

## **BIBLIOGRAPHY**

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## **ABSTRACT**

This study was conducted to determine the willingness to pay premium price of organic vegetable as to identify the level consumer regarding organic vegetable. The study aimed to determine consumer's reason for buying organic vegetable and to determine the level of price premium the consumers are willing to pay for organic vegetable. It can be said that all of the objectives of this research were attained.

A total of 100 respondents that were classified o their occupation as to employee, self-employee, unemployed and students. Most of the respondents are employee, majority of them have ages ranging from 20 to 30 years old, married, college graduate and most of them have a household monthly income of P20, 000 and below.

The kinds of organic vegetables usually bought by the respondents were patchay, bean, lettuce, cabbage, Chinese cabbage, chayote, broccoli, cauliflower and celery. The vegetable that is frequently bought by the respondents was patchay and the least frequent was celery. The sources of organic vegetables for the consumers were LaTOP as the major source followed by BSU Organic Market. There were some consumers that buy directly



from the farmers.

The respondents were aware on the different attributes of organic vegetables such as: safer to consume, no pesticide residues, good for the health, damaged by insects, longer shelf life, more nutritious, not always available in the market, are sanitary, and packed in plastics with labels as organic.

The reasons of respondent for buying organic vegetable is classified by the respondents agree on the taste, health benefits, it does not contain pesticides and it is easier to prepare. The consumers also classified about the affordability and spoilage of organic vegetable as neutral or not taking the part of agreement and disagreement.

The willingness to pay between groups of respondents, there was no significant different on the willingness to pay premium price base on occupation and educational attainment. However, there were significant differences on the willingness to pay base on income bracket. It was found that higher income bracket- respondents were willing to pay more than 10% while respondents with lower income brackets were willing to pay 10% and below.

There are recommendations suggested by organic vegetable consumer is that there should be regular information drive to consumers about the important attributes of organic vegetables so that more consumers will be aware about organic vegetables and more consumers will patronize the organic vegetables. . Since consumers are willing to pay at most 10% premium price on organic vegetables, it is recommended that rigorous requirements on organic production that limits the ability of most farmers to engage in organic production should be lessened.



## RESULTS AND DISCUSSION

### Socio-Demographic Profile of the Respondents

Table 1 shows the distribution of respondents according to age, sex, civil status, number of family members, educational attainment, occupation and their monthly income.

Age. Among the 55 employee- respondents, majority (58%) were 20- 40 years old and 40% were 41 – 60 years old. Among the self-employed, 60% were adult (41 – 60 years old), 20% young adult (20 – 40 years old) and 20% young (below 20 years old). The age distribution among the student-respondents was that 50% young and 50% young adult. There were no respondents on the older age bracket. For the unemployed- respondents there were 67% young adults and 33% adults.

Sex. Majority of the employee-respondents were female and most of the student-respondents and unemployed-respondents were female but for the self-employed-respondents, majority were male.

Civil status. Except for the student-respondents majority of the employee-respondents, unemployed-respondents, and self-employed respondents were married. There were a few widowed from the employee-respondents and unemployed-respondents.

Number of family members. There were 30% of the employee respondents who have 4 to 7 family members; 40% for the self-employed respondents, 17% for the student-respondents, and 20% for the unemployed-respondents. Majority of the respondents from employee-respondents, student-respondents, and unemployed-



Table 1. General profile of the respondents

CHARACTERISTICS	EMPLOYEE		SELF-EMPL.		STUDENT		UNEMPLOYED	
	N	%	N	%	N	%	N	%
<b>Age ( in Years)</b>								
Below 20	1	2	1	20	3	50	0	0
20 – 40	32	58	4	80	3	50	4	67
41 – 60	22	40	0	0	0	0	2	33
<b>TOTAL</b>	<b>55</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>6</b>	<b>100</b>
<b>Sex</b>								
Female	39	71	2	40	5	83	5	83
Male	16	29	3	60	1	17	1	17
<b>TOTAL</b>	<b>55</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>6</b>	<b>100</b>
<b>Civil Status</b>								
Single	9	16	2	40	5	83	0	0
Married	42	76	3	60	1	17	5	83
Widow/er	4	7.3	0	0	0	0	0	17
<b>TOTAL</b>	<b>55</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>6</b>	<b>100</b>
<b>Number of Family Member</b>								
1 – 3	14	30	2	40	1	17	1	20
4 – 7	30	65	2	40	4	66	4	80
> 7	2	4.3	1	20	1	17	0	0
<b>TOTAL</b>	<b>46</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>5</b>	<b>100</b>
<b>Educational Attainment</b>								
High School	2	3.6	1	20	0	0	0	0
Vocational	11	20	2	40	0	0	1	20
College	42	76	2	40	6	100	4	80
<b>TOTAL</b>	<b>55</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>5</b>	<b>100</b>
<b>Household Monthly Income</b>								
<10,000	19	38	5	100	1	33	2	67
10,000 to 20,000	26	52	0	0	0	0	1	33
21,000 to 30,000	3	6	0	0	1	33	0	0
31,000 to 40,000	2	4	0	0	1	33	0	0
<b>TOTAL</b>	<b>50</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>3</b>	<b>100</b>



respondents have 4 to 7 family members. Very few respondents have more than seven family members.

Educational attainment. As shown in Table 1, most of the respondents in all the respondents group, except for students were college graduate or had reached the college level. Forty percent of the student-respondents were taking vocational course, 20% were high school and another 40% were college students.

Household monthly income. With regards to the monthly income of the respondents, 52% from employee- respondents that had Php10,000-Php20,000 monthly income; 38% had less than Php10,000, and only 6% and 4% had monthly family income from Php21,000 – Php30,000 and Php 31,000 – Php 40,000, respectively. For the self-employed all of them had less than Php10,000 monthly family income. For the student-respondents, 33% each had monthly family income ranging from Php21,000-Php30,000; Php31,000-40,000, and less than Php10,000. Sixty seven percent and 33% of the unemployed-respondents had monthly income of less than Php10,000 and Php10,000 – Php20,000, respectively.

#### Kinds of Organic Vegetable Bought by the Respondents

Table 2 shows the kinds of organic vegetables that the respondent bought as well as the frequency of buying. The different organic vegetables bought by the respondents were lettuce, beans, petchay, cabbage, Chinese cabbage, chayote, cauliflower, broccoli, and celery.

Among these vegetables, petchay had the highest overall frequency mean of 3.35 per week. This is followed by beans (2.92), lettuce (2.74), chayote and cauliflower (2.62



each), broccoli (2.45), cabbage (2.21), and Chinese cabbage (2.10). All these means however are in the category of sometimes. The least was celery with a mean of 1.43 which fell into the category of never. This is plausible because celery cannot be consumed alone but has to be mixed with other vegetable.

For the employee-respondents, patchay is still the leading vegetables consumed with a mean frequency of 3.72 which shows that on the average employees frequently buy patchay compared to the other vegetables. This was followed by chayote (3.25), beans (3.23), broccoli (3.15), lettuce and cauliflower (3.02), cabbage (2.69), chinese cabbage (2.58) and celery (1.43).

For the self-employed, patchay still had the highest frequency mean (2.8) but it is less frequent than the employees. The second more frequently bought by self-employed was beans (2.6) followed by lettuce (2.4), and chinese cabbage and cauliflower (2.0). It was found that chayote, broccoli, and cabbage were less frequent next to celery.

For the student-respondents, patchay also had the highest frequency mean (3.67) followed by beans, chayote and broccoli with frequency mean of 2.83 each; lettuce and cabbage with frequency mean of 2.33 each, Chinese cabbage (1.83) and the lowest was celery (1.5).

For the unemployed-respondents, both patchay and lettuce had the same frequency mean of 3.2 followed by beans (3.0); chayote and cauliflower (2.8 each); cabbage, Chinese cabbage, and broccoli (2.0 each); and the lowest is celery with 1.4.

This finding implies that among the organic vegetables bought by the respondents, patchay is bought more frequently than the other organic vegetables while celery is the least frequent.



Table 2. Kinds of vegetables bought and frequency of buying

VEGETABLE	WEIGHTED MEAN				OVER ALL	
	A	B	C	D	MEAN	DESCRIPTION
Lettuce	3.02	2.4	2.33	3.2	2.74	Sometimes
Beans	3.23	2.6	2.83	3	2.92	Sometimes
Petchay	3.72	2.8	3.67	3.2	3.35	Sometimes
Cabbage	2.69	1.8	2.33	2.0	2.21	Sometimes
Chinese Cabbage	2.58	2.0	1.83	2.0	2.10	Sometimes
Chayote	3.25	1.6	2.83	2.8	2.62	Sometimes
Cauliflower	3.02	2.0	2.67	2.8	2.62	Sometimes
Broccoli	3.15	1.8	2.83	2.0	2.45	Sometimes
Celery	1.43	1.4	1.5	1.4	1.43	Never

Numerical value and descriptive equivalent:

- 1- 1.79 = never
- 1.8 – 2.59 = seldom
- 2.6 – 3.39 = sometimes
- 3.4 – 4.19 = frequent
- 4.2 – 5.00 = very frequent

Respondents Category

- A - employees
- B – self-employed
- C - students
- D - unemployed

Sources of Organic Vegetables Consumed by the Respondents

Table 3 presents the market outlets where the respondents are buying organic vegetables and the frequency of buying from that market outlet. Results showed that consumers either buy their organic vegetables from LaTOP, BSU Organic Market, or direct from the farmers. Based on the results of the analysis, LaTOP had a mean frequency of 4 meaning that consumers frequently buy from this market outlet while BSU Organic Market had a mean frequency of 3, meaning sometimes; and direct from



Table 3. Sources of organic vegetables consumed by the respondents.

PARTICULARS	1		2		3		4		5		MEAN
	N	%	N	%	N	%	N	%	N	%	
LaTOP	6	6	9	9	34	34	31	31	20	20	4
BSU OM	12	12	25	25	28	28	24	24	11	11	3
Direct from the farmers	65	65	7	7	14	14	10	10	4	4	2

Numerical value and descriptive equivalent: 1- never  
 2- seldom  
 3- sometimes  
 4- frequent  
 5-very frequent

farmers had a score of 2, meaning consumers seldom buy directly from the farmers. This could be explained by the very few number of respondents buying directly from the farmers. Between LaTOP and BSU Organic Market, LaTOP has a more strategic location and more varieties of organic vegetables sold compared to BSU Organic Market

#### Weekly Consumption of Organic Vegetables

Table 4 shows the respondents households' average consumption of organic vegetables per week. From the result, it can be gleaned that patchay had the highest overall mean quantity of 1.69 kilograms per week. This is consistent with the earlier finding that patchay is more frequently bought by the respondents. Beans and chayote came in next with average quantity of 1.29 kilograms per week followed by Chinese cabbage (1.28 kg.), cauliflower (1.22 kg.), broccoli (1.7 kg.), lettuce (0.99 kg.), and the least is celery (0.51 kg)

When it comes to consumer group, patchay was on top of the other organic vegetables in terms of quantity consumed per week by the employee group (1.93 kg.), the students group and the unemployed group (1.83 kg. each). For the self-employed group,





the average quantity consumed for petchay was the same with Chinese cabbage (1.50 kg each). The second highest for the employee group was chayote (1.54 kg.), the self-employed was cauliflower (1.25 kg.) and both the students group and unemployed group was Chinese cabbage (1.75 kg. each). The least consumed by each group was celery with about half kilogram per week by each group of respondents. This was followed by lettuce with about three quarter of a kilogram for each group of respondents.

This finding reveals that among all the organic vegetables consumed by the respondents, petchay was the highest while celery followed but lettuce were consumed least.

Table 4. Weekly consumption of organic vegetable.

PARTICULARS	WEIGHTED MEAN (IN KILOGRAM PER WEEK)				OVERALL MEAN
	A	B	C	D	
Lettuce	1.22	0.75	0.70	0.70	0.99
Beans	1.35	1.00	1.70	1.70	1.29
Petchay	1.93	1.50	1.83	1.83	1.69
Cabbage	1.43	1.17	1.10	1.10	1.24
Chinese Cabbage	1.05	1.50	1.75	1.75	1.28
Chayote	1.54	1.00	1.33	1.33	1.29
Cauliflower	1.48	1.25	0.90	0.90	1.22
Broccoli	1.33	0.83	1.33	1.33	1.17
Celery	0.56	0.50	0.50	0.50	0.51

Respondents Category: A - employees  
 B – self-employed  
 C - students  
 D - unemployed



### Level of Awareness on some Attributes of Organic Vegetables

Table 5 shows the how aware consumers are about the attributes of organic vegetables. Majority of the respondents (54) were aware that organic vegetables are safer to consume than conventional vegetables while 38% were very much aware. The weighted mean of 4 implies that on the average, consumers of organic vegetables are aware of this attribute. For the attribute that organic vegetables contain no pesticide residues, majority were aware, many were very much aware and there were a few who are slightly aware. On the average, the respondents were aware of this attribute. On the attribute that organic vegetables are good for the health, half of the respondents were aware and many were very much aware. The consumers are aware of this attribute as shown by the weighted mean value of 4. There were many respondents who were slightly aware that organic vegetables have insect damages but there were more who said that they are very much aware of this. The weighted mean value of 4 implies that on the average, consumers are aware that organic vegetables have insect damages because they are not applied with pesticides. With regards to the longer shelf life of organic vegetables, there were respondents who are not aware of this attribute but more respondents were very much aware. The weighted mean value is 4 thus the level of awareness of the consumers is aware. The other attributes like: organic vegetables are more nutritious, organic vegetables are not always available in the market, they have good appearance, are sanitary, are packed in plastics with labels as organic; the respondents' level of awareness was aware.



Table 5. Awareness level on attributes regarding organic vegetable

PARTICULARS	1	2	3	4	5	MEAN
	N	N	N	N	N	
1. It is safer to consume organic vegetable	0	0	8	54	38	4
2. Organic vegetables contains no Pesticides residues	0	0	11	55	34	4
3. It is good for the Health	0	0	6	50	44	4
4. It is damaged by the insects	0	1	25	44	30	4
5. It has a longer shelf life	3	7	20	46	24	4
6. Organic vegetable are more nutritious	0	2	14	47	37	4
7. Organic products are not always available in local markets	0	6	29	46	19	4
8. It has good appearance	1	5	30	44	20	4
9. Organic vegetable are sanitary	0	1	21	49	29	4
10. Packed in plastics with labels as organic	0	3	23	43	31	4

Numerical value and descriptive equivalent: 1- very much unaware  
 2- unaware  
 3- slightly  
 4- aware  
 5- very much aware



## Reasons of Respondents for Buying Organic Vegetables

Table 6 shows the reasons of the respondents for buying organic vegetables. More than half of the respondents (57%) agreed that organic vegetable has a better taste than the conventional vegetables. There were 25% that were neutral and 18% that strongly agree. None of the respondents disagree about this attribute. The weighted mean of 4 implies that the respondents generally agree that organic vegetables have better taste than conventional vegetables. Majority (61%) agree that organic vegetables are good for the health, 5% were neutral and 34% strongly agree. The weight mean of 4 implies that the respondents generally agree that organic vegetables are good for the health. This attribute of organic vegetables influence the decision of consumers to buy. As to the attribute of being pesticide free, there were a few who disagree, 37% were neutral, 45% agree and 15% strongly agree. The weighted mean of 4 shows that the respondents generally agree that organic vegetables are pesticide free, hence they buy them. Organic food is safe because they are produced to certain production standards, meaning they are grown without the use of conventional pesticides, artificial fertilizers, human waste, or sewage sludge and that they were processed without ionizing radiation or food additives.

As to the attribute that organic vegetables are affordable, many of the respondents disagree and most of them are neutral, only 25% agree and 2% strongly agree. The weighted mean of 3 implies that the respondents are neutral on this attribute. Similarly, the attribute that organic vegetables do not spoil easily has a weighted mean of 3. This finding implies that the above attribute was an not important consideration in buying organic vegetables.



Table 6. Reasons of respondents for buying organic vegetables

PARTICULARS	1		2		3		4		5		MEAN
	N	%	N	%	N	%	N	%	N	%	
It has better taste	0	0	0	0	25	25	57	57	18	18	4
It is good for the health	0	0	0	0	5	5	61	61	34	34	4
It does not contain pesticide residue or have lower pest residues	1	1	2	2	37	37	45	45	15	15	4
It is affordable	3	3	27	27	43	43	25	25	2	2	3
It does not easily spoils	2	2	9	9	40	40	42	42	7	7	3
It is easier to prepare	0	0	5	5	27	27	30	30	38	38	4

Numerical value and descriptive equivalent: 1- strongly disagree  
 2- disagree  
 3- neutral  
 4- agree  
 5- strongly agree

Most of the respondents (37%) strongly agree that organic vegetable is easy to prepare. Findings are that no need to wash many times or soak in water with baking soda to remove pesticides from vegetables. Organic vegetables are irrigated with clean water that there is no difficulty in preparing them. Some respondents (5%) disagree that organic vegetable is easy to prepare.

Willingness of Respondents to Pay the Premium Price of Organic Vegetables

Table 7 shows the opinion of the respondents on the affordability of the premium price of organic vegetables and Table 8 presents the amount of premium price that the respondents are willing to pay.



Table 7. Opinion of respondents on the premium price of organic vegetable

PARTICULARS	1		2		3		4		5		MEAN
	N	%	N	%	N	%	N	%	N	%	
I can afford the premium price	2	3	1	12	40	40	36	36	9	9	3
I don't care about the premium price	4	0	2	22	43	43	25	25	6	6	3
I better consider the health benefits	0	0	0	0	11	11	51	51	38	38	4

Numerical value and descriptive equivalent: 1- strongly disagree  
 2- disagree  
 3- neutral  
 4- agree  
 5- strongly agree

From Table 7, most of the respondents (40%) were neutral on the opinion that they can afford the premium price but there are 36% and 12% who agree and strongly agree on it, respectively. The weighted mean of 3 implies that the respondents neither agree nor disagree that the premium price is affordable. This finding is supported by the next issue: I don't care about the premium price. The weighted mean of 3 implies that the respondents are neutral. This implies that the number of respondents who agree that the premium price of organic vegetables is affordable is equal to the number who disagree thus it average to neutral opinion.

However, a more interesting finding was that the respondents give more importance on the health benefits of the product rather than the price. Most of the respondents (51%) agree that they consider the health benefits rather than the monetary value. The weighted mean value of 4 implies that consumers agree that they better consider the health benefits. This implies that consumers of organic vegetables are willing to pay the premium price



because of their concern for health. This finding was the same with the finding of Bocaletti and Nardella (2001) that Italian consumer were generally concerned about health risk from pesticide. They were aware that pesticides can cause different illnesses including cancer, thus they are willing to pay the premium price of organic products.

### Level of Willingness to Pay the Premium Price

The level of willingness to pay the premium price refers to the extra amount over and above the regular price of conventional vegetables that consumers are willing to pay. This was measured as percentage of the price of the conventional vegetable. Table 8 presents the level of willingness by occupation, Table 9 by educational attainment, and Table 10 by household monthly income.

Occupation. It can be noted from Table 8a that many of the respondents are willing to pay a premium price of 10% or less. Even among the employed respondents very few are willing to pay 21 – 30% while nobody is willing to pay this premium among the self-employed, students and the unemployed. With a scale of 1 for willingness to pay 10% and below, 2 for 11 – 20% , and 3 for 21 – 30%; the weighted mean presented in Table 8b presents all the values were below 2 which means that the respondents are willing to pay 10% and below. The table also shows that the weighted mean values for employee-respondents were higher than that of the self-employed, the students and the unemployed in all the vegetables they are buying. However, the statistical test show no significant differences in the mean values between the four groups of respondents, except or chayote. This implies that for chayote, the employees are willing to pay a higher premium than the self-employed, the students and the unemployed.



Table 8a. Distribution of respondent according to how much they are willing to pay by occupation

ORGANIC VEGETABLES	EMPLOYEE			SELF EMPLOYED			STUDENT			UNEMPLOYE D		
	1	2	3	1	2	3	1	2	3	1	2	3
	Lettuce	38	11	4	5	0	0	6	0	0	4	1
Beans	33	11	5	5	0	0	4	1	0	4	1	0
Petchay	37	12	5	4	1	0	5	1	0	4	1	0
Cabbage	28	9	7	5	0	0	4	2	0	4	0	0
Chinese Cabbage	26	10	5	5	0	0	4	1	0	5	0	0
Chayote	35	13	4	4	1	0	5	0	0	4	0	0
Cauliflower	33	23	5	4	0	0	5	1	0	4	1	0
Brocoli	35	12	6	5	0	0	6	0	0	4	0	0
Celery	16	7	1	5	0	0	5	0	0	3	0	0

Legend: 1 = 10% or less

2= 11 – 20%

3= 21 – 30%

Table 8b. Level of willingness to pay the premium price according to occupation

ORGANIC VEGETABLE	OCCUPATION/MEAN				F <sub>c</sub>
	EMPLOYEE	SELF-EMPLOYED	STUDENT	UNEMPLOYED	
Lettuce	1.45	1.00	1.00	1.20	2.36 <sup>ns</sup>
Beans	1.40	1.00	1.20	1.20	1.05 <sup>ns</sup>
Petchay	1.44	1.20	1.17	1.20	1.33 <sup>ns</sup>
Cabbage	1.48	1.00	1.33	1.00	1.10 <sup>ns</sup>
Chinese Cabbage	1.44	1.00	1.20	1.00	1.20 <sup>ns</sup>
Chayote	1.45	1.00	1.00	1.00	3.38*
Cauliflower	1.45	1.20	1.17	1.25	1.14 <sup>ns</sup>
Brocoli	1.45	1.00	1.00	1.00	2.31 <sup>ns</sup>
Celery	1.39	1.00	1.00	1.00	1.57 <sup>ns</sup>
OVERALL	1.42	1.04	1.11	1.09	2.53*

\*significant (p≤0.05)

<sup>ns</sup>not significant (p>0.05)





Educational attainment. Base on the educational attainment of the respondents, nobody among the high school level is willing to pay a premium price higher than 10%. For the vocational level, most them are willing to pay a premium price of 10% and below and few are willing to pay more than that. For the college level respondents, many are willing to pay 10% and below but there were some who are willing to pay 11 - 20% and a some were even willing to pay 21 – 30%. This is because majority of the college level are employed so they can afford to pay a higher premium price. These are also the people who put a higher premium on health than money. Table 9b presents the statistical test on the difference in the mean value between the three groups of respondents. Results show that there were no significant differences on the level of willing between the three groups of respondents.

Table 9a. Distribution of respondent according to how much they are willing to pay by educational attainment

ORGANIC VEGETABLES	HIGHSCHOOL			VOCATIONAL			COLLEGE		
	1	2	3	1	2	3	1	2	2
Lettuce	5	0	0	14	2	0	48	15	4
Beans	5	0	0	14	2	1	50	15	4
Petchay	5	0	0	15	1	1	51	18	5
Cabbage	4	0	0	12	2	1	38	14	7
Chinese Cabbage	3	0	0	11	1	0	36	15	5
Chayote	3	0	0	13	1	1	47	13	3
Cauliflower	3	0	0	15	1	1	43	18	3
Broccoli	3	0	0	15	1	1	55	15	5
Celery	2	0	0	6	1	0	31	9	1

Legend: 1 = 10% or less      2= 11 – 20%      3= 21 – 30%



Table 9b. Level of willingness to pay the premium price according to educational attainment.

ORGANIC VEGETABLE	EDUCATIONAL ATTAINMENT/MEAN			F <sub>c</sub>
	HIGH SCHOOL	VOCATIONAL	COLLEGE	
Lettuce	1.00	1.18	1.36	1.57 <sup>ns</sup>
Beans	1.00	1.24	1.33	0.92 <sup>ns</sup>
Petchay	1.00	1.17	1.38	1.87 <sup>ns</sup>
Cabbage	1.00	1.20	1.51	2.14 <sup>ns</sup>
Chinese Cabbage	1.00	1.08	1.44	2.29 <sup>ns</sup>
Chayote	1.00	1.19	1.32	0.77 <sup>ns</sup>
Cauliflower	1.00	1.18	1.40	1.51 <sup>ns</sup>
Brocoli	1.00	1.19	1.33	0.76 <sup>ns</sup>
Celery	1.00	1.13	1.26	0.52 <sup>ns</sup>
OVERALL	1.00	1.16	1.34	2.24 <sup>ns</sup>

<sup>ns</sup>not significant ( $p > 0.05$ )

Income bracket. Tables 10a and 10b show how much premium price consumers are willing to pay base on their income bracket. The results show that the higher the income bracket the higher are the mean values which implies that higher income consumers are willing to pay a higher premium price for organic vegetables. Table 10b presents that the mean values on the willingness to pay between the three income brackets were significantly different as shown by the F test.



Table 10a. Distribution of respondent according to how much they are willing to pay by income bracket (in pesos)

ORGANIC VEGETABLES	<10,000			10,000-20,000			21,000-30,000			31,000-40,000		
	1	2	3	1	2	3	1	2	3	1	2	3
Lettuce	36	3	0	14	11	1	0	2	2	0	1	1
Beans	36	1	0	8	11	2	2	2	2	2	0	1
Petchay	36	3	0	14	11	3	0	3	1	0	0	2
Cabbage	26	5	0	10	7	4	0	2	1	0	0	2
Chinese Cabbage	26	5	0	13	7	3	0	3	0	0	1	1
Chayote	32	2	0	14	10	4	2	1	0	1	0	1
Cauliflower	28	3	0	13	9	4	1	2	1	0	1	1
Brocoli	32	3	0	14	9	4	1	2	1	1	0	1
Celery	18	1	0	11	4	1	2	1	0	0	1	0

Legend: 1 = 10% or less      2= 11 – 20%      3= 21 – 30%

Table 10b. Level of willingness to pay the premium price according to household monthly income.

ORGANIC VEGETABLE	HOUSEHOLD MONTHLY INCOME/MEAN				F <sub>c</sub>
	<10, 000	10, 000-20, 000	21, 000-30, 000	>30, 000	
Lettuce	1.08	1.50	2.50	2.50	19.49**
Beans	1.03	1.59	2.50	3.00	23.33**
Petchay	1.08	1.62	2.25	2.50	14.53**
Cabbage	1.16	1.71	2.50	3.00	13.87**
Chinese Cabbage	1.16	1.57	2.00	3.00	10.25**
Chayote	1.06	1.59	1.33	2.50	9.72**
Cauliflower	1.15	1.59	2.00	2.50	7.64**
Brocoli	1.08	1.59	2.00	3.00	12.96**
Celery	1.06	1.41	1.50	2.00	2.85*
OVERALL	1.09	1.56	2.09	2.69	25.71**

\*\*highly significant (p≤0.01)      \*significant (p≤0.05)



## SUMMARY, CONCLUSION AND RECOMMENDATION

### Summary

This study was conducted to determine the willingness of consumers to pay premium price for organic vegetable. The study aimed to determine consumers' reason for buying organic vegetable and to determine the level of price premium the consumers are willing to pay for organic vegetable. A total of 100 consumers of organic vegetables from La Trinidad, Benguet were taken as respondents of this study. Survey questionnaire were used in collecting the data.

The results show that most of the respondents were young adults, majority were female, majority were married and have a number of family members ranging from 4 -7. Most of them have a household monthly income of P20,000 and below.

The kinds of organic vegetables usually bought by the respondents were patchay, bean, lettuce, cabbage, Chinese cabbage, chayote, broccoli, cauliflower and celery. The vegetable that is frequently bought by the respondents was patchay and the least frequent was celery. The sources of organic vegetables for the consumers were LaTOP as the major source followed by BSU Organic Market. There were some consumers that buy directly from the farmers.

The respondents were aware on the different attributes of organic vegetables such as: safer to consume, no pesticide residues, good for the health, damaged by insects, longer shelf life, more nutritious, not always available in the market, are sanitary, and packed in plastics with labels as organic. The reasons for buying organic vegetables were the following: has better taste, good for the health, no pesticide residue, affordable, not easily spoil, and easy to prepare because they do not require too much washing.



Many of the respondents agree that the price premium of organic vegetables is affordable but there are also several respondents who disagree. However, majority consider the health benefits of consuming organic vegetables rather than the monetary value. As to how much premium price the respondents are willing to pay, most of them mentioned 10% and below. There were some who are willing to pay more than 10% and a few were even willing to pay more than 20%.

The statistical test on the difference on the willingness to pay between groups of respondents, there was no significant different on the willingness to pay premium price base on occupation and educational attainment. However, there were significant difference on the willingness to pay base on income bracket. It was found that higher income bracket-respondents were willing to pay more than 10% while respondents with lower income brackets were willing to pay 10% and below.

### Conclusion

From the result, the following conclusions were drawn.

1. Consumers of organic vegetables were aware of the different attributes of organic vegetables.
2. Most of the consumers buying organic vegetables are looking at the health benefits rather than the monetary value. This is the reason they are willing to pay a premium price for organic vegetables.
3. Although consumers are willing to pay the premium price for organic vegetables, most of them are willing to pay at most 10% over the regular price of conventional vegetables.



4. A significant factor that affects willingness of consumers to pay the premium price is income. The higher the income level, the higher premium price they are willing to pay.

### Recommendation

Base on the conclusions the following recommendations are forwarded:

1. There should be regular information drive to consumers about the important attributes of organic vegetables so that more consumers will be aware about organic vegetables and more consumers will patronize the organic vegetables. If more consumers will shift to organic vegetables then demand for conventional vegetables will decline. Following the principle of supply and demand price of conventional vegetables will be lower and more farmers will shift to organic vegetable production.

2. Since consumers are willing to pay at most 10% premium price on organic vegetables, it is recommended that rigorous requirements on organic production that limits the ability of most farmers to engage in organic production should be lessened. In this way production cost will be lowered and more farmers will shift to organic production. Supply of organic vegetables will increase to match increases in demand, thus price of organic vegetables could be lowered to an affordable level to all consumers, even the low income population. If this is realized environmental pollution from the use of synthetic fertilizer and pesticides will be minimized.



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