day plus meals and transportation). Because of these, the PCIC Region 4 was forced to hire those with no agriculture background. The newly hired adjusters were trained for only one to two days before going to the damaged farms. It seems that this is not enough for the adjuster to be competent in damage estimation.

Overall efficiency of the Rice Crop Insurance Program. As seen in Table 4, the RCIP was marked as inefficient with a low score of 1.66 (with 5 as the highest score and 1 as the lowest score). Majority of the farmers experienced gaps in the program enrollment (67%), filing processes (70%), response of the team of adjusters (83%), and the transmittal of indemnity payments (73%). Moreover, 40 percent had discrepancies in the estimation of damages.

The overall efficiency score of 1.73 implies that there was a poor fit between the competency of the PCIC and RCIP's tasks particularly in assisting rice farmer-participants in program enrollment, filing for damages, responding to damaged farms, estimating farm damages, and awarding of indemnity payments. As a result, the RCIP in the Region 4 was found to be inefficient.

Table 4. Overall efficiency score of the Rice Crop Insurance Program, Laguna, 2016

ITEM	RICE FARMERS WITHOUT GAP (n=30)		WEIGHT ^a (%)	SCORE ^b
	No.	%		
Enrollment in the program	10	33.3	20.0	1.66
Filing processes	9	30.0	20.0	1.50
Response of team of adjusters	5	16.7	20.0	0.83
Estimation of damages	18	60.0	20.0	3.00
Arrival of indemnity payments	8	26.7	20.0	1.33
Overall score			100	1.67

*Assuming equal weights

^bUsing a scale from 1, being the lowest, to 5, being the highest, each score was computed as the percentage of rice farmer-participants who did not experience gaps multiplied by the highest score. The overall efficiency score is the average of each computed scores as they consisted of equal weights.

Table 5. Knowledge of participants regarding the enrollment, damage filing, and insurable damages of the Rice Crop Insurance Program, Laguna, 2016 (n = 30)

ITEM	NK		LK		MK		HK		VHK	
	No.	%	No.	%	No.	%	No.	%	No.	%
Enrollment	1	3.3	8	26.7	10	33.3	9	30.0	2	6.7
Damage filing	1	3.3	7	23.3	13	43.3	7	23.3	2	6.7
Insurable damages	0	0.0	6	20.0	12	40.0	10	33.3	2	6.7

Legend: NK - No Knowledge, LK - Low Knowledge, MK - Moderate Knowledge, HK - High Knowledge, VHK - Very High Knowledge

Analysis of the Effectiveness of the Rice Crop Insurance Program

Knowledge of participants. Results showed that 33 percent had moderate knowledge about the enrollment processes, while 43 and 40 percent of the respondents were moderately knowledgeable about damage filing and insurable damages, respectively (Table 5). They had basic knowledge about the RCIP; hence, they could enroll to the program with little help from the PCIC staff. Because they also had basic knowledge on damage filing and insurable damages, it took them shorter time to file for damages compared to other farmers who did not have basic knowledge of the program.

Access to services. Majority of the respondents (80%) gave good ratings in terms of access to RCIP's services. About 37 percent rated the program accessibility as high, while 43 percent rated it as very high (Table 6). RCIP's services are accessible through their satellite offices. The RCIP can also be contacted through the cooperatives, municipal agriculture office, and satellite offices.

Helpfulness of PCIC staff. Forty percent of the respondents agreed that the program staff were always helpful. On other hand, some farmer-participants rated the program staff as sometimes helpful (30%) and not helpful (17%) (Table 7). Although the PCIC staff provide equal treatment to farmers (i.e., explaining the program mechanics), some farmers need more explanation than the others. Hence, some gave ratings as "sometimes helpful" and "not helpful at all."

Table 6. Extent by which participants were able to access the services offered by the Rice Crop Insurance Program in Laguna, 2016

ITEM	NO. (n = 30)	%
Low access	4	13.3
Moderate access	2	6.7
High access	11	36.7
Very high access	13	43.3

Table 7. Helpfulness of PCIC staff in responding to the needs of the participants, Laguna, 2016

ITEM	NO. (n = 30)	%
Not helpful	5	16.7
Sometimes helpful	9	30.0
Helpful	1	3.3
Most of the times helpful	3	10.0
Always helpful	12	40.0

Table 8. Extent by which expectations of the participants were met by the Rice Crop Insurance Program, Laguna, 2016

ITEM	NO. (n = 30)	%
Never	8	26.7
Rarely	9	30.0
Sometimes	1	3.3
Most of the time	3	10.0
Always	9	30.0

Table 9. Effectiveness as measured by perception on income loss reduction, Laguna, 2016

ITEM	NO. (n = 30)	%
Effective	20	66.7
Moderately effective	6	20.0
Not effective at all	4	13.3

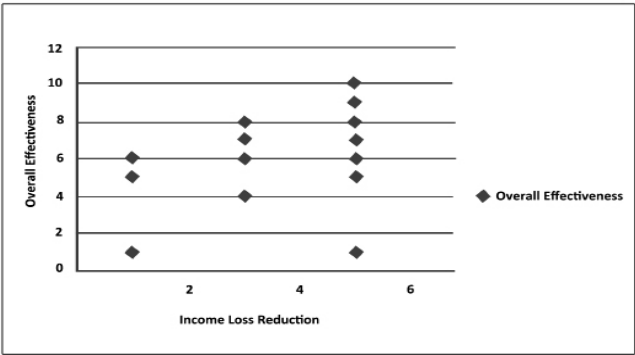


Figure 3. Scatter plot of the responses regarding perceived income loss reduction and overall effectiveness of the program (unit of measurement for both is mean rating)

Expectations. More than half (57%) of the respondents reported that their expectations were never and rarely met (Table 8). These include the expectation on the amount of indemnity they would receive will be as high or higher than their own estimates. Likewise, they expected that the time they would receive the indemnity payments would be quick enough for them to have capital to re-plant on the same cropping season. The results imply that the farmers considered the RCIP as beneficial but their expectations of the program were not always met. Thus, the delivery of services of the RCIP must be enhanced in order to meet the expectations of the farmers.

Perceived income loss reduction. The RCIP was perceived to be effective in reducing income loss as expressed by most participants (Table 9 and Figure 3). The services of the RCIP regarding income loss reduction should also be improved to enhance the program's effectiveness.

**Relationship Between the Indicators
and the Overall Effectiveness of the Program**

The Spearman’s rho correlation coefficient showed significant correlation (at 0.01 level) of knowledge on damage filing, helpfulness of staff, and the extent to which the expectations of participants were met with the overall effectiveness of the program. Access to the services of the program as well as helpfulness of the program staff also attained a high correlation with the success of the program (Table 10).

The scatter plots (Figures 4-9) illustrate a positive linear relationship between the indicators of effectiveness (i.e., enrollment, damage filing, knowledge about insurable damages, helpfulness of the PCIC Region 4 staff, and expectations met) and the overall effectiveness of the program as rated by the participants regardless of outliers. Regardless of the frequency of those with low rating for their knowledge on enrollment but gave a relatively high rating on the overall effectiveness of the program (Figure 4), a positive relationship was observed between

Table 10. Summary of the results of statistical tests used to show correlation between indicators and the overall effectiveness of PCIC’s Rice Crop Insurance Program, Laguna, 2016

ITEM	SPEARMAN’S RHO CORRELATION COEFFICIENT
Knowledge	
Enrollment	0.142
Damage filing	0.496**
Insurable damages	0.227
Access	0.365*
Helpfulness of PCIC staff	0.629**
Helpfulness of the Program	0.364*
Expectations Met	0.697**

*Correlation is significant at 0.05 level
**Correlation is significant at 0.01 level

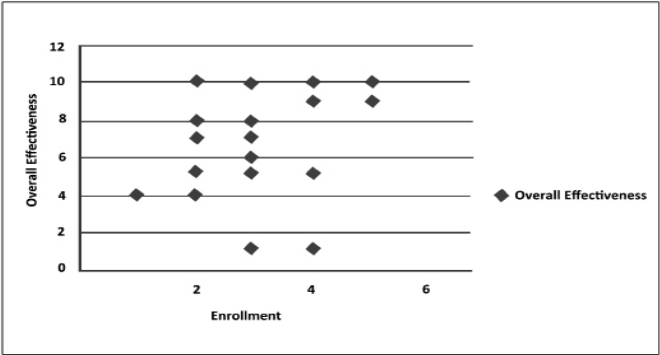


Figure 4. Scatter plot of the responses regarding knowledge on enrollment and overall effectiveness of the program (unit of measurement for both is mean rating)

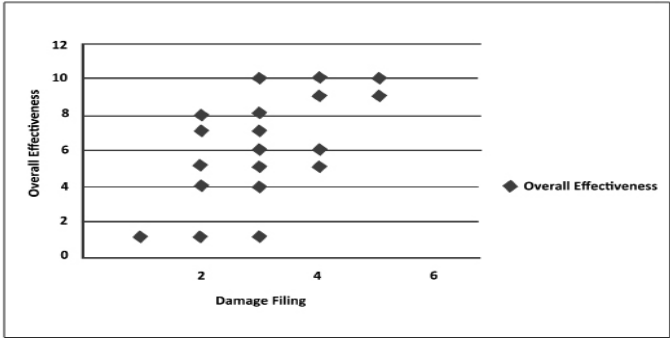


Figure 5. Scatter plot of the responses regarding knowledge on damage filing and overall effectiveness of the program (unit of measurement for both is mean rating)

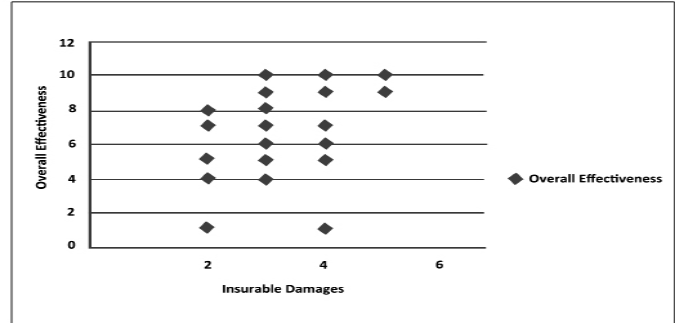


Figure 6. Scatter plot of the responses regarding knowledge on insurable damages and overall effectiveness of the program (unit of measurement for both is mean rating)

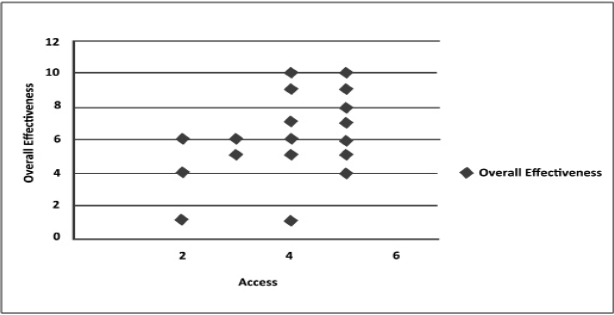


Figure 7. Scatter plot of the responses regarding access to services offered by PCIC’s RCIP and overall effectiveness of the program

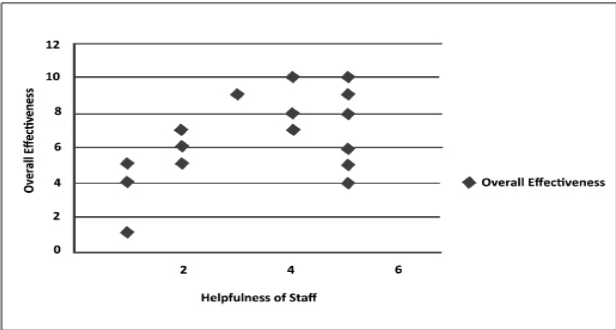


Figure 8. Scatter plot of the responses regarding helpfulness of PCIC staff and overall effectiveness of the program (unit of measurement for both variables is mean rating)

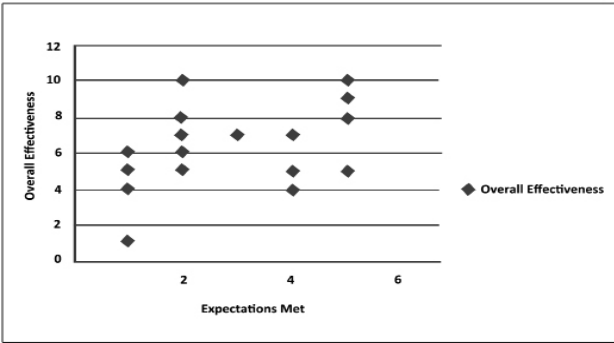


Figure 9. Scatter plot of the responses regarding the extent to which expectations of participants are met and overall effectiveness of the program (unit of measurement for both is mean rating)

knowledge on enrollment and overall effectiveness of the program as seen by the farmer-participants. Likewise, overall effectiveness of the program had positive relationship with knowledge on damage filing (Figure 5), knowledge on insurable damages (Figure 6), access to the PCIC's RCIP and the overall effectiveness of the program (Figure 7), helpfulness of the staff (Figure 8), and extent to which the expectations of the participants are met (Figure 9). These imply that the higher the score of these individual indicators, the higher the tendency that the farmers increase the ratings on the program's overall effectiveness.

Overall Effectiveness of the Rice Crop Insurance Program

Weights were assigned to indicators/criteria identified such as knowledge of the program, accessibility of the services offered by the program, helpfulness of PCIC staff in addressing the needs of farmer-participants, and extent to which the expectations of farmer-participants were met. The weights used given were based on the Spearman's rho correlation coefficient of the indicators considered as opposed to the ratings the farmers gave on their perceived effectiveness of the program. Among the indicators, knowledge on damage filing (3.27), helpfulness of

Table 11. Overall Effectiveness Scoring Interpretations of the Rice Crop Insurance Program, Laguna, 2016

CRITERIA	WEIGHT (%)	MEAN RATING	SCORE
Knowledge	15	3.14	0.471
Enrollment	30	3.10	
Damage filing	40	3.07	
Insurable damages	30	3.27	
Accessibility of services	20	4.10	0.820
Helpfulness of PCIC staff	25	3.27	0.818
Helpfulness of program	15	4.07	0.611
Expectations met	25	2.87	0.718
Overall score			3.44

1-2.50: not effective
2.51-2.90: slightly effective
2.91-3.90: moderately effective
3.91-4.50: effective
4.51-5: highly effective

PCIC staff (3.07), and the extent to which the expectations of participants were met (2.87) gained the highest correlation to the effectiveness of the program as perceived by the farmers. Thus, bigger weights were assigned to these factors. Results of the study showed that the overall effectiveness score of the Rice Crop Insurance Program is 3.44, which fall under moderate effectiveness (Table 11).

The critical fit between the farmer's needs and the resources as well as services made available to the farmers as outputs of the RCIP were the determinants on how effective the program was. Findings in the Likert scale showed that the RCIP was moderately effective with a score of 3.44 out of 5. The highest mean rating was the accessibility of the program with a score of 4.10, while expectations met was the lowest with a score of 2.87. A moderate mean rating was computed in terms of the participants' knowledge about the program and the helpfulness of the staff with mean ratings of 3.14 and 3.27, respectively. These imply that the program must improve the delivery of its services to effectively cater to the needs of the farmers.

Information dissemination to and from the farmers and the PCIC is critical in evaluating the needs of the farmers and the process by which the PCIC can effectively provide their needs. Improvement of the accessibility of the services of the program will help the PCIC reach out to more farmers and thus stimulate the achievement of their developmental goals. Helpfulness of the staff also plays a critical role in the success of the program because they are the primary actors in the delivery of services. Enhancements of these factors are critical and essential in achieving the perfect fit between the needs of the farmers and the services offered by the organization.

CONCLUSIONS

Key results of the study showed that there is an upward trend of participating farmers in the RCIP in Region 4 where area insured increased from 12,065.03 ha in 2011 to 57,900.07 ha in 2016, but this is only 14 percent of the total rice farm area in the Region. In addition, the net income of the regional office increased from PhP4,378,000 in 2011 to PhP125,464,000 in 2016. The Gap Analysis revealed that there are gaps in the program enrollment (3 days), filing of application for cover (2 days), team of adjusters' response (31 days), damage estimates (PhP20, 727.27), and receipt of indemnity (43 days). The result is an estimated mean score of 1.66 out of 5 in terms of efficiency of the program.

Findings in the Likert scale showed that the RCIP was moderately effective with a score of 3.44 out of 5. The highest mean rating was the accessibility of the program with a score of 4.10 while expectations met was the lowest with a score of 2.87. A moderate mean rating was computed in terms of the participants' knowledge about the program and the helpfulness of the staff with mean ratings of 3.14 and 3.27, respectively. A high rating of 4.07 was computed for the effectiveness of the program in terms of perception on reducing income loss during times of calamity.

Based on the overall results, the study concludes that the performance of RCIP of PCIC Region 4 has not been ideally efficient but is moderately effective.

RECOMMENDATIONS

The PCIC should deputize officers/staff of the municipal agricultural office as members of the team of adjusters (TAs) to strengthen the efficiency of the RCIP. The PCIC can hire directly from agriculture-trained officers and/or staff of the office of the municipal agriculturist as TA members in their respective municipality. This will facilitate faster response by the TAs and therefore, increase the efficiency of the program.

Moreover, a stronger and more hands-on assistance to participating farmers should be provided by the PCIC. Lack of awareness on PCIC's policies, procedures, and documentation requirements among the farmer-participants appeared to be the root cause of the problems cited such as delays in processing of documents and failed expectations of the farmers. This has been a major contributing factor that led to a less efficient implementation of the program.

The PCIC should also streamline policies, procedures, and documentation requirements in enrollment to the RCIP to raise the program's efficiency. Streamlining the policies, procedures, and documentation processes of the RCIP would encourage former farmer-participants and farmer prospects to enroll in the program, and thus, encourage farmer participation. In addition, easing up the processes would boost efficiency as it would make it simpler for the farmers to enroll and file for claims in the RCIP.

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