



SERVICE QUALITY AND FARMER-BENEFICIARIES' SATISFACTION ON THE PLANT-NOW-PAY-LATER PROGRAM OF BAYBAY CITY AGRICULTURE OFFICE

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The study was conducted to assess the level of service quality and satisfaction of farmer-beneficiaries of the Plant-Now-Pay-Later (PNPL) program administered by the City Agriculture Office of Baybay, Leyte, Philippines. The study was guided by the SERVQUAL model which consists of five dimensions, namely: reliability, responsiveness, assurance, empathy, and tangibility. Through a non-probabilistic (convenience) sampling, the study employed 157 farmer-beneficiaries of the PNPL program for jackfruit production. Primary data was gathered through a developed and structured questionnaire. Data were analyzed using means, frequencies, and percentages and adopts a descriptive-correlational research design. Findings revealed that 56.7% of the respondents were male and mostly 46-55 years old. Moreover, there is a significant gap ($p\text{-value} < 0.001$) between the respondents' expectations and actual perception, which indicates that their expectations were not met by the service quality provided. The respondents' age, gender, number of years in farming and involvement in the program, and other sources of income showed a positive relationship with their perception of the service quality provided. However, educational attainment, income, land tenure status, the main source of income, and membership to the 4Ps do not influence their actual perception of the service quality of the program.

Keywords: Plant-Now-Pay-Later Program, SERVQUAL model, expectation and actual perception, Baybay City, farmers

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1. INTRODUCTION

One of the major thrusts of Region VIII, Philippines is to have a resilient, high earning, and sustainable agriculture and fisheries sector to assure the availability of food in every household's table (National Economic Development Authority, 2017). Agriculture is a backbone of the Philippine economy, hence, the government is focusing on agricultural policies in improving its different sectors (Bayudan-Dacuycuy & Serafica, 2019; Jamora et al., 2019; Casinillo, 2020; Cosrojas & Eguia, 2021). In the region, however, productivity is lower than that of the consumption wherein the Agriculture, Hunting, Fishery, and Forestry (AHFF) sector performance registered continued shortfalls from the sector targets (PSA, 2018). In terms of consumption, the estimated annual per capita consumption by commodity in Leyte as of 2015-2016 is 158.364 kg in terms of rice and corn, 14.163 kg for root crops, 25.686 kg for vegetables, legumes, and condiments, 28.543 kg for fruits, 21.591 kg for livestock, 21.395 kg for fish and other marine products, and 5.366 kg for noodles (PSA, 2017). On the other hand, the crop production which accounted for 54.9 percent of the total agricultural output, decreased by 2.1 percent during the first quarter of the year 2020 in which rice and corn production went down by 3.6 percent and 3.4 percent, respectively (PSA, 2020). In this regard, the agriculture extension program and services offered by the Department of Agriculture contribute a big help to the farmers in providing them with inputs that could help them improve their productivity.

One of the programs under the City Agriculture of Baybay is the Plant-Now-Pay-Later (PNPL) Program aimed to uplift and improve the lives of Filipino farmers. The PNPL program of the City Agriculture Office of Baybay started from the year 2017 up to the present. The City Agriculture offers PNPL on high-value vegetables and commercial crops such as grafted jackfruit, cacao and rambutan seedlings, abaca and banana suckers, vegetable seeds, sweet potato, and cassava cuttings. With this, one can be assisted with protective structures on off-season production of vegetables, seed and seedling production, seeds and fertilizer subsidy, and technology transfer such as promotion on the use of organic fertilizers and pesticides, season-long training on high-value vegetables and fruit crops. As well as training on cultural management practices of vegetables and fruit trees, and plant quarantine services. The success of government programs like this PNPL rests on the technology transfer process, among other things. Agricultural development expected from these programs is partly dependent on farmers' satisfaction with the extension services extended to them (Dullas & Acoba, 2013;

Kamaruddin et al., 2013). Fully satisfied farmers are likely to be more productive and more cooperative with the government's plans and additionally, this could positively impact food security and export (Ganpat et al., 2014; Casinillo 2020).

It is therefore imperative that the quality of services extended to farmers for all government projects be assessed in terms of quality to assure positive impact not only to the farmer-beneficiaries but also to their community and the country in general (Schmidt et al., 2015). This study aimed to assess the quality of services provided and the farmer-beneficiaries satisfaction of the Plant-Now-Pay-Later (PNPL) program administered by the City Agriculture Office (CAO) of Baybay City, Leyte. Results of this study can contribute to the improvement of the extension services of CAO and other government programs to better serve the beneficiaries' well-being. This will also build a mutually beneficial relationship with the farmers to achieve advancement in the agricultural sector of the municipality.

The framework of the Study

According to the study of Brown et al. (2018), low agricultural productivity is an even bigger challenge. Long-standing challenges that hamper productivity include limited access to credit and agricultural insurance, low farm mechanization, inadequate post-harvest facilities, inadequate irrigation, weak extension service, and among others (Sanchez, 2015; Andriesse, 2018). Despite the existence of agriculture extension services, the productivity and farmers' satisfaction with the programs and services provided remains in quandary (Casinillo, 2020; Saridewi et al., 2020). Satisfaction among farmers is the most important element for developing and sustaining organizational policies and practices (Bingen et al., 2003; Elias et al., 2013; Hansen & Stræte, 2020). In connection to this, the matter of the appropriateness and relevance of the extension service program to the genuine needs of the small farmers and the necessity of knowing beforehand what the client needs is a concern not to be taken for granted. Hence, generally, the framework of this study used the SERVQUAL dimensions (Berry et al., 1990; Zeithaml et al., 1990; Babakus & Boller, 1992) which allows analyzing respondents' expected and actual satisfaction on the service quality of the PNPL program of the Baybay City Agriculture Office.

SERVQUAL dimensions are as follows (Zeithaml et al., 1990): (1) "Realibility" - refers to the ability to execute the promised service on time and accurately; (2) "Responsiveness" - refers to the ability to help and provide the needs of the customers in a prompt service; (3) "Assurance" - refers to the

personnel/employees' information and knowledge to their program, and ability to stimulate trust and confidence to customers; (4) "Empathy" refers to the nice communication, understanding, care and smooth access given to the customers; (5) "Tangibility" - refers to the physical appearance of the facilities and equipment as well as the personal and written materials in the office. Specifically, this study seeks to answer the following research objectives: (1) to determine the socio-demographic profile of farmers; (2) to measure the farmer's expectation and actual perception of the PNPL program in regards to SERVQUAL dimensions; (3) to determine the significant difference between farmer's expectation and actual perception on the level of quality of services provided by the Baybay-agricultural extension on its PNPL program; and (4) to determine if there is a significant relationship between socio-demographic profile and actual perception. Figure 1 shows the conceptual framework of the study.

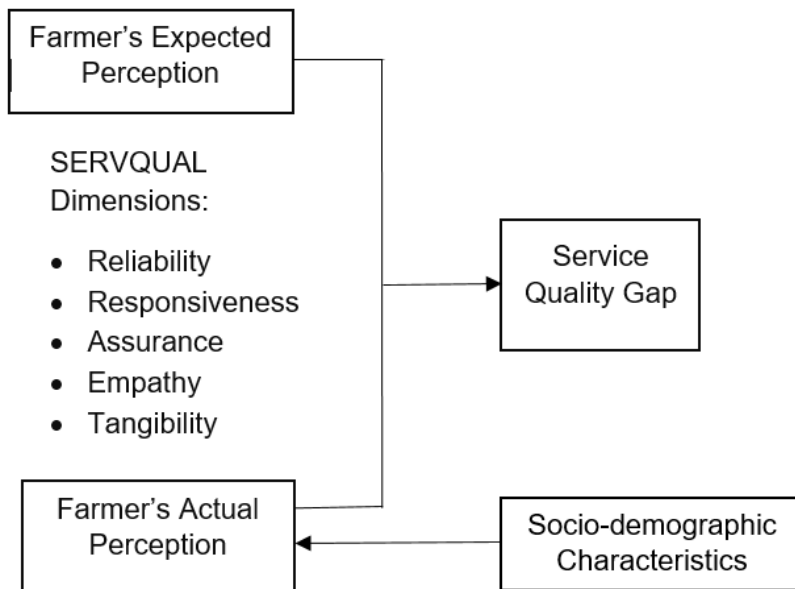


Figure 1. Conceptual Model (Source: Adapted from Zeithaml et al. (1990)).

2. METHODOLOGY

Research Design

This study adopts a descriptive-correlational design which measures the relationship between actual perception and socio-demographic profile and the gap between the level of expected and actual perception of farmer-beneficiaries of the PNPL program on jackfruit production given SERVQUAL dimensions of satisfaction. The researchers were interested on jackfruit farming due to limited study on literature in spite of its large production at Baybay City, Leyte and other places in the Philippines. A variety of descriptive measures were used in this study such as frequency, percentages, mean and standard deviation. For inferential statistics, Wilcoxon signed-rank test was used to determine a significant difference between expected and actual perception, and the Chi-square test for independence was used to determine the significant relationship between socio-demographic profile and actual perception of farmers.

The Respondents and Ethical Procedure

The study was conducted in 30 barangays of Baybay, City (Figure 2), namely: Baybay City Proper, Bitanahuan, Buenavista, Candadam, Can-ipa, Cogon, Gaas, Gabas, Gacat, Hilapnitan, Igang, Jaena, Kansungka, Kiga, Kilim, Maganhan, Mailhi, Makinhas, Maslug, Palhi, Pangasugan, Patag, Plaridel, Pomponan, Punta, Sabang, Gacat, San Agustin, San Isidro, and Sta. Cruz.

The respondents of the study are the farmer-beneficiaries of the PNPL program, particularly on jackfruit production. Convenience sampling which is a non-probability sampling technique was used in choosing the respondents of this study. In this technique, respondents were selected because of their convenient accessibility and proximity to the researcher, considering the current pandemic situation and the travel restrictions currently implemented. Master list of farmer-beneficiaries of the PNPL for jackfruit was obtained from the City Agriculture of Baybay, City. From the total population of 256 farmer-beneficiaries, a sample size of 157 was drawn using Slovin's formula at a margin of error of 5%.

As for the ethical procedure, the study was reviewed by the ethics committee (Graduate Advisory Committee) of the Graduate Studies (GS) of Visayas State University (VSU) that follows the research ethics involving human participation (VSU-GS, 2021). Then, the permission of the head of the Baybay City Agriculture Office was asked before the conduct of the survey. Furthermore, farmer-beneficiaries were informed that the participation was voluntary, and was

assured that all data gathered from them is confidential and used only for this study.

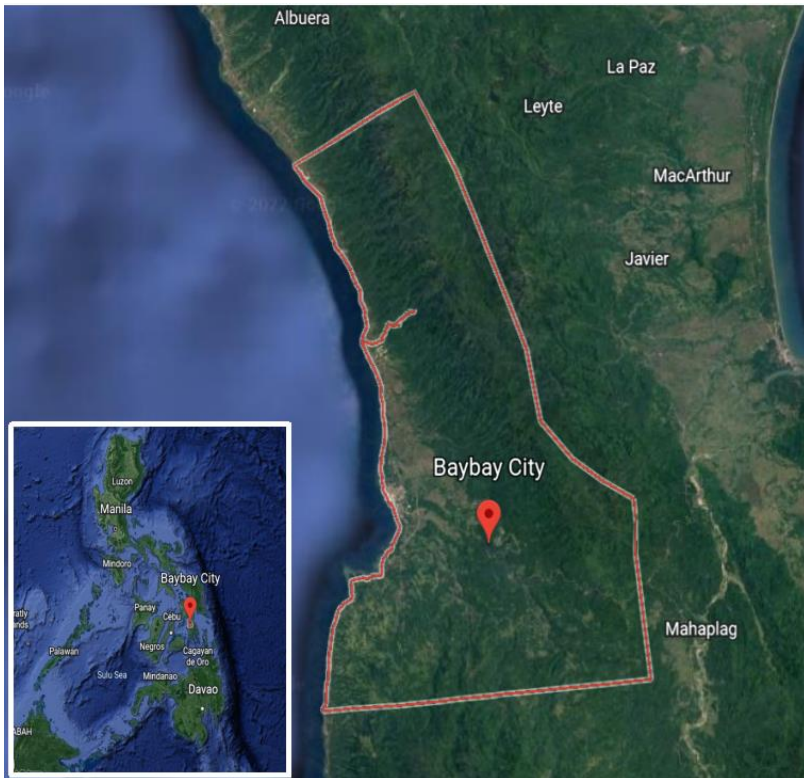


Figure 2. Location where the study is conducted (Source: Google Earth, 2022).

Research Instrument and Data Collection

In this study, survey questionnaires adopted from the SERVQUAL instrument were distributed to the respondents under the researcher and the research enumerator's supervision. All respondents were given a questionnaire in vernacular with a message from the researcher and instructions before answering. The first part of the questionnaire includes necessary questions that would obtain data for the respondents' socio-demographic profiles. The expected and actual perception of the respondents was measured using 22 quantitative questions in which respondents are required to indicate the extent to which they agree or disagree with each statement under each of the five SERVQUAL dimensions such as reliability (5), responsiveness (4), assurance (4), empathy (5), and tangibility (4)

by indicating the number that best describes their expected and actual perception. All the 22 items on service quality were Likert scaled using five points ranging between 1=Strongly disagree, 2=disagree, 3=Neutral (neither disagree nor agree), 4=Agree, and 5=Strongly agree. Table 1 shows the range of values for mean perception score, overall response, and its corresponding description.

Table 1. Range of mean perception score, overall response, and its description

Range of Mean Perception Score	Overall Response	Description
1.00 – 1.80	Strongly disagree	Very Dissatisfied
1.81 – 2.60	Disagree	Dissatisfied
2.61 – 3.40	Neither disagree nor agree	Neutral
3.41 – 4.20	Agree	Satisfied
4.21 – 5.00	Strongly agree	Very Satisfied

(Adapted from Casinillo and Casinillo, 2020)

Data Analysis

The data on the respondents' socio-demographic profile was analyzed using the Statistical Package for Social Science (SPSS) by computing frequencies and percentage distribution. Means were used to analyze the respondents' expected and actual perception of their satisfaction with the quality of services provided by the City Agriculture Office of Baybay on its PNPL program. In determining the gap between the PNPL farmers' expected and actual perception on the quality of services provided by the City Agriculture Office of Baybay is significant, the Wilcoxon signed-rank test was used since the data were categorical or ordinal. Likewise, the relationship between the farmers' demographic characteristics and their actual perception of the quality of service provided by the City Agriculture Office of Baybay, was analyzed using the Chi-square test for independence.

3. RESULTS AND DISCUSSION

Farmer-beneficiaries' Socio-Demographic Profile

Table 2 reveals that over 50% of them are male and the remaining are female. About 35.7% of them belong to the age group 46-55 years old and the youngest (1.3%) among them are between 18-25 years old while the oldest (31.2%) are 60 years old and above. This relates to the study findings of Agholor *et al.* (2013) that male dominance in the agricultural sector is a common phenomenon and falls within the age range of older men and women who are more into agricultural activities than youths. In terms of educational attainment, a considerable number (35%) of the respondents were only high school graduates. This likewise relates to the study findings of Mamun-ur-Rashid *et al.* (2018) that the majority of the farmers achieved secondary level education. More than half of them have been recipients of the PNPL program for more than five (5) years. On the other hand, about 40.1% of the respondents earn a monthly income of P5,000.00 and below. Almost 60% were landowners. 79% of whom availed of the PNPL for five years and above. A very small (4.5%) of the respondents were *Pantawid Pamilyang Pilipino Program* (4Ps) members and were indigent (7.6%).

The income of the respondents, as shown in Table 2, has two (2) sources: the major source of income and the other sources of income. This is somehow similar to the findings of Casinillo (2020) that most of the farmers have other sources of income. Thereafter, the two sources of income were categorized into on-farm income, off-farm income, and non-farm income. Those income sources which were categorized under on-farm income are those derived from farm activities done on their farm. The sources of off-farm income are those that include income from rendering farm activities done on other people's farm and the non-farm income are earned from activities that are not related to agriculture. The source of income of the respondents categorized under on-farm income includes rice farming, livestock, income from coconut, banana, and vegetable farming. Labor was categorized under off-farm income. Salary, business, and other non-farm activities of the respondents as their source of income, were categorized under the non-farm income. Furthermore, results show that the respondents who have a major source of income were obtained from on-farm activities (79.6%), and only 20.4% of the respondents have non-farm activities as their major source of income. As to the respondents' other sources of income, results show that 35.5% were non-farm, only 1 (0.6%) is off-farm, 30% on-farm, and 33.8% have no other source of income.

Table 2. Descriptive statistics for socio-demographic profile (n=157)

SOCIO-DEMOGRAPHIC PROFILE	FREQUENCY	PERCENT (%)
Gender		
Male	89	56.7
Female	68	43.3
Age Group		
18-25	2	1.3
26-35	6	3.8
36-45	26	16.6
46-55	56	35.7
56-59	18	11.5
60 and above	49	31.2
Educational Attainment		
Elementary Graduate	52	33.1
High School Graduate	55	35
College Graduate	38	24.2
Master's degree holder	2	1.3
College Level	5	3.2
High school level	3	1.9
Vocational Course	2	1.3
No. of years in PNPL		
Less than one year	8	5.1
One year and less than 3 years	28	17.8
Three years and less than 5 years	32	20.4
Five years and above	89	56.7
Income Range (Philippine Pesos)		
5000 and below	63	40.1
5001 to 9999	41	26.1
10000 to 14999	23	14.6
15000 to 19999	9	5.7
20000 to 24999	15	9.6
25000 and above	6	3.8

continuation Table 2. Descriptive statistics for socio-demographic profile (n=157)

SOCIO-DEMOGRAPHIC PROFILE	FREQUENCY	PERCENT (%)
Type of beneficiary		
Landowner	94	59.9
Tenant	56	35.7
Lessee	7	4.5
Years in Farming		
Less than one year	2	1.3
1 year and less than 3 years	13	8.3
3 years and less than 5 years	18	11.5
5 years and above	124	79
4P's Beneficiary		
No	150	95.5
Yes	7	4.5
Indigent		
No	145	92.4
Yes	12	7.6
Major Source of Income		
On-farm Income	125	79.6
Non-Farm Income	32	20.4
Other Sources of Income		
On-farm Income	47	30
Off-farm Income	1	0.6
Non-farm Income	56	35.5
None	53	33.8

Expected and Actual Perception on the Service Quality of the PNPL Program

The results on the analysis of the respondents' expectation on the service quality of the PNPL program of the Baybay City Agriculture presented in Table 3 indicates that the respondents' rating reached the strongly agree scale in all five (5) dimensions. The mean scores of the five dimensions ranged from 4.34 to 4.46. This result reflects the respondents' high expectations towards the service quality of the Baybay City Agriculture Office's PNPL program. This is supported by the study of Knight and Gunatilaka (2010) that deals with great expectations. Among the five dimensions, empathy got the highest expectation mark at 4.46 which indicated that respondents strongly agree with the importance of this dimension, particularly on the aspects of caring and individualized attention provided to

them. The reliability dimension showed a mean of 4.43, which indicates that the respondents strongly agree with the statements concerning the ability of the Baybay City Agriculture Office to perform the promised service dependably and accurately. Relative to tangibility which got a mean of 4.42, indicates that the respondents strongly agree with the statements concerning the physical facilities, equipment, and appearance of personnel. Provision of up-to-date and appropriate equipment, good plant quarantine facilities, neat and professional appearance of extension providers are highly expected by the respondents. The assurance dimension reflected a mean of 4.38 which indicates that the respondents strongly agree with the statements concerning courtesy, knowledge, and ability of employees to inspire trust and confidence. Lastly, the responsiveness dimension resulted in a mean of 4.34 which indicates that the respondents strongly agree with the statements concerning the willingness to help and promptness of service provided to them. Therefore, the respondents have a high expected perception of the service quality of the Baybay City Agriculture Office's PNPL program. This result is parallel with the findings of Casinillo (2020) that deals with expected satisfaction in a government policy in agriculture.

Table 3. Farmer-beneficiaries' expected perception of the service quality of the Baybay City Agriculture Office's PNPL program

SERVQUAL DIMENSION	MEAN	STANDARD DEVIATION	OVERALL RESPONSE^a	DESCRIPTION^a
Reliability	4.4267	0.6309	Strongly agree	Very Satisfied
Responsiveness	4.3376	0.5385	Strongly agree	Very Satisfied
Assurance	4.3758	0.6082	Strongly agree	Very Satisfied
Empathy	4.4586	0.5544	Strongly agree	Very Satisfied
Tangibility	4.4204	0.6992	Strongly agree	Very Satisfied

Note: a – See Table 1 for details.

On the other hand, the results from the analysis on the respondents' perception of the service quality of the Baybay City Agriculture Office's PNPL program shown in Table 4 has the mean ratings from 3.86 to 4.11, in which this reached the agree scale in all five dimensions. It is worth noting that these actual perceptions are influenced by some socio-economic determinants (Dullas & Acoba, 2013; Kamaruddin et al., 2013). The reliability dimension showed the highest mean of 4.11 among the five dimensions. Still, reliability statements include the provision of accurate and dependable information, delivering

promises to provide service on time, adequate knowledge on services provided, and interest in solving farmers' problems. The second is the assurance dimension which has a mean of 4.09. This indicates that the respondents agree to the statements about the actions of the extension agents that instill confidence. Responsiveness reflects a mean of 4.05 which indicates that the respondents agree to the statements concerning this dimension such as prompt service from the extension service providers, the willingness to help, prompt response to concerns, and needs of the farmers. The empathy dimension got a mean of 4.09, which indicates that the respondents agree with the statements on the aspects of caring and individualized attention provided to them. Lastly, the tangibility dimension got the lowest mean of 3.86, which is within the agreed scale concerning the physical facilities, equipment, and appearance of personnel of the City Agriculture of Baybay. These results indicate that the quality of services of the City Agriculture of Baybay is acceptable yet could further be enhanced (Schmidt et al., 2015).

Table 4. Farmer-beneficiaries' actual perception of the service quality of the Baybay City Agriculture Office's PNPL program

SERVQUAL DIMENSION	MEAN	STANDARD DEVIATION	OVERALL RESPONSE^a	DESCRIPTION^a
Reliability	4.1096	0.7079	Agree	Satisfied
Responsiveness	4.0494	0.5426	Agree	Satisfied
Assurance	4.0971	0.6649	Agree	Satisfied
Empathy	4.0968	0.6108	Agree	Satisfied
Tangibility	3.8567	0.7151	Agree	Satisfied

Note: a – See Table 1 for details.

The results of the analysis presented in Table 5 showed a gap between the respondents' expectations and actual perception of the service quality of the Baybay City Agriculture Office's PNPL program. It shows a p-value of <0.001 on all of the five service quality dimensions which indicates that it meets the probability of rejecting the null hypothesis of "no significant gap". Hence, there is a piece of strong evidence that the actual satisfaction on the service quality of the City Agriculture Office of Baybay's PNPL program is lower compared to their expected satisfaction. This result is similar to the findings of Knight and Gunatilaka (2010), and Casinillo (2020) that deal with the expectation gap. The SERVQUAL framework reveals that when actual perceptions are lower from the expectation, it indicates that the services provided do not meet the expected service quality. Hence, the farmer-beneficiaries were not satisfied with the service

quality of the Baybay City Agriculture Office's PNPL program. This further means that the quality of the services provided to them failed to meet the farmers' expectations.

Table 5. Significance of the gap between expectation and perception on the service quality of the Baybay City Agriculture Office's PNPL program

SERVQUAL DIMENSION	WILCOXON SIGNED RANKS TEST		
	<i>Perception Gap (A-E)</i>	<i>Z-computed</i>	<i>p-value</i>
Reliability	-0.317	-5.817*	<0.001
Responsiveness	-0.288	-6.386*	<0.001
Assurance	-0.279	-4.925*	<0.001
Empathy	-0.362	-7.269*	<0.001
Tangibility	-0.564	-7.842*	<0.001

Note: E- expected perception, A-actual perception, *-highly significant at 1% level.

Relationship between the Farmer-Beneficiaries' Demographic Characteristics and Actual Perception

Shown in Table 6 were the results showing the analysis of the relationship between farmer-beneficiaries socio-demographic characteristics and their level of actual perception towards the PNPL program of the City Agriculture Office of Baybay. The null hypothesis for this test is that there is no relationship between a particular socio-demographic characteristic and actual perception. The alternative hypothesis is that there is a relationship between a particular demographic characteristic and actual perception. With regards to the respondents' educational attainment, monthly income, as to the type whether the farmer-beneficiary is a landowner, lessee, or tenant, type of main income (farm/off-farm/non-farm income), whether or not a 4Ps member or indigent, has no significant relationship with perception. Hence, it indicates that the said demographic characteristics do not influence their perception of the service quality of the Baybay City Agriculture Office's PNPL program and this result is not consistent with the findings of Ganpat et al. (2014). The respondents' gender (p-value=0.064) and age (p-value=0.070) has a significant relationship at 10% level. This indicates that the respondents' gender and age are influencing their level of perception of the service quality of the City Agriculture Office of Baybay's PNPL program. This implies that farmer's perception on the service quality of the City Agriculture Office of Baybay's PNPL will vary depending on farmer's gender. Likewise, farmer's perception on the said program also varies depending on age gap. It is worth noting that a male farmer

is more capable of farming and older farmers have a lot of experience in the said program. This result is somehow parallel to the findings of Gullifer and Thompson (2006) that deal with aged male farmers who maintain a positive self-concept. Likewise, the number of years of involvement in PNPL (p-value of 0.011) and the number of years in farming (p-value<0.001) show a significant relationship between the level of perception. This implies that farmers with more experience are more knowledgeable about the program and in farming which plays an important role in sustainable innovations (Stuiver et al., 2004). Furthermore, in Table 6, the results show that the p-value is the other source of income is less than the significance level of 1%. Thus, the strength meets or exceeds the evidentiary standard of rejecting the null hypothesis of "no relationship" between a certain demographic characteristic and the perception. The result implies that the other source of income has a highly significant relationship with the level of perception. In other words, the other sources of income of the respondents are dependent on or influence their level of perception on the service quality of the City Agriculture Office of Baybay's PNPL program. This infers that a farmer with additional income aside from the benefits of the program is more satisfied as a member. This result is parallel to the findings of Prus (2018) that farmers are willing to chase alternative jobs to improve their inadequate economic status.

Table 6. Relationship between socio-demographic profile and actual perception on the service quality of the Baybay City Agriculture Offices' PNPL program

SOCIO-DEMOGRAPHIC PROFILE	CHI-SQUARE TEST FOR INDEPENDENCE		
	χ^2 -computed	df	p-value
Gender	7.259*	3	0.064
Age	23.747*	15	0.070
Educational Attainment	18.029	18	0.454
Years in PNPL	21.498**	9	0.011
Income	21.107	15	0.133
Type of Beneficiary	2.866	6	0.825
Years in Farming	83.178***	9	<0.001
Type of Main Income	36.981	39	0.562
4Ps	1.774	3	0.621
Indigent	2.113	3	0.549
Other source of income	208.078***	69	<0.001

Note: *** -highly significant at 1% level ** -significant at 5% level * -significant at 10% level

4. CONCLUSION

Results revealed that the actual satisfaction is lower compared to the expectations of the farmers in regards to the service (specific benefits of farmers are agricultural inputs and trainings) quality of the program. It is concluded that the City Agriculture Office of Baybay has fallen short (expectation has not been met) on the five dimensions of service quality as reflected by the gap between farmers' expectations and actual perception. Based on the findings of this study, the tangibility dimension has the highest gap between their expectation and actual perception of the program. Hence, to further enhance the level of satisfaction of the farmer-beneficiaries of the PNPL program of the City Agriculture of Baybay, the provision of up-to-date and appropriate equipment to the beneficiaries, good plant quarantine facilities, including neatness and professional appearance, should be enhanced to further meet the expectation of the beneficiaries and likewise, give them optimum satisfaction. Furthermore, it is concluded that a farmer with more experience in farming and who has another source of income is more satisfied with the program. Hence, there should be a thorough follow-up and visit on the planting progress of those who availed the PNPL program of jackfruit, accurate and sufficient information should be provided for farmers to be able to fully understand the program and more attention from the farm technicians should be provided to the younger farmers.

5. RECOMMENDATIONS

Based on the fact that the study only focused on the PNPL program for jackfruit production and it was likewise revealed in this study that rice farming was mostly their main source of income, the same or related study should be replicated considering the whole coverage of the program not just for the jackfruit but also to the PNPL program for rice and others, to further test its validity. To avoid a bias perception, it is recommended that an ex-ante survey must be done before the implementation of the said program. Additionally, the financial aspect should be included as part of the service quality dimension so as to evaluate the program's influence on the finances of the beneficiaries. Lastly, immediate follow-up questions should be done on the respondent's vague answers to assure that the respondents and researchers have common understanding of the questions asked and the respondent's answers. Furthermore, focus group discussions (FGD) must be done to further acquire more inputs from the respondents.

6. REFERENCES

- Agholor, I. A., Monde, N., Obi, A., & Sunday, O. A. (2013). Quality of extension services: A case study of farmers in Amathole. *Journal of Agricultural Science*, 5(2), 204-212.
- Andriesse, E. (2018). Primary sector value chains, poverty reduction, and rural development challenges in the Philippines. *Geographical Review*, 108(3), 345-366.
- Babakus, E., & Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24(3), 253-268.
- Bayudan-Dacuycuy, C., & Serafica, R. B. (2019). Harnessing the potential of the Philippines' agricultural sector: An assessment using the product space (No. 2018-16). PIDS Discussion Paper Series.
- Berry, L. L., Zeithaml, V. A., & Parasuraman, A. C. S. Q. (1990). Five imperatives for improving service quality. *MIT Sloan Management Review*, 31(4), 29. <https://www.proquest.com/docview/224963656?pq-origsite=gscholar&fromopenview=true>
- Bingen, J., Serrano, A., & Howard, J. (2003). Linking farmers to markets: different approaches to human capital development. *Food policy*, 28(4), 405-419.
- Brown, E. O., Ebor, R. V., & Decena, F. L. C. (2018). The current state, challenges and plans for Philippine agriculture. FFTC Agricultural Policy Platform (FFTC-AP).
- Casinillo, L. F. (2020). Econometric modelling on satisfaction in rice farming under Philippine Rice Tariffication Law. *Journal of Research and Multidisciplinary*, 3(2), 326-336.
- Casinillo, L. F., & Casinillo, E. L. (2020). Modelling Experiences and its Factors in General Mathematics: The Case of Grade 11 Students. *Indonesian Journal of Educational Research and Review*, 3(2), 25-34.
- Cosrojas, K. D. J., & Eguia, R. E. (2021). Industry concentration and growth in Philippine agriculture. *Agricultural Socio-Economics Journal*, 21(1), 15-24.
- Dullas, A. R., & Acoba, E.F. (2013). Concept of happiness among Filipino farmers: A qualitative and quantitative view. LAP Lambert Academic Publishing, Germany.
- Elias, A., Nohmi, M., Yasunobu, K., & Ishida, A. (2013). Effect of agricultural extension program on smallholders' farm productivity: Evidence from three peasant associations in the highlands of Ethiopia. *Journal of Agricultural Science*, 5(8), 163.

- Ganpat, W. G., Webster, N., & Narine, L. (2014). Farmers' satisfaction with extension services in the Organization of Eastern Caribbean States. *Journal of International Agricultural and Extension Education*, 21(3), 49-62.
- Google Earth (2022). Map of Baybay City. Retrieved from <https://earth.google.com/web/search/Baybay+City/@10.72156065>
- Gullifer, J., & Thompson, A. P. (2006). Subjective realities of older male farmers: Self-perceptions of aging and work. *Rural Society*, 16(1), 80-97.
- Hansen, B. G., & Stræte, E. P. (2020). Dairy farmers' job satisfaction and the influence of automatic milking systems. *NJAS-Wageningen Journal of Life Sciences*, 92, 100328.
- Jamora, J. B., Gudia, S. E. L., Go, A. W., Giduquio, M. B., Orilla, J. W. A., & Loretero, M. E. (2019). Potential reduction of greenhouse gas emission through the use of sugarcane ash in cement-based industries: A case in the Philippines. *Journal of Cleaner Production*, 239, 118072.
- Knight, J., & Gunatilaka, R. (2010). Great expectations? The subjective well-being of rural-urban migrants in China. *World Development*, 38(1), 113-124.
- Philippine Statistics Authority (PSA). (2017). Value of Production in Agriculture by Type of Valuation, Subsector, Year, and Period. Retrieved from <http://openstat.psa.gov.ph>.
- Kamaruddin, R., Ali, J. & Saad, N. M. (2013). Happiness and its Influencing Factors Among Paddy Farmers in Granary Area of MADA. *Proceedings Book of ICEFMO*. PAK Publishing Group. Malaysia.
- Mamun-ur-Rashid, M., Gao, Q., & Alam, O. (2018). Service quality of public and private agricultural extension service providers in Bangladesh. *Journal of Agricultural Extension*, 22(2), 147-160.
- National Economic Development Authority (2017). Eastern Visayas Regional Development Plan (EVRDP) 2017-2022. National Economic Development Authority Region VIII, Philippines.
- Philippine Statistics Authority (PSA). (2018). Supply Utilization Accounts (SUA) of Selected Agricultural Commodities. Retrieved from https://psa.gov.ph/sites/default/files/SUA_2015-2017.pdf
- Philippine Statistics Authority (PSA). (2020). Performance of Philippine Agriculture, First Quarter 2020. Retrieved from <https://psa.gov.ph/ppa-main/id/161874>.
- Prus, P. (2018). Farmers' opinions about the prospects of family farming development in Poland. *Proceedings of the 2018 International Conference "ECONOMIC SCIENCE FOR RURAL DEVELOPMENT"*, 47, 267-274.

- Sanchez Jr, F. C. (2015). Challenges faced by Philippine agriculture and UPLB's [University of the Philippines Los Baños] strategic response towards sustainable development and internalization. *Journal of ISSAAS* [International Society for Southeast Asian Agricultural Sciences] (Philippines).
- Saridewi, T. R., Ilhami, W., & Junaidi, E. (2020). Farming productivity, farmers' perception and satisfaction to agricultural extension worker in Garut Regency. *IOP Conference Series: Earth and Environmental Science*, 518(1), 012050.
- Schmidt, S., Magigi, W., & Godfrey, B. (2015). The organization of urban agriculture: Farmer associations and urbanization in Tanzania. *Cities*, 42, 153-159.
- Stuiver, M., Leeuwis, C., & van der Ploeg, J. D. (2004). The power of experience: farmers' knowledge and sustainable innovations in agriculture. *Seeds of Transition*, Assen, Royal Van Gorcum, 93-118.
- Visayas State University-Graduate School (VSU-GS) (2021). Visayas State University: Graduate programs manual of operations. Retrieved from https://www.vsu.edu.ph/images/OGS/docs//GMPO_Revised_2021_Nov_24.pdf
- Zeithaml, V. A., Parasuraman, A., Berry, L. L., & Berry, L. L. (1990). Delivering quality service: Balancing customer perceptions and expectations. Simon and Schuster. [https://books.google.com.ph/books?id=kyvhCLOVmHgC&dq=+Zeithaml+et+al.+\(1990\)&lr=](https://books.google.com.ph/books?id=kyvhCLOVmHgC&dq=+Zeithaml+et+al.+(1990)&lr=)