

BIBLIOGRAPHY

PAGADUAN, LARRY N. APRIL 2011. Perception of Actors on Quality of Potato in the Spot Market Chains. Benguet State University, La Trinidad Benguet.

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ABSTRACT

The study was conducted to identify the perception on quality of potato by chain actors in the spot market based from three dimensions such as the physical, functional and service, the abilities and inabilities to meet the quality requirement and the various constraints to improve/maintain the quality of fresh vegetable offered.

The respondents are classified according to production, collection/assembly, distribution and retailing groups and a total of 193 chain actors.

Majority of the respondents have ages ranging from 31-40, female, married, Catholic, no affiliation to any organization, high school graduate & undergraduate and have been engaged in potato trading business from 1-5 years.

Chain actors' perceived physical qualities of potato are produced/procure fresh, clean and firm. Moreover, to include the color, size and variety, free from chemical residues, pest and diseases, properly weighed and packed. The price was based on market prevailing and negotiated price.

Chain actors appropriately classify, weighed and packed the potatoes properly. However, Chain actors have insufficient capital or money to procure large quantity of potato and they depend to market prevailing price.

The common problems faced by the chain actors in trading potatoes were too much high temperature, destructive calamities and lack of proper equipment/facilities and insufficient capital.

Recommendations suggested by the chain actors are that the government agencies should provide support like financial assistance, providing appropriate facilities/equipments and reliable market information. Government should provide new varieties of potato with high quality.



INTRODUCTION

Rationale

Luzon produced around 86% of the total output for potato in 2007. Mindanao contributed 14% while Visayas share less than 0.1%. Around 67% of the country's total area harvested with potato in 2007 was shared by Luzon. Mindanao contributed 33% while Visayas' share was less than 0.1%. Furthermore CAR produced around 85% of the total output for potato in 2007. Other regions contributed 15%. Among CAR provinces Benguet and Mountain Province are the top potato producers in Northern Luzon which contributes to 101,993 metric tons or 86% of the total production in the Philippines. They have also the highest production area which is 3,784 ha or 64% in the Philippines (BAS, 2008).

The primary factors considered by farmers in the choice of market outlets are: regular buyers, better price and convenience. Another factor considered is the credit marketing tie-up. It means that buyers extend loans (in cash or in kind) to the producers without interest. The producers, in turn, sell their produce to the creditor-buyer at stipulated prices. To note, when vegetable prices dip to a low, low level and farmers foresee that the total cost of their sales will not compensate for the production and hauling costs, they just leave their crops unharvested to avoid more loss.

Other factor may be due you the absence of an efficient market network coupled with the absence and communication facilities, trading centers, market assistance centers, transportation and inadequate storage facilities, and credit assistance to farmers.



Potato growers, traders and processors perform several marketing functions which vary according to variety/type of processed product, their scale of operations, market and arrangement between buyers and sellers (FRLD, 1995).

Farmers usually transport and sell their produce to assemblers-wholesalers and retailers at the La Trinidad Vegetable Trading Post and Baguio City Market. However, during peak selling periods such as December, these traders practice “harang” or intercept farmers’ vegetable loaded vehicles along the Halsema highway to assure adequate volume of supply. Generally, the vegetables pass through several middlemen before reaching the customers (Benguet Socio-Economic Profile, 2007).

Statement of the Problem

1. What are the perceived quality criteria by the actors as basis of buyers in buying potato in the spot market chain?
2. What are the perceived abilities of actors to meet the quality requirement of buyers in the spot market chains for potato?
3. What are the perceived inabilities of chain actors’ to meet the needs of market intermediaries?
4. What are the barriers to improve/maintain the quality of potato?

Objectives of the Study

1. To identify the perceived quality criteria by the actors as basis of buyers in buying potato in the spot market chain.
2. To determine the perceived abilities of actors to meet the quality requirement of buyers in the spot market chains for potato.



3. To determine the perceived inabilities of chain actors' to meet the needs of market intermediaries.

4. To identify the barriers to improve/maintain the quality of potato.

Importance of the Study

In the Philippines, agricultural commodity supply chains researches become a research priority agenda for industry development. Hence, this research would contribute in some ways information about the potato in the spot market.

Since most literatures in supply chain management are in the field of manufacturing and logistics, the research given fact of the expected contribution to the present literatures in supply chains for agriculture, hence an avenue for future research and development in potato supply chain is inevitable.

Scope and Delimitation of the Study

The study focused on the analysis of perception on quality of potato among chain actors in the different spot market chains. The study covers the spot market for potato, thus, the actors involved in the major markets.



REVIEW OF LITERATURE

Supply Chain and Network

Folkerts and Koehorst (1998) defined supply chain as “a set of interdependent companies that work closely together to manage the flow of goods and services along the value-added chain of agricultural and food products, in order to realize superior customer value at the lowest possible cost”. Van der Vorst (2000) further defined supply chain as “a network of physical and decision making activities connected by material and information flows that cross organizational boundaries.” According to Lambert and Cooper (2000), there are four main characteristics of a supply chain: First, it goes through several stages of increasing intra- and inter- organizational, vertical coordination. Second, it includes many independent firms, suggesting that managerial relationship is essential. Third, a supply chain includes a bi-directional flow of products and information and the managerial and operational activities. Fourth, chain members aim to fulfill the goals to provide high customer value with an optimal use of resources.

Supply chain means the process of planning, implementing and controlling the efficient, cost effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point-of-origin to point of final consumption for the purpose of conforming to customer requirements (Council of Logistics Management, 1986). Supply chain is a dual flow of products and information. It is the drive to meet the central needs of the consumer and it stresses the importance of the relationships between participants in the marketing system. However, the tendency is often focus solely on the immediate economic aspects when firms are building supply chains (Champion and Fearn, 2000). Hongze Ma (2005) pointed out that supply chain is a network of



organizations from suppliers with the purpose to improve the flow of material and information. Drabenstott (1999) discusses the increasing move toward the development of supply chains and describes supply chain structures where all stages of production, processing and distribution are bound together tightly to ensure reliable, efficient delivery of high quality products.

Perception

Robbins (1988) defined perception as a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. People can emerge with different perceptions on the same object because of three perceptual processes: selective attention, selective distortion, and selective retention. Selective attention means that a marketer has to work hard to attract consumers' notice. Selective distortion is the tendency to twist information in a way that will fit one's preconceptions. Unfortunately, there is not much a marketer can do about selective distortion.

In selective retention, people will forget much that they learn but will tend to retain information that supports their attitudes and beliefs. Because of selective retention, people are likely remember good points mentioned about a product they like and forget good points mentioned about competing products (Berelson and Steiner, 1964). A number of factors operate to shape and sometimes distort perception. These factors can reside in the perceiver, in object, or target, or in the context of the situation which the perception is made. When an individual looks at a target and attempts to interpret what he sees, his personal characteristics heavily influence the interpretation. These personal characteristics include attitudes, personality, motives, interest, past experiences, and



expectations (Robbins, 1988). Individuals cannot assimilate all they observe, so they engage into selectivity depending on the observer's interests, background, experience, and attitudes.

Quality and its Dimension

Quality is determined by a customer determination is based upon the customer's actual experience with product measured against the customer's stated requirements (Feigenbaum, 1991). It does not necessarily mean best; quality means fitness for intended purpose; it may also mean providing customers with products that consistently meet their specifications. Customers that are in businesses will define quality very clearly using specifications, standards and other measures. However, it is not just product quality that is important; quality also describes the way in which suppliers go about meeting the needs of their customers, providing the product on time, in the quantity required, correctly packaged and correctly invoiced. Perceived quality therefore is a major factor by which people make distinctions in the marketplace. Quality entails being responsive, pro-active and reactive, and about being able to meet customer's special request (Batt, 2005).

The fresh vegetables sector supply chain in the Philippines, the operation is generally characterize as spot-markets or networks, hence the transactions involves the interactions of chain actors in the market. These chain actors (farmers, assemblers, trucker-wholesalers and retailers) may assume varied perceptions about quality. In most cases, the physical quality of vegetables is given more importance while the other criteria are sometimes overlooked. In the frame of this study is to examine the perceived quality based on the selective retention perception concept (Robbin, 1988) and the descriptions



and dimensions on quality as (Gronroos, 1990) - technical and functional quality; and Parasuraman (1998) - the service quality defined.

Gronroos (1990) describes quality by differentiating it into two dimensions: technical and functional. Technical quality describes the customer's specifications. This is a physical description of the product in terms of its size; shape; color; freedom from pests and diseases; purity (in terms of its freedom from chemical contaminants, pathogenic organisms and genetically modified plants); maturity or freshness; and the manner in which the product is packed. Functional quality, on the other hand, describes the way a supplier goes about delivering the product to the customer. Fundamentally, this means being able to deliver the product when the customer wants it. By implications, it involves many inter-related activities such as production, scheduling, storage and warehousing, logistics, ordering and invoicing. Parasuraman (1998) introduced a third dimension called service quality, which describes the extra things a supplier is willing to do to retain customer's business. While the exact meaning of the term "service" varies with the nature of the product and the requirements of the buying organizations, service may include such variables as providing technical assistance, innovative suggestions, credit arrangements, support for special needs, or providing advance notice of impending price changes or shortages in supply (Hutt and Speh, 1995).

Feder and Zilberman (1985) suggest that the major constraints to the adoption of a new variety in a developing country include; the lack of credit, limited access to information, the farmer's aversion to risk, inadequate farm size, inadequate incentives (associated with land tenure), insufficient human capital, the absence of machinery to relieve labor shortages, the chaotic supply of complementary inputs, and, poorly



developed transportation infrastructure. However, in The Philippines, the availability of quality seed at planting time may also influence the demand for seed. The lack of seed often means that the farmer will be forced to plant whatever variety is available at that time (Crissman, 1989).

Definition of Terms

Producer - the one who produces the commodity

Assembler - Wholesaler - they are the one who assemble the commodity to make it in a large quantity.

Trucker - in charge of carrying the product to deliver it in the spot market

Wholesaler - refers to middleman who directly sells the commodity to retailers in a wholesale price.

Retailer - individual who market/sell the commodity directly to the consumer

Bagsakan - local term for spot market where the transactions are done and where products are being delivered

Spot market - place where products are being delivered and sold.

Abilities - this refers to the capability of the actors in the spot market in meeting the quality requirements.

Inabilities - this refers to the incapability of the chain actors in the spot market in meeting the quality requirements.

Perceived Quality - the expectation of buyers about the commodity

Dimension - parameters or indicators used in observation.



Conceptual Framework

This study was focused on the flow of potato from Baguio City, La Trinidad Benguet and to some part of Metro Manila in accordance with the different perception on quality of the actors in the spot market chains.

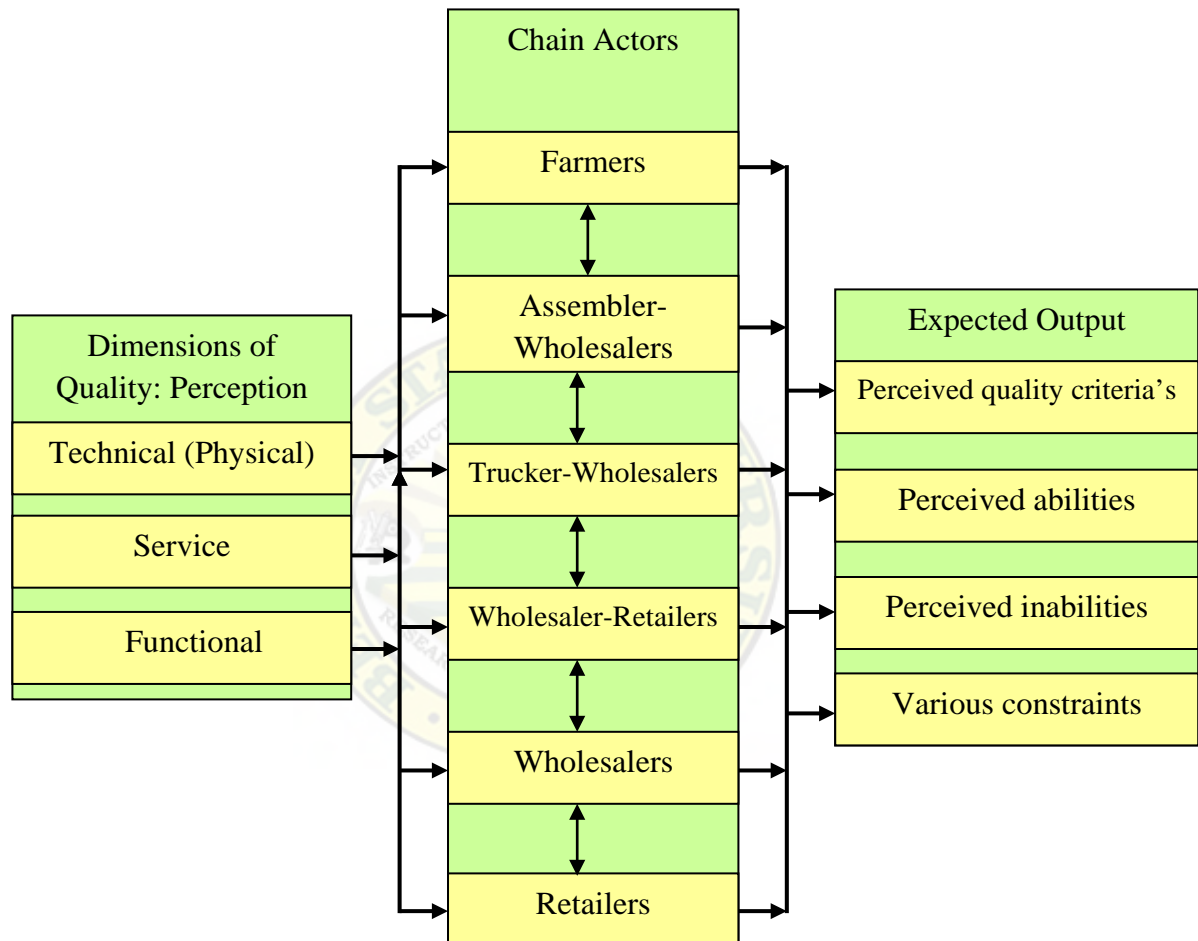


Figure 1. Conceptual framework



METHODOLOGY

Locale and Time of the Study

As earlier ascribed, the research locations followed the geographic flow of potato from the major source (production) to the major market assembly and collection, and the distribution and retail markets. The research coverage areas are focused to selected production and marketing areas.

The production group was identified and interviewed at the trading post. The primary market (assembly/collection) is concentrated in La Trinidad, Benguet. Secondary markets (distribution) are the major vegetables trading centers (commonly called “bagsakan”) in Balintawak Market in Quezon City and Urdaneta City, Pangasinan while the tertiary markets include the retailers within these trading centers and other retail market outlets like Novaliches, Nepa-Q Mart, Mega-Q Mart, and Kamuning.

The research was been conducted on November 2010 – January 2011.

Respondents of the Study

The respondents represent the major actors in the spot market chain. Specifically, the target respondent was classified into four major groups as shown below.

Table 1. Classification and type of respondents

CLASSIFICATION	TYPE OF RESPONDENTS
Production	Vegetable farmers
Assembly/Collection	Assembler-wholesalers; Financier-assembler-wholesalers
Distribution	Trucker-wholesalers; wholesalers/wholesaler-retailers
Retailing	Retailers



The production group is composed of selected farmers producing potato. The next group of respondents is the primary buyer representing the assembly/collection group consists of assembler-wholesalers and the financier-assembler-wholesalers. Most of them are operating at La Trinidad Vegetable Trading Post and in a privately owned and managed trading facility. The third group is the distributors consist of the trucker-wholesalers, wholesalers and wholesaler-retailers. The trucker-wholesaler respondents are those responsible in the transportation and distribution of vegetables to various geographic market outlets. The wholesalers and wholesaler-retailers, on the other hand, are traders in the spot markets to whom the trucker-wholesalers supply the vegetables. The last group is the retailers representing the last link in the marketing process. The retailers sell the vegetables to ultimate users or consumers.

Table 2. Distribution of sample size according to respondent groups and locations

RESPONDENTS GROUP	TOTAL SAMPLE SIZE
Farmers	43
Assemblers/Collectors	
Assembler-wholesalers	19
Financier-assembler-wholesalers	18
Distributors	
Trucker-wholesalers	12
Wholesalers	10
Wholesaler-retailers	37
Retailers	54
TOTAL	193



Data Gathering Procedure

Data collection of the study was obtained through interview schedule and observation.

Data Gathered

The data collected was the perceived quality criteria such as perceived technical/physical quality, functional quality and service quality, perceived abilities and inabilities of chain actors and the various constraints to meet the quality requirements of the potato buyers from the different markets.

Data Analysis

The data was tabulated in excell program and analyzed through the SPSS version 16. Frequency counts and percentage was used for descriptive analysis while Kruskal-Wallis for statistical test.



RESULTS AND DISCUSSION

Demographic Profile of Respondents

Table 3 presents the characteristics of the chain actors according to its age, gender, marital status, religious affiliation and educational attainment.

Age. Majority of the farmers (40%) and retailers (39%) have the ages from 21-30 and 41-50 years old respectively. However, majority from the other group of respondents ages from 31-40 years old. The results indicated that age is not a factor requisite to engage in potato trading business.

Gender. Majority financier-assembler-wholesalers (72%), retailers (83%) and wholesale-retailers (68%) are females. Therefore, the findings implied the differences in the functions performed in the spot market chains.

Marital status. Most of the retailers (78%) farmers (67%) and wholesale-retailers (78%) are married. It shows that married person engaged more in potato trading business.

Religious affiliation. Almost all retailers (87%), farmers (74%) and wholesale-retailers (73%) are Catholic. Protestant also involved farmers (14%) and wholesale-retailers (19%). It implies that Catholic is more involved in potato trading business.

Educational background. Most of the retailers (57%), farmers (42%) and wholesale-retailers (46%) are high school graduate and under graduate. Followed by retailers (19%) and farmers (30%) college graduate. Elementary graduate (28%) farmers and retailers (19%) but some of the actors finished vocational courses, wholesale-retailers (5%) and farmers (4%). Result means that actors are knowledgeable and have logistics on potato trading business.



Table 3. Demographic profile of respondents

CHARACTERISTICS	PRODUCTION FARMER		ASSEMBLY				DISTRIBUTION				RETAILING RETAILER			
			A-W		F-A-W		T-W		W		W-R			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
AGE														
20 and below	4	9	2	11	0	0	0	0	3	30	3	8	2	4
21-30	17	40	6	32	4	22	5	42	4	40	13	35	10	19
31-40	9	21	6	32	7	39	4	33	1	10	14	38	10	19
41-50	9	21	4	21	4	22	2	17	1	10	3	8	21	39
51-60	3	7	1	5	3	17	1	8	1	10	3	8	9	17
60 and above	1	2	0	0	0	0	0	0	0	0	1	3	2	4
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100
GENDER														
Male	39	91	13	68	5	28	8	67	4	40	12	32	9	17
Female	4	9	6	32	13	72	4	33	6	60	25	68	45	83
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100
MARITAL STATUS														
Single	14	33	2	11	1	6	5	42	6	60	16	43	10	19
Married	29	67	17	90	16	89	7	58	4	40	20	54	42	78
Separated	0	0	0	0	1	6	0	0	0	0	0	0	1	2
Widower	0	0	0	0	0	0	0	0	0	0	1	3	1	2
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100
RELIGIOUS AFILLIATION														
Catholic	32	74	14	74	12	67	12	100	9	90	27	73	47	87
Protestant	6	14	3	16	4	22	0	0	1	10	7	19	6	11
Others	5	12	2	11	2	11	0	0	0	0	3	8	1	2
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100
EDUCATIONAL BACKGROUND														
Elementary	12	28	1	5	2	11	2	17	1	10	4	11	10	19
High School	18	42	9	47	8	44	4	33	3	30	17	46	31	57
College	13	30	9	47	8	44	6	50	5	50	14	38	11	20
Vocational	0	0	0	0	0	0	0	0	1	10	2	5	2	4
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100



Number of Years Engaged in Business

Table 4 shows the number of years the actors engaged in potato trading business. Most farmers (37%) have been engaged in potato trading business for the period 1-5 years and retailers for more than 5 years. It implies that actors need more experienced to have adequate logistics in potato trading business.

Table 4. Number of years engaged in business

YEARS	PRODUCTION FARMER		ASSEMBLY				DISTRIBUTION				RETAILING RETAILER			
			A-W		F-A-W		T-W		W		W-R			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Below 1 year	0	0	1	5	0	0	0	0	4	40	5	14	2	4
1-5 years	16	37	8	42	6	33	4	33	5	50	10	27	15	28
6-10 years	5	12	6	32	3	17	3	25	1	10	11	30	9	17
11-15 years	5	12	3	16	7	39	4	33	0	0	5	14	5	9
16-20 years	9	21	0	0	0	0	0	0	0	0	1	3	11	20
21-25 years	2	5	1	5	2	11	1	8	0	0	1	3	2	4
26-30 years	2	5	0	0	0	0	0	0	0	0	1	3	9	17
31 and above	4	9	0	0	0	0	0	0	0	0	3	8	1	2
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100



Organizational Affiliation of the Chain Actors

Table 5 shows the organizational affiliation of the chain actors. Joining into such organization is very much helpful. Organizations can help you if you have problem but you need also to help your organization for it will grow to help more. Every member must help each other.

Majority of the retailers (87%) and farmers (91%) were not affiliated to any organization. Some of the retailers (9%) and trucker-wholesalers (33%) have their organization like cooperative. It implies that actors are not willing to join or there is no established organization in their place

Potato Spot Market Chain

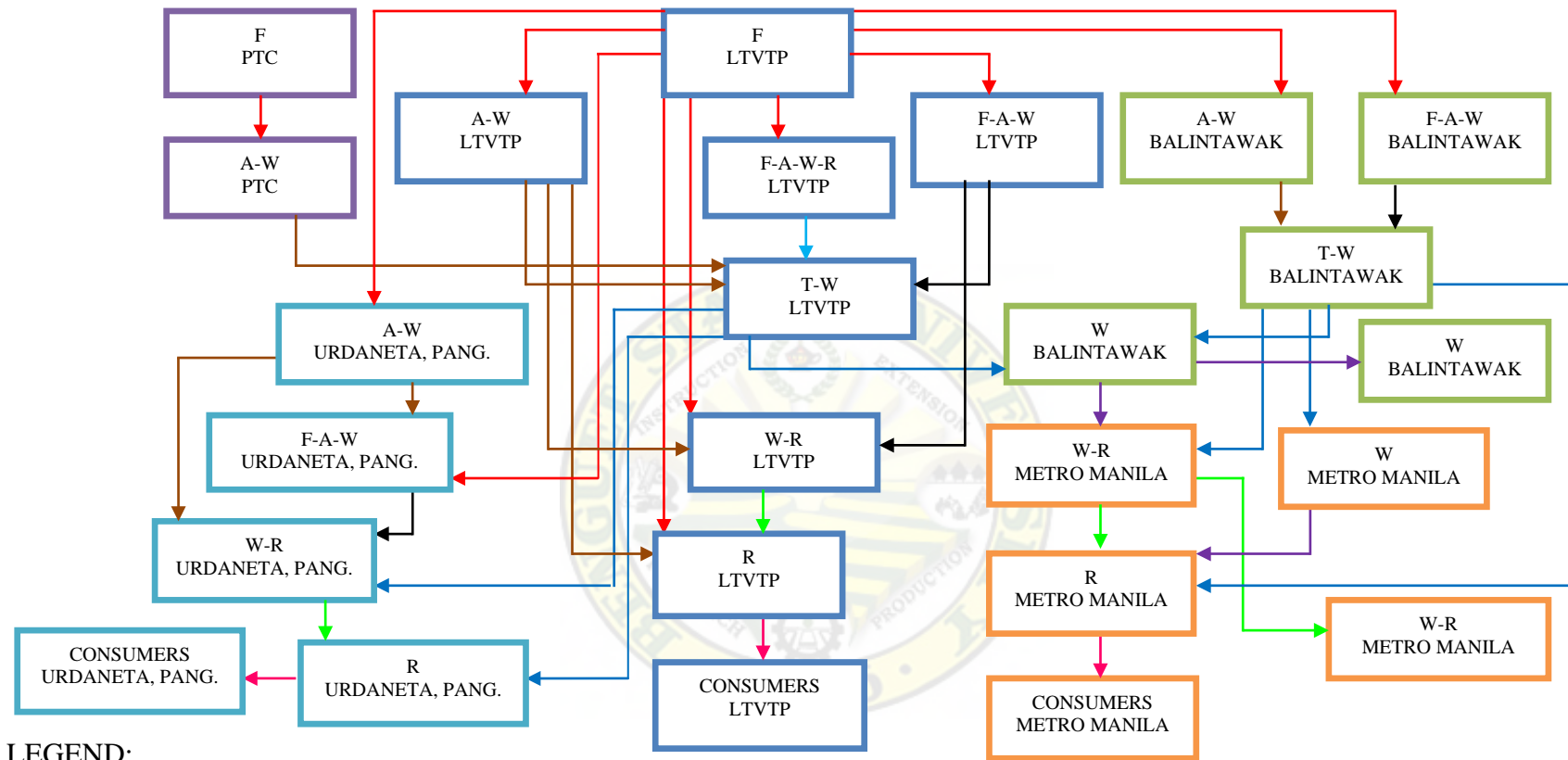
Figure 2 present the different buyer of potatoes from the producer to the end user. It shows the product flow from the producers as it passes through the different market intermediaries.

Majority of the buyers assembler-wholesalers where in they buy large quantity of potato bought then resell it to the other chain actors through wholesale.

Table 5. Organizational affiliation of the chain actors

ORGANIZATION	PRODUCTION		ASSEMBLY				DISTRIBUTION				RETAILING			
	FARMER		A-W		F-A-W		T-W		W		W-R		RETAILER	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Farmer's Organization	0	0	0	0	0	0	0	0	2	20	0	0	0	0
Cooperative	1	2	2	11	4	22	3	25	0	0	6	16	2	4
Others	3	7	3	16	3	17	4	33	0	0	3	8	5	9
None	39	91	14	74	11	61	5	42	8	80	28	76	47	87
TOTAL	43	100	19	100	18	100	12	100	10	100	37	100	54	100





LEGEND:

- F (Farmer)
- F-A-W-R (Financier-Assembler-Wholesaler-Retailer)
- W (Wholesaler)
- LTVTP (La Trinidad Vegetable Trading Post)
- PTC (Private Trading Center)
- Urdaneta, Pangasinan
- A-W (Assembler-Wholesaler)
- W-R (Wholesaler-Retailer)
- Metro Manila
- Balintawak
- F-A-W (Financier- Assembler-Wholesaler)
- T-W (Trucker-Wholesaler)
- R (Retailer)

Figure 2. Spot market chain and location for potato

Almost of the retailer in Metro Manila buy their potatoes to the wholesale-retailers in Balintawak for the price is lower than to the other markets. Consumer buys potato to retailers, the buy only what they can consumed in 1-3 days for vegetable are easily being wilt due to the hot temperature. Even if the consumer wants to buy many to avail discount but they can't for this reason: lack of cold storage equipment like refrigerator/freezer and too high temperature.

Most of the farmer sold their potato in La Trinidad Vegetable Trading Post (LTVLP). LTVLP is where most of the chain actors meet. It is the trading market of farmers in Benguet. Chain actors come here to buy different vegetable at low price then distribute it to the different markets of Metro Manila with high price. Most of the wholesaler-retailer sells their potato in Nepa Q followed by retailers in Balintawak and Nepa Q. Balintawak is one trading market in Metro Manila where other chain actors buy potato and sell it to the other market.

Perceived Physical Quality of Potatoes
by Actors in the Spot Market Chains.

Table 6a shows the physical quality as perceived by buyers in choosing/buying of potatoes, more specific to physical description of the product.

Majority of the trucker-wholesalers (58%) strongly agree that the potato procured and sell are free from chemical residues. Most farmers (30%) have doubt and retailers (11%) strongly disagree for it cannot easily determine if there are chemical residues.

Almost of the wholesalers (58%) strongly agree that the potatoes are free from pest and diseases but wholesaler (10%) disagree on it.



Table 6a. Perceived Physical Quality of Potatoes by Actors in the Spot Market Chains.

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. Potatoes are free from chemical residue.	2	5	2	5	13	30	11	26	15	35	4
2. Potatoes are free from pests and diseases.	0	0	4	9	8	19	12	28	19	44	4
3. Variety, color and size of potatoes are specified.	1	2	4	9	6	14	8	19	24	56	4
4. Potatoes are free from physical injury.	0	0	1	2	14	33	12	28	16	37	4
5. Potatoes are fresh, clean and fully trimmed.	0	0	2	5	8	19	8	19	25	58	4
6. Potatoes are firm and crunchy.	0	0	0	0	6	14	13	30	24	56	4
B. ASSEMBLER-WHOLESALE											
1. Potatoes are free from chemical residue.	1	5	1	5	3	16	6	32	8	42	4
2. Potatoes are free from pests and diseases.	0	0	1	5	2	11	3	16	13	68	5
3. Variety, color and size of potatoes are specified.	0	0	1	5	0	0	5	26	13	68	5
4. Potatoes are free from physical injury.	0	0	0	0	0	0	8	42	11	58	5
5. Potatoes are fresh, clean and fully trimmed.	0	0	0	0	2	11	5	26	12	63	5
6. Potatoes are firm and crunchy.	0	0	0	0	0	0	6	32	13	68	5
C. FINANCIER-ASSEMBLER-WHOLESALE											
1. Potatoes are free from chemical residue.	1	6	3	17	5	28	3	17	6	33	4
2. Potatoes are free from pests and diseases.	1	6	2	11	5	28	3	17	7	39	4
3. Variety, color and size of potatoes are specified.	0	0	1	6	4	22	6	33	7	39	4
4. Potatoes are free from physical injury.	0	0	1	6	8	44	4	22	5	28	4
5. Potatoes are fresh, clean and fully trimmed.	0	0	2	11	3	17	5	28	8	44	4
6. Potatoes are firm and crunchy.	0	0	0	0	4	22	4	22	10	56	4

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



Table 6a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
D. TRUCKER-WHOLESALE											
1. Potatoes are free from chemical residue.	1	8	0	0	2	17	2	17	7	58	4
2. Potatoes are free from pests and diseases.	0	0	0	0	1	8	3	25	8	67	5
3. Variety, color and size of potatoes are specified.	1	8	0	0	2	17	1	8	8	67	4
4. Potatoes are free from physical injury.	1	8	0	0	1	8	2	17	8	67	4
5. Potatoes are fresh, clean and fully trimmed.	0	0	1	8	0	0	1	8	10	83	5
6. Potatoes are firm and crunchy.	0	0	0	0	2	17	0	0	10	83	5
6. Potatoes are firm and crunchy.	0	0	0	0	3	30	2	20	5	50	47
E. WHOLESALE-RETAILER											
1. Potatoes are free from chemical residue.	2	5	1	3	9	24	10	27	15	41	4
2. Potatoes are free from pests and diseases.	1	3	1	3	4	11	11	30	20	54	4
3. Variety, color and size of potatoes are specified.	1	3	0	0	2	5	12	32	22	60	5
4. Potatoes are free from physical injury.	1	3	3	8	5	14	13	35	15	41	4
5. Potatoes are fresh, clean and fully trimmed.	1	3	1	3	3	8	10	27	22	60	4
6. Potatoes are firm and crunchy.	0	0	0	0	4	11	17	46	16	43	4
F. RETAILER											
1. Potatoes are free from chemical residue.	6	11	6	11	6	11	13	24	23	43	4
2. Potatoes are free from pests and diseases.	1	2	9	17	4	7	9	17	31	57	4
3. Variety, color and size of potatoes are specified.	6	11	1	2	8	15	13	24	26	48	4
4. Potatoes are free from physical injury.	3	6	4	7	7	13	13	24	27	50	4
5. Potatoes are fresh, clean and fully trimmed.	1	2	4	7	2	4	11	20	36	67	4
6. Potatoes are firm and crunchy.	1	2	3	6	3	6	12	22	35	6	4

While few financier-assembler-wholesalers are undecided for some supplier are mixing up diseased potato most especially in the middle portion of packed potatoes.



Assembler-wholesalers strongly agree that the potatoes have specified according to its variety, color and size. Some wholesalers have doubt while retailers (11%) disagree for the reason that the potato they have procured contained different sizes.

Trucker-wholesalers said that the potatoes they sell are free from injury. But some financier-assembler-wholesaler cannot decide on it for some injured potato cannot be seen so it was mixed. Wholesaler (10%), wholesaler-retailer and retailer strongly disagree on it.

Majority of the trucker-wholesalers (83%) strongly agree that the potato is fresh for its freshness it is firm and crunchy. Some wholesaler (30%) undecided if the potatoes are firm and crunchy for some potatoes have been displayed in the sun so it is not that crunchy. One retailer doesn't agree with it.

Table 6b on the overall, chain actors moderately agree to all the statements about the perceived physical quality. Most especially chain actors believed that the potato being produced/procured are clean, fully trimmed and fresh for its freshness the potatoes are firm and crunchy. Before the chain actors procure potato they select it with good quality that they know it will satisfy the perception of the buyer. Statistical test was done purposely to validate the descriptive results.

Most of the chain actors prioritized that the potato they procure and sell has been specified according to variety, color and size for before buying they choose the right potato that suits the perceived physical quality of the buyer. All the responses of the chain actors have no significant difference wherein the chain actors have the same perceived physical quality.



Table 6b. Physical quality statistical means and test statistics

PRODUCT QUALITY STATEMENTS	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. Potatoes are free from chemical residue.	3.88	2.45	3	0.484
2. Potatoes are free from pests and diseases.	4.16	1.22	3	0.749
3. Variety, color and size of potatoes are specified.	4.21	3.85	3	0.278
4. Potatoes are free from physical injury.	4.05	1.55	3	0.670
5. Potatoes are fresh, clean and fully trimmed.	4.36	1.27	3	0.737
6. Potatoes are firm and crunchy.	4.41	0.56	3	0.905
respondents group	2.64			

Scale used: 1-1.8- strongly disagree
 1.9-2.7- moderately disagree
 2.8-3.5- undecided
 3.6-4.3- moderately agree
 4.4-5- strongly agree

The findings confirm the Gronroos (1990) Technical quality describes the customer's specifications. This is a physical description of the product in terms of its size; shape; color and the manner in which the product is packed.

Percieved Service Quality of Potato by actors in the Spot Market Chains

Table 7a shows the service quality of potato as perceived by actors as basis of buyers in choosing/buying. Service quality is the additional requirement a supplier is willing to do to retain customer business.

Majority of the trucker-wholesalers (42%) strongly agree that they extend credit term to their buyer most especially to their regular customer. Few financier-assembler-wholesalers (28%) are undecided for some of their buyer will not pay it anymore and some wholesalers disagree to extend credit terms.



Table 7a. Percieved Service Quality of Potato by actors in the Spot Market Chains

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. Supplier (seller) extends credit term to buyers of potatoes.	11	26	9	21	10	23	5	12	8	19	3
2. Supplier has an outstanding loan/cash advance from the buyer.	13	30	7	16	12	28	3	7	8	19	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	6	14	10	23	6	14	8	19	13	30	3
4. Supplier exerts effort to produce/procure potatoes ordered.	2	5	7	16	10	2	7	16	17	40	4
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	10	23	9	21	9	21	11	26	4	9	3
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	3	7	19	44	10	23	9	21	2	5	3
B. ASSEMBLER-WHOLESALE											
1. Supplier (seller) extends credit term to buyers of potatoes.	4	21	2	11	2	11	7	37	4	21	3
2. Supplier has an outstanding loan/cash advance from the buyer.	4	21	3	16	3	16	7	37	2	11	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	0	0	3	16	1	5	8	42	7	37	4
4. Supplier exerts effort to produce/procure potatoes ordered.	0	0	1	5	6	32	6	32	6	32	4
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	0	0	3	16	8	42	5	26	3	16	3
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	1	6	2	11	7	37	5	26	4	21	4

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



Table 7a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. FINANCIER-ASSEMBLER-WHOLESALE											
1. Supplier (seller) extends credit term to buyers of potatoes.	4	22	2	11	5	28	2	11	5	28	3
2. Supplier has an outstanding loan/cash advance from the buyer.	7	39	1	6	4	22	3	17	3	17	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	1	6	3	17	4	22	1	6	9	50	4
4. Supplier exerts effort to produce/procure potatoes ordered.	1	6	3	17	2	11	4	22	8	44	4
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	2	11	1	6	5	28	5	28	5	28	4
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	2	11	2	11	2	11	8	44	4	22	4
D. TRUCKER-WHOLESALE											
1. Supplier (seller) extends credit term to buyers of potatoes.	2	17	2	17	2	17	1	8	5	42	3
2. Supplier has an outstanding loan/cash advance from the buyer.	3	25	3	25	1	8	4	33	1	8	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	1	8	1	8	0	0	3	25	7	58	4
4. Supplier exerts effort to produce/procure potatoes ordered.	0	0	0	0	1	8	1	8	10	83	5
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	3	25	0	0	1	8	2	17	6	50	4
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	0	0	1	8	3	25	4	33	4	33	4



Table 7a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
E. WHOLESALER											
1. Supplier (seller) extends credit term to buyers of potatoes.	3	30	2	20	2	20	1	10	2	20	3
2. Supplier has an outstanding loan/cash advance from the buyer.	4	40	4	40	0	0	1	10	1	10	2
3. Supplier gives notice to the buyers about supply shortage and the price changes.	2	20	1	10	3	30	1	10	3	30	3
4. Supplier exerts effort to produce/procure potatoes ordered.	1	10	0	0	1	10	1	10	7	70	4
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	3	30	0	0	2	20	3	30	2	20	3
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	2	20	2	20	3	30	2	20	1	10	3
F. WHOLESALER-RETAILER											
1. Supplier (seller) extends credit term to buyers of potatoes.	3	8	4	11	5	14	11	30	14	38	4
2. Supplier has an outstanding loan/cash advance from the buyer.	8	22	6	16	7	19	8	22	8	22	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	2	5	4	11	3	8	13	35	15	41	4
4. Supplier exerts effort to produce/procure potatoes ordered.	1	3	1	3	8	22	8	22	19	51	4
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	5	14	2	5	10	27	12	32	8	22	3
6. Supplier has adequate logistics in trading the potatoes.	1	3	8	22	10	27	15	45	3	8	4



Table 7a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
G. RETAILER											
1. Supplier (seller) extends credit term to buyers of potatoes.	15	28	5	9	8	15	16	30	10	19	3
2. Supplier has an outstanding loan/cash advance from the buyer.	21	39	6	11	12	22	10	19	5	9	3
3. Supplier gives notice to the buyers about supply shortage and the price changes.	14	26	8	15	7	13	11	20	14	26	3
4. Supplier exerts effort to produce/procure potatoes ordered.	13	24	4	7	7	13	13	24	17	32	3
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	25	46	5	9	6	11	10	19	8	15	3
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	14	26	16	30	11	20	9	17	4	7	3

Many Wholesale-retailers (22%) strongly agree that they have an outstanding loan/cash advance from the buyer but some farmers are undecided on it and wholesalers (40%) strongly disagree that they have an outstanding cash/loan advanced from the buyer.

Most of the trucker-wholesalers (50%) strongly agree that the supplier should give notice to the buyers about supply shortage and price changes or anything that might affect the said product. Few wholesalers (30%) don't know if their supplier will give any notice or not. Majority of the retailers (26%) strongly disagree for the reason that they don't know if there is any changes.

Almost all of the Trucker-wholesalers (83%) strongly agree that the supplier exert effort to produce/procure ordered potato to have many buyers and to have a good



relationship. Some of the assembler-wholesalers (32%) cannot decide and most of the retailer doesn't agree on it.

Almost all of wholesalers (50%) strongly agree that supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes and majority of the assembler-wholesalers (42%) cannot decide if suppliers will extend credit. Majority of the retailers strongly disagree on it for they buy only low quantity of potato.

Majority of trucker-wholesalers (33%) strongly agree that the supplier has adequate logistics most likely on their facilities or equipments. Assembler-wholesalers (37%) cannot decide if they have the adequate logistics in trading potato but most of the retailer disagree that they have appropriate facility/equipments.

Table 7b All the chain actors are undecided to all the statements about their perceived service quality. Chain actors cannot decide if their supplier has adequate logistics (facilities/equipments and workforce) in trading potatoes. Also if their supplier are willing to exert effort like “comboy” and packing for they will packed and deliver the potatoes procured if they will be given extra tips also if they place to be delivered is near. The chain actors have significant difference that the supplier gives notice about supply and demand if the price of potato will changed; does the supplier exerting efforts to fulfill the orders of their buyers and will extend support services of the ordered potato by delivering and packing. Most of all, the supplier has the proper facilities/equipments and enough workforce in trading the potatoes.

Findings confirmed the Parasuraman (1998) service includes providing technical assistance, support for special needs, or providing advance notice of impending price changes or shortages in supply.



Table 7b. Service quality statistical mean and test statistics

SERVICE QUALITY STATEMENT	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. Supplier (seller) extends credit term to buyers of potatoes.	3.16	6.18	3	0.103
2. Supplier has an outstanding loan/cash advance from the buyer.	2.72	1.61	3	0.657
3. Supplier gives notice to the buyers about supply shortage and the price changes.	3.53	9.93	3	0.019*
4. Supplier exerts effort to produce/procure potatoes ordered.	3.79	16.97	3	0.001*
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of potatoes.	3.04	14.73	3	0.002*
6. Supplier has adequate logistics (facilities, equipments, and workforce) in trading the potatoes.	3.03	20.31	3	0.000**
respondents group	2.64			

Scale used: 1-1.8- strongly disagree
 1.9-2.7- moderately disagree
 2.8-3.5- undecided
 3.6-4.3- moderately agree
 4.4-5- strongly agree

*significant
 **highly significant

Perceived Functional Quality of Potato by Actors in the Spot Market Chain

Table 8a shows the functional quality perceived by actors as basis of buyers in choosing/buying potato. Functional quality is the process of delivering the product to customer.

Majority of the trucker-wholesalers (50%) strongly agree that they adhere to production/procurement/delivery targets but some of the assembler-wholesalers are undecided if they are adhering to the targets. Some of the farmers said that they cannot really fulfill the production targets.

Trucker-wholesalers are classifying/grading the potatoes properly to have a good business but two trucker-wholesalers disagree with it and some of the financier-



Table 8a. Percieved functional quality of potato by actors in the spot market chain

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. Supplier (seller) adheres to production/procurement/delivery targets.	6	14	8	19	9	21	13	30	7	16	3
2. Supplier classifies/grades the potatoes properly.	7	16	5	12	10	23	7	16	14	33	3
3. Supplier accurately weighed and packed the potatoes.	9	21	5	12	9	21	5	12	15	35	3
4. Supplier has adequate supply of potatoes when the buyers want it.	1	2	13	30	19	44	6	14	4	9	3
5. Supplier accepts orders and delivers the potatoes when needed.	13	30	9	21	7	16	8	19	6	14	3
6. Supplier is flexible in pricing the potatoes and accepts payment term.	4	9	9	21	16	37	11	26	3	7	3
B. ASSEMBLER-WHOLESALE											
1. Supplier (seller) adheres to production/procurement/delivery targets.	1	5	0	0	7	37	8	42	3	16	4
2. Supplier classifies/grades the potatoes properly.	0	0	3	16	5	26	4	21	7	37	4
3. Supplier accurately weighed and packed the potatoes.	0	0	1	5	4	21	7	37	7	37	4
4. Supplier has adequate supply of potatoes when the buyers want it.	0	0	2	11	3	16	8	42	6	32	4
5. Supplier accepts orders and delivers the potatoes when needed.	0	0	2	11	3	16	7	37	7	37	4
6. Supplier is flexible in pricing the potatoes and accepts payment term.	0	0	1	5	3	16	8	42	7	37	4

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



Table 8a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. FINANCIER-ASSEMBLER-WHOLESALE											
1. Supplier (seller) adheres to production/procurement/delivery targets.	0	0	3	17	2	11	7	39	6	33	4
2. Supplier classifies/grades the potatoes properly.	1	6	1	6	5	28	6	33	5	28	4
3. Supplier accurately weighed and packed the potatoes.	0	0	1	6	5	28	5	28	7	39	4
4. Supplier has adequate supply of potatoes when the buyers want it.	0	0	2	11	3	17	5	28	8	44	4
5. Supplier accepts orders and delivers the potatoes when needed.	1	6	1	6	4	22	3	17	9	50	4
6. Supplier is flexible in pricing the potatoes and accepts payment term.	1	6	0	0	5	28	5	28	7	39	4
D. TRUCKER-WHOLESALE											
1. Supplier (seller) adheres to production/procurement/delivery targets.	0	0	0	0	1	8	5	42	6	50	4
2. Supplier classifies/grades the potatoes properly.	2	17	0	0	0	0	2	12	8	67	4
3. Supplier accurately weighed and packed the potatoes.	0	0	0	0	1	8	4	33	7	58	5
4. Supplier has adequate supply of potatoes when the buyers want it.	0	0	0	0	1	8	5	42	6	50	4
5. Supplier accepts orders and delivers the potatoes when needed.	0	0	0	0	2	17	3	25	7	58	4
6. Supplier is flexible in pricing the potatoes and accepts payment term.	0	0	0	0	0	0	4	33	8	67	5
E. WHOLESALE											
1. Supplier (seller) adheres to production/procurement/delivery targets.	1	10	0	0	1	10	5	50	3	30	4
2. Supplier classifies/grades the potatoes properly.	1	10	1	10	1	10	2	20	5	50	4
3. Supplier accurately weighed and packed the potatoes.	1	10	0	0	2	20	2	20	5	50	4
4. Supplier has adequate supply of potatoes when the buyers want it.	0	0	0	0	3	30	5	50	2	20	4
5. Supplier accepts orders and delivers the potatoes when needed.	0	0	0	0	2	20	2	20	6	60	4
6. Supplier is flexible in pricing the potatoes and accepts payment term.	0	0	0	0	4	40	2	20	4	40	4



Table 8a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.	
	N	%	N	%	N	%	N	%	N	%		
F. WHOLESALER-RETAILER												
1. Supplier (seller) adheres to production/procurement/delivery targets.	0	0	3	8	6	16	14	38	14	38	4	
2. Supplier classifies/grades the potatoes properly.	3	8	2	5	4	11	15	41	13	35	4	
3. Supplier accurately weighed and packed the potatoes.	2	5	1	3	4	11	13	35	17	46	4	
4. Supplier has adequate supply of potatoes when the buyers want it.	0	0	1	3	8	22	12	32	16	43	4	
5. Supplier accepts orders and delivers the potatoes when needed.	1	3	0	0	8	22	14	38	14	38	4	
6. Supplier is flexible in pricing the potatoes and accepts payment term.	1	3	0	0	6	16	15	41	15	41	4	
G. RETAILER												
1. Supplier (seller) adheres to production/procurement/delivery targets.	5	9	9	17	10	19	21	39	9	17	4	
2. Supplier classifies/grades the potatoes properly.	3	6	5	9	11	20	20	37	15	28	4	
3. Supplier accurately weighed and packed the potatoes.	2	4	6	11	6	11	19	35	21	39	4	
4. Supplier has adequate supply of potatoes when the buyers want it.	1	2	5	9	15	28	19	35	14	26	4	
5. Supplier accepts orders and delivers the potatoes when needed.	5	9	8	15	12	22	15	28	14	26	4	
6. Supplier is flexible in pricing the potatoes and accepts payment term.	3	6	4	7	9	17	18	33	20	37	3	

assembler-wholesalers have doubt in it for what they procure is what they sell and they are not repacking the procured potatoes.

Majority of the trucker-wholesalers (58%) strongly agree that they accurately weighed and packed the potatoes. Few financier-assembler-wholesalers don't know if the supplier really weighed and packed the potatoes accurately. Nine farmers don't agree for some suppliers don't weigh properly to gain more income.



Majority of the trucker-wholesaler (50%) strongly agree that supplier has adequate supply of potato when buyers want. Almost all farmers are undecided for they are dependent on the size of their farm. One retailer disagrees for it can't provide the proper supply of potato.

The wholesalers (60%) strongly agree that the supplier should accept orders and deliver it when needed for buyer don't have time to purchase so they prefer to order. Twelve retailers cannot decide if they will accept orders for retailers don't have enough capital to acquire large quantity. Farmers disagree for their supplier will procure their potato.

Majority of the retailer (37%) strongly agree that they are flexible in pricing the potatoes, both of the seller and buyer will not incur loss. Some wholesaler cannot decide whether the supplier is flexible or fair enough in pricing the potato for sometimes they price it higher than the exact price also some famers disagree for their buyers will dictate the price.

Table 8b shows that the chain actors moderately agree on the process of the supplier in delivering the potato to the buyer. The chain actors believed that their supplier weighed and packed properly the potatoes they are not cheating in such a way that they reduced the desired weight. The price is flexible in the case that both buyer and seller will not incur loss. The supplier accepts payments terms to their regular buyer or customer. The responses of the chain actors have significant difference in the following statements: the supplier adhere production/procurement/delivery targets, the potatoes are weighed and packed properly with a negotiated price. The supplier has adequate supply so they can fulfill the orders and deliver it when needed by buyer.



Table 8b. Funtional quality statistical mean and test statistics

FUNCTIONAL QUALITY STATEMENT	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. Supplier (seller) adheres to production/procurement/delivery targets.	3.62	17.33	3	0.001*
2. Supplier classifies/grades the potatoes properly.	3.72	4.89	3	0.180
3. Supplier accurately weighed and packed the potatoes.	3.88	8.53	3	0.036*
4. Supplier has adequate supply of potatoes when the buyers want it.	3.76	34.46	3	0.000**
5. Supplier accepts orders and delivers the potatoes when needed.	3.61	33.92	3	0.000**
6. Supplier is flexible in pricing the potatoes and accepts payment term.	3.82	34.45	3	0.000**
respondents group	2.64			

Scale used: 1-1.8- strongly disagree
 1.9-2.7- moderately disagree
 2.8-3.5- undecided
 3.6-4.3- moderately agree
 4.4-5- strongly agree

*significant
 **highly significant

Findings supported the Gronroos (1990) functional quality, the way a supplier goes about delivering the product to the customer, being able to deliver the product when the customer wants it. It involves many inter-related activities such as production, scheduling, storage and warehousing, logistics, ordering and invoicing.

Percieved Abilities of Actors to Meet the Buyers Quality Requirements of Potato.

Table 9a present the perceptions of actors about their abilities to meet the criteria used by market intermediaries in purchasing potato. Abilities refer to the capabilities of the actors in the spot market in meeting quality requirement.

Most assembler-wholesalers (58%) strongly agree that they appropriately classify, weighed and packed the potatoes they sell but some financier-assembler-wholesalers are



Table 9a. Percieved abilities of actors to meet the buyers quality requirements of potato.

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. I appropriately classified, weighed and packed the potatoes I sold.	8	19	4	9	8	19	7	16	16	37	3
2. I sell/buy potatoes at a negotiated price.	5	12	3	7	15	35	13	30	7	16	3
3. I deliver when required.	13	30	6	14	15	35	6	14	3	7	3
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	8	19	9	21	4	9	14	33	8	19	3
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	9	21	4	9	8	19	12	28	10	23	3
6. I buy potatoes from sellers with good reputation.	9	21	8	19	8	19	11	26	7	16	3
7. I buy adequate volume of potatoes to meet immediate demand.	10	23	9	21	14	33	5	12	5	12	3
8. I have adequate logistics to buy potatoes.	7	16	15	35	13	30	5	12	3	7	3
B. ASSEMBLER-WHOLESALE											
1. I appropriately classified, weighed and packed the potatoes I sold.	1	5	3	16	2	11	2	11	11	58	4
2. I sell/buy potatoes at a negotiated price.	0	0	0	0	4	21	6	32	9	47	4
3. I deliver when required.	0	0	3	16	5	26	3	16	8	42	4
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	1	5	4	21	2	11	3	16	9	47	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	0	0	3	16	0	0	2	11	14	74	4
6. I buy potatoes from sellers with good reputation.	0	0	0	0	6	32	3	16	10	53	4
7. I buy adequate volume of potatoes to meet immediate demand.	0	0	0	0	3	16	9	47	7	37	4
8. I have adequate logistics to buy potatoes.	0	0	3	16	3	16	9	47	4	21	4
Numerical value and descriptive equivalent: 1-strongly disagree 2- moderately disagree 3- undecided 4- moderately agree 5- strongly disagree											



Table 9a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. FINANCIER-ASSEMBLER-WHOLESALE											
1. I appropriately classified, weighed and packed the potatoes I sold.	0	0	2	11	5	28	3	17	8	44	4
2. I sell/buy potatoes at a negotiated price.	0	0	1	6	3	17	6	33	8	44	4
3. I deliver when required.	1	6	2	11	4	22	6	33	5	28	4
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	1	6	2	11	6	33	3	17	6	33	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	1	6	1	6	6	33	4	22	6	33	4
6. I buy potatoes from sellers with good reputation.	0	0	5	28	4	22	5	28	4	22	3
7. I buy adequate volume of potatoes to meet immediate demand.	0	0	3	17	3	17	5	28	7	39	4
8. I have adequate logistics to buy potatoes.	0	0	3	17	3	17	10	56	2	11	4
D. TRUCKER-WHOLESALE											
1. I appropriately classified, weighed and packed the potatoes I sold.	0	0	0	0	1	8	5	42	6	50	4
2. I sell/buy potatoes at a negotiated price.	0	0	0	0	1	8	5	42	6	50	4
3. I deliver when required.	3	25	0	0	2	17	3	25	4	33	3
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	0	0	1	8	3	25	2	17	6	50	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	0	0	0	0	1	8	2	17	9	75	5
6. I buy potatoes from sellers with good reputation.	0	0	0	0	4	33	4	33	4	33	4
7. I buy adequate volume of potatoes to meet immediate demand.	0	0	0	0	3	25	3	25	6	50	4
8. I have adequate logistics to buy potatoes.	0	0	1	8	2	17	6	50	3	25	4



Table 9a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
E. WHOLESALER											
1. I appropriately classified, weighed and packed the potatoes I sold.	3	30	0	0	0	0	2	20	5	50	4
2. I sell/buy potatoes at a negotiated price.	0	0	0	0	2	20	2	20	6	60	4
3. I deliver when required.	1	10	1	10	2	20	1	10	5	50	4
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	0	0	0	0	2	20	4	40	4	40	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	1	10	0	0	2	20	1	10	6	60	4
6. I buy potatoes from sellers with good reputation.	1	10	0	0	2	20	4	40	3	30	4
7. I buy adequate volume of potatoes to meet immediate demand.	0	0	1	10	2	20	4	40	3	30	4
8. I have adequate logistics to buy potatoes.	1	10	0	0	5	50	3	30	1	10	3
F. WHOLESALE-RETAILER											
1. I appropriately classified, weighed and packed the potatoes I sold.	0	0	3	8	4	11	11	30	19	51	4
2. I sell/buy potatoes at a negotiated price.	0	0	1	3	3	8	7	19	26	70	5
3. I deliver when required.	6	16	1	3	10	27	7	19	13	35	4
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	0	0	1	3	5	14	17	46	14	38	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	0	0	0	0	2	5	18	49	17	46	4
6. I buy potatoes from sellers with good reputation.	0	0	1	3	11	30	10	27	15	41	4
7. I buy adequate volume of potatoes to meet immediate demand.	0	0	1	3	6	16	12	32	18	49	4
8. I have adequate logistics to buy potatoes.	3	8	4	11	8	22	16	43	6	16	4



Table 9a. Continued . . .

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
G. RETAILER											
1. I appropriately classified, weighed and packed the potatoes I sold.	1	2	5	9	7	13	14	26	27	50	4
2. I sell/buy potatoes at a negotiated price.	1	2	2	4	6	11	25	46	20	37	4
3. I deliver when required.	16	30	7	13	11	20	13	24	7	13	3
4. I buy potatoes free from pest and diseases, physical injury and chemical residues.	2	4	9	17	8	15	14	26	21	39	4
5. I usually buy potatoes which are fresh, clean, firm/crunchy and fully trimmed.	1	2	5	9	10	19	16	30	22	41	4
6. I buy potatoes from sellers with good reputation.	1	2	9	17	12	22	17	32	15	28	4
7. I buy adequate volume of potatoes to meet immediate demand.	3	6	10	19	12	22	17	32	12	22	4
8. I have adequate logistics to buy potatoes.	15	28	13	24	12	22	10	19	4	7	3

undecided if they are doing it properly. Three wholesalers are disagrees for the potato they procured has been packed and they have no time to repacked and classify it again.

Almost all wholesaler-retailers (70%) strongly agree that they buy and sell potatoes at a negotiated price or market prevailing price but the farmers cannot decide and disagreed about their price for the seller and buyer will decide.

Majority of the wholesalers delivers the bought potato when required or to as requested by the buyer. Farmers go directly to the trading market and some farmers wait for their buyers at to their farm.

Assembler-wholesalers procure and sell potatoes which are free from pest and diseases, physical injury and chemical residues. Six financier-assembler-wholesalers have doubt to other suppliers for they mix injured potato which is not unseen directly and few farmers disagree for sometimes they cannot avoid that they have packed injured potatoes.



Assembler-wholesalers (74%) strongly agree that the potato they buy and sell are fresh, clean, firm/crunchy and fully trimmed. Some financier-assembler-wholesalers cannot decide if the potato they procure is fresh or it has been stock for few many days. Other farmers don't clean properly the potatoes they produced.

Majority of the assembler-wholesalers procure potato to their supplier that is reputable enough to change any damage potato if possible and some assembler-wholesalers have doubt to their supplier. Some farmers disagree about their financier or supplier if they are reputable.

Trucker-wholesalers mostly buy adequate potatoes to meet the immediate demand of their buyer. Farmers do only depend on what they have harvested and undecided if they can produce what is dictated by the demand and some of the farmers disagree that they can produce adequate volume of potato.

Trucker-wholesalers strongly agree that they have the logistics to procure potato most especially based on their perceptions. Some financier-assembler-wholesaler has doubt to their selves if they have knowledge on their business. Majority of the retailer don't have the logistics in buying potatoes.

Table 9b overall chain actors are moderately agree that the chain actors appropriately classify, weighed and packed the potatoes they sold. Chain actors are fair enough to the buyer to avoid misunderstanding. Chain actors buy fresh, firm, crunchy and fully trimmed potatoes. The responses of the chain actors have significant difference. Chain actors buy/sell fresh potatoes from reputable supplier that is free from any damages and at a negotiated price. Chain actors have adequate volume of potato and logistic. Chain actors deliver the bought potatoes to as requested by the buyer.



Table 9b. Percieved abilities statistical mean and test statistics

PERCIEVED ABILITIES STATEMENT	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. I appropriately classified, weighed and packed the vegetables I sold.	3.96	6.57	3	0.087
2. I sell/buy vegetables at a negotiated price.	4.08	32.95	3	0.000**
3. I deliver when required.	3.17	21.88	3	0.000**
4. I buy vegetables free from pest and diseases, physical injury and chemical residues.	3.72	14.51	3	0.002*
5. I usually buy vegetables which are fresh, clean, firm/crunchy and fully trimmed.	3.94	20.79	3	0.001*
6. I buy vegetables from sellers with good reputation.	3.69	15.55	3	0.001*
7. I buy adequate volume of vegetables to meet immediate demand.	3.59	41.4	3	0.000**
8. I have adequate logistics to buy vegetables.	3.13	28.86	3	0.000**
respondents group	2.64			

Scale used: 1-1.8- strongly disagree
 1.9-2.7- moderately disagree
 2.8-3.5- undecided
 3.6-4.3- moderately agree
 4.4-5- strongly agree

*significant
 **highly significant

Percieved Inabilities of Actors to Meet the Buyers Quality Requirements of Potato.

Table 10a shows the perceptions of actors about their abilities to meet the market intermediary need. Inabilities are the incapability’s of the actors in the spot market in meeting quality requirement of potato.

Majority of the wholesalers (28%) strongly agree that they are dependent on the quality/quantity of potatoes procured but one wholesaler strongly disagree with it. Some farmers are undecided if they are depending on the quality/quantity of potato.

Retailers of potato in Metro Manila have insufficient capital to procure potato wherein they only sell small quantity of potato. Some of the wholesaler-retailers cannot decide whether they have enough capital.



Table 10a. Percieved inabilities of actors to meet the buyers quality requirements of potato.

STATEMENT	1		2		3		4		5		AVE
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	0	0	1	2	15	35	15	35	12	28	4
2. I have insufficient capital to produce/procure potatoes.	2	5	15	35	11	26	11	26	4	9	3
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	4	9	14	33	10	23	13	30	2	5	3
4. I largely depend from the prevailing market price.	4	9	6	14	11	26	13	30	9	21	3
B. ASSEMBLER-WHOLESALE											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	0	0	1	5	5	26	5	26	8	42	4
2. I have insufficient capital to produce/procure potatoes.	3	16	5	26	4	21	6	32	1	5	3
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	2	11	3	16	5	26	6	32	3	16	3
4. I largely depend from the prevailing market price.	0	0	1	5	13	68	1	5	4	21	3
C. FINANCIER-ASSEMBLER-WHOLESALE											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	1	6	1	6	2	11	9	50	5	28	4
2. I have insufficient capital to produce/procure potatoes.	3	17	2	11	4	22	7	39	2	11	3
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	0	0	6	33	6	33	5	28	1	6	3
4. I largely depend from the prevailing market price.	1	6	0	0	7	39	5	28	5	28	4
Numerical value and descriptive equivalent: 1-strongly disagree 2- moderately disagree 3- undecided 4- moderately agree 5- strongly disagree											



Table 10a. Continued . . .

STATEMENT	1		2		3		4		5		AVE
	N	%	N	%	N	%	N	%	N	%	
D. TRUCKER-WHOLESALE											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	0	0	0	0	1	8	4	33	7	58	5
2. I have insufficient capital to produce/procure potatoes.	3	25	4	33	3	25	2	17	0	0	2
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	1	8	3	25	3	25	3	25	2	17	3
4. I largely depend from the prevailing market price.	2	17	1	8	3	25	3	25	3	25	3
E. WHOLESALE											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	1	10	1	10	1	10	1	10	6	60	4
2. I have insufficient capital to produce/procure potatoes.	4	40	1	10	2	20	1	10	2	20	3
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	3	30	1	10	1	10	3	30	2	20	3
4. I largely depend from the prevailing market price.	0	0	1	10	4	40	1	10	4	40	4
F. WHOLESALE-RETAILER											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	0	0	2	5	6	16	9	24	20	54	4
2. I have insufficient capital to produce/procure potatoes.	8	22	7	19	10	27	6	16	6	16	3
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	2	5	9	24	11	30	6	16	9	24	3
4. I largely depend from the prevailing market price.	1	3	6	16	9	24	8	22	13	35	4
G. RETAILER											
1. I am dependent on the quality/quantity of potatoes I produced/procured.	2	4	1	2	6	11	19	35	26	48	4
2. I have insufficient capital to produce/procure potatoes.	6	11	11	20	6	11	14	26	17	32	4
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	4	7	13	24	8	15	11	20	18	33	4
4. I largely depend from the prevailing market price.	2	4	6	11	13	24	15	28	18	33	4



Wholesalers disagree for they have sufficient capital to procure large quantity of potato to meet immediate demand.

Most retailers (33%) strongly agree that they have limited control on the quality/quantity of potato being procured. Majority of the financier-assembler-wholesalers have doubt if the procured potatoes have good quality. Two wholesalers disagree for they don't have the power to control.

Majority of wholesaler (40%) strongly agree that they largely depend on the market prevailing price but some wholesalers have doubt if they will follow the price or increase. One trucker-wholesaler disagrees to follow the market prevailing price.

Table 10b overall, the chain actors moderately agree that they have the incapability in meeting the quality requirement of the buyer. Chain actors have insufficient capital or money to procure large quantity of potato hence chain actors depend on what they have. Chain actors depend on the market prevailing price for them to have the same prices. There is a significant difference on the responses of the chain actors that they have insufficient capital to procure/produce potatoes and was rank as their number one incapability followed by limited control on the quality/quantity of potatoes procured/produced and sold for their basis is their capital.

Table 10b .Percieved inabilities statistical mean and test statistics

PERCIEVED INABILITIES_STATEMENT	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. I am dependent on the quality/quantity of potatoes I produced/procured.	4.07	5.25	3	0.155
2. I have insufficient capital to produce/procure potatoes.	3.06	11.04	3	0.012*
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.	3.21	7.22	3	0.065
4. I largely depend from the prevailing market price.	3.63	4.73	3	0.192



Various Constraints of Actors to Improve/Maintain the Buyers Quality Requirement

Table 11a shows the various constraints of the actors need to do to improve/maintain the quality fresh potato offered. Constraints are the barriers that hinder the actors in the spot market in meeting quality requirement.

Retailers (70%) in Metro Manila strongly agree that they have inadequacy of logistics facilities/equipments. Nine financier-assembler-wholesalers cannot decide if they have appropriate facilities/equipments in trading potato. Few trucker-wholesalers disagree for they have the proper facilities/equipments.

Majority of the retailers don't have enough capital to acquire appropriate facilities/equipments for the facilities are expensive. Some of the financier-assembler-wholesalers have doubt for they have limited facilities/equipments. Few wholesalers have enough capital to acquire facilities.

Wholesale-retailers (19%) strongly agree that they have limited choice in potato. Majority of the financier-assembler-wholesalers cannot decide if they have limited supplier of potato. Most of the trucker-wholesalers disagree for they have many choices of potato.

Retailers agree that they have less control in grading/packaging for they only sell low quantity of potato and what they have procured are already graded. Majority of the farmers cannot control the grading and packaging for their buyer will do it. Three assembler-wholesalers strongly disagree for that they have the control in packing and grading potato.



Table 11a. Various constraints of actors to improve/maintain the buyers quality requirement

STATEMENT	1		2		3		4		5		AVE
	N	%	N	%	N	%	N	%	N	%	
A. FARMER											
1. Inadequacy of logistic facilities/equipments.	1	2	7	16	19	44	11	26	5	12	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	1	2	12	28	5	12	21	49	4	9	3
3. Limited choices on potatoes.	5	12	20	47	12	28	3	7	3	7	3
4. Less control in grading/packaging.	5	12	14	33	15	35	3	7	6	14	3
5. Lack of cold storage facility in trading.	4	9	3	7	5	12	1	2	30	70	4
B. ASSEMBLER-WHOLESALER											
1. Inadequacy of logistic facilities/equipments.	1	5	3	16	6	32	6	32	3	16	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	1	5	5	26	3	16	8	42	2	11	3
3. Limited choices on potatoes.	4	21	9	47	2	11	3	16	1	5	3
4. Less control in grading/packaging.	3	16	2	11	9	47	3	16	2	11	3
5. Lack of cold storage facility in trading.	0	0	3	16	3	16	2	11	11	58	4
C. FINANCIER-ASSEMBLER-WHOLESALER											
1. Inadequacy of logistic facilities/equipments.	3	17	2	11	9	50	2	11	2	11	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	2	11	5	28	5	28	4	22	2	11	3
3. Limited choices on potatoes.	1	6	8	44	6	33	2	11	1	6	3
4. Less control in grading/packaging.	2	11	6	33	5	28	5	28	0	0	3
5. Lack of cold storage facility in trading.	4	22	2	11	2	11	2	11	8	44	3
D. TRUCKER-WHOLESALER											
1. Inadequacy of logistic facilities/equipments.	2	17	6	50	1	8	2	17	1	8	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	2	17	6	50	1	8	1	8	2	17	3
3. Limited choices on vegetables.	5	42	4	33	2	17	0	0	1	8	2
4. Less control in grading/packaging.	1	8	6	50	2	17	2	17	1	8	3
5. Lack of cold storage facility in trading.	3	25	1	8	1	8	1	8	6	50	4

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



Table 11a. Continued . . .

STATEMENT	1		2		3		4		5		AVE
	N	%	N	%	N	%	N	%	N	%	
E. WHOLESALER											
1. Inadequacy of logistic facilities/equipments.	0	0	2	20	4	40	3	30	1	10	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	3	30	1	10	4	40	0	0	2	20	3
3. Limited choices on potatoes.	3	30	2	20	3	30	2	20	0	0	2
4. Less control in grading/packaging.	1	10	0	0	3	30	4	40	2	20	3
5. Lack of cold storage facility in trading.	2	20	2	20	2	20	0	0	4	40	3
F. WHOLESALER-RETAILER											
1. Inadequacy of logistic facilities/equipments.	3	8	10	27	10	27	9	24	5	14	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	6	16	8	22	7	19	12	32	4	11	3
3. Limited choices on potatoes.	8	22	8	22	8	22	10	27	3	8	3
4. Less control in grading/packaging.	2	5	11	30	5	14	12	32	7	19	3
5. Lack of cold storage facility in trading.	12	32	2	5	4	11	5	14	14	38	3
G. RETAILER											
1. Inadequacy of logistic facilities/equipments.	6	11	5	9	11	20	17	32	15	28	4
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	7	13	11	20	6	11	13	24	17	32	3
3. Limited choices on potatoes.	12	22	14	26	9	17	17	32	2	4	3
4. Less control in grading/packaging.	3	6	11	20	11	20	16	30	13	24	4
5. Lack of cold storage facility in trading.	11	20	5	9	2	4	5	9	31	57	4

Majority of the farmers of potato in Benguet agree that they lack cold storage and usually they don't need this for they have low temperature. Two wholesalers cannot decide if they have appropriate cold storage for their potato to maintain its freshness. Most of the wholesaler-retailers disagree for they have cold storage.



Table 11b the chain actors cannot decide or undecided on the various constraints to maintain/improve the quality of fresh potato as to lack of capital, cannot buy appropriate facilities/equipments for potato trading business. Selling potato in Metro Manila need cold storage to maintain its freshness. Sometimes, chain actors have limited choice on potato to procure for what is left will they buy, “first come, first serve” or the regular buyer will be given first. The responses of the chain actors on the lack of cold storage facility in trading have significant difference and ranked number one as their various constraints. Chains actors have less control in grading/packing for they buy packed potatoes. Inadequacy of logistics facilities/equipments ranked number three as their various constraints.

Table 11b. Various constraints statistical mean and test statistics

VARIOUS CONSTRAINTS STATEMENT	MEAN	CHI-SQUARE	DEGREE OF FREEDOM	ASYMPTOTIC SIGNIFICANCE
1. Inadequacy of logistic facilities/equipments.	3.23	6.24	3	0.100
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	3.16	3.95	3	0.267
3. Limited choices on vegetables.	2.6	1.49	3	0.685
4. Less control in grading/packaging.	3.09	6.48	3	0.091
5. Lack of cold storage facility in trading.	3.68	11.53	3	0.009*
respondents group	2.64			

Scale used: 1-1.8- strongly disagree
 1.9-2.7- moderately disagree
 2.8-3.5- undecided
 3.6-4.3- moderately agree
 4.4-5- strongly agree

*significant



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study was conducted to identify and provide information on the perception on quality of potato by chain actors in the spot market particularly on the physical, functional and service quality of potato. The abilities and inabilities of the chain actors to meet the quality requirement and the various constraints of the chain actors to improve/maintain the quality of fresh vegetable offered.

Chain actors believed that potatoes being produce/procure are clean, fully trimmed, firm and crunchy. All their responses have no significant difference wherein the chain actors have the same perceived physical quality.

Chain actors cannot decide if their supplier has adequate logistics (facilities/equipments and workforce) in trading potatoes. The suppliers are willing to exert effort like “comboy” and packing. The chain actors have significant difference that the supplier gives notice about supply and demand. Most of all, the supplier has the proper facilities/equipments and enough workforce in trading the potatoes.

The chain actors believed that the supplier weighed and packed properly the potatoes. The price is flexible. The supplier accepts payments terms and the responses of the chain actors have significant difference in the following statements: the supplier adhere production/procurement/delivery targets. The supplier has adequate supply so they can fulfill the orders and deliver it when needed by buyer.

Chain actors moderately agree that they have the capability in meeting the quality requirement of the buyer. Chain actors appropriately classify, weighed and packed the



potatoes they sold. Chain actors have significant difference to buy/sell fresh potatoes from reputable supplier and Chain actors have adequate potato and logistics.

As to their incapability, Chain actors have insufficient capital or money to procure large quantity of potato and they depend to market prevailing price. There is a significant difference on the responses of the chain actors that they have insufficient capital to procure/produce potatoes and limited control on the quality/quantity of potatoes procured/produced and sold.

The various constraints faced by the chain actors were too much high temperature, when calamities occur that causes infestation of insect and diseases and lack of capital and proper facility/equipments in trading. The responses of the chain actors on the lack of cold storage facility in trading have significant difference and Chains actors have less control in grading/packing.

Conclusions

Based on the findings and result of the study the following conclusions were made.

1. Produced/procured potatoes are fresh, firm and crunchy, specified according to its variety, color, and packed properly with exact weight. Chain actors removed the damage, infested potatoes by pest and diseases.
2. Chain actors extend credit terms to their regular buyer. Chain actors produced what was being ordered by the buyer and deliver it when needed.
3. Chain actors procure large quantity of potato to provide or fulfill the demand of potato. Price of potato is flexible and depend on market prevailing price.



4. The quality of the potato was lessening for it passed through the different chain actors.

5. The traders of potato lack proper facility/equipment like cold storage in trading. They have insufficient capital in potato trading business.

Recommendations

Vegetable trade industry in the country is very much needed and important however vegetables supply is low/irregular, lack or low financial assistance so it is recommended that the government and NGO should provide support to the potato traders and provide appropriate facilities/equipments (cold storage). Creation of reliable market information system supported by the government and NGO for the traders to have well information about the demand and supply of vegetable in the market. Government and NGO's should provide new varieties of potato with high quality than that of the present. Lastly, for the buyers have less control in grading/packing the supplier should appropriately grade and packed the potatoes. Potato traders should maintain their business.



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APPENDIX A

Letter to the Respondents

Benguet State University
COLLEGE OF AGRICULTURE
La Trinidad, Benguet

November 2010

Sir/ Madam,

I am a fourth year student taking up Bachelor of Science in Agribusiness majoring in Enterprise Management at Benguet State University is conducting a research entitled “PERCEPTION OF ACTORS ON QUALITY OF POTATO IN THE SPOT MARKET CHAINS.”

In this connection, may I request a part of your time to answer this questionnaire honestly and completely. Rest assured that all data gathered will be kept strictly confidential.

Thank you very much for your kind consideration. God bless.

Very truly yours,

LARRY N. PAGADUAN
Researcher

Noted:

LEOPOLDO N. TAGARINO
Adviser



APPENDIX B

Interview Schedule

This research aims to investigate the fresh vegetable supply networks. All information solicited will be treated with confidentiality. Please answer the questions honestly by putting check mark [√] in the appropriate box provided for. Thank you very much!

Respondent's Name: _____

No. _____

Respondent's Group:

1. Production Group: Farmers
2. Assembly (Collection) Group : Assembler-Wholesaler Financier-Assembler-Wholesaler
 Financier-Assembler-Wholesaler-Retailer
3. Distribution Group : Trucker-Wholesaler Wholesaler
 Wholesaler-Retailer
4. Retailing Group : Retailers

A. Respondent's Profile

1. Age: _____
2. Gender: _____ Male _____ Female
3. Marital status: Single Married Separated Widowed
4. Religion: Catholic Protestant Others, specify _____
5. Educational background: Elementary High School College Vocational
6. Number of years engage in vegetable business: _____
7. Organizational affiliation: Farmers' Association Cooperatives Others, specify _____

B. What are the potatoes you frequently produce/procure and sell in the market?

- Potato Cabbage Chayote Others, specify _____

C. Who are the buyers of Potatoes you produced/procured?

- Assembler-Wholesalers Financier-Assembler-Wholesalers Financier-Assembler-Wholesaler-Retailer Trucker-Wholesalers Wholesalers Wholesaler-Retailers Retailers

D. Where do you sell the Potatoes produced/procured?

- La Trinidad Vegetable Trading Post Others, specify _____
 Private Trading Center in La Trinidad, specify _____
 Metro Manila, specify _____

E. PERCEPTIONS: QUALITY

What product quality criteria do you perceive as having been the bases of the buyers in choosing or buying the potato?

E.1. Product (Technical) Quality. Technical quality is the physical description of the agricultural products.

1 2 3 4 5

- | | | | |
|---|-------------------|-------|----------------|
| 1. Potatoes are free from chemical residue. | Strongly Disagree | □□□□□ | Strongly Agree |
| 2. Potatoes are free from pests and diseases. | Strongly Disagree | □□□□□ | Strongly Agree |
| 3. Variety, color and size of Potatoes are specified. | Strongly Disagree | □□□□□ | Strongly Agree |
| 4. Potatoes are free from physical injury. | Strongly Disagree | □□□□□ | Strongly Agree |
| 5. Potatoes are fresh, clean and fully trimmed. | Strongly Disagree | □□□□□ | Strongly Agree |
| 6. Potatoes are firm and crunchy. | Strongly Disagree | □□□□□ | Strongly Agree |

What service quality criteria do you perceive as having been the bases of the buyers in choosing or buying the potato?

E.2. Service Quality. Service quality is the additional requirement a supplier is willing to do to retain customer's business.

1 2 3 4 5

1. Supplier (seller) extend credit term to buyers of vegetables. Strongly Disagree Strongly Agree
2. Supplier has an outstanding loan/cash advance from the buyer. Strongly Disagree Strongly Agree
3. Supplier gives notice to the buyers about supply shortage and the price changes.
Strongly Disagree Strongly Agree
4. Supplier exerts effort to produce/procure Potatoes ordered. Strongly Disagree Strongly Agree
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of vegetables.
Strongly Disagree Strongly Agree
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the vegetables.
Strongly Disagree Strongly Agree

What functional quality criteria do you perceive as having been the bases of the buyers in choosing or buying the vegetables?

E.3. Functional Quality. Functional quality is the process of delivering the products to customers.

1 2 3 4 5

1. Supplier (seller) adhere to production/procurement/delivery targets.
Strongly Disagree Strongly Agree
2. Supplier classifies/grades the Potatoes properly. Strongly Disagree Strongly Agree
3. Supplier accurately weighed and packed the vegetables. Strongly Disagree Strongly Agree
4. Supplier has adequate supply of Potatoes when the buyers want it.
Strongly Disagree Strongly Agree
5. Supplier accepts orders and delivers the Potatoes when needed.
Strongly Disagree Strongly Agree
6. Supplier is flexible in pricing the Potatoes and accepts payment term.
Strongly Disagree Strongly Agree

E.4. Perception about their abilities to meet the criteria used by market intermediaries in purchasing vegetables. Abilities refer to the capabilities of the actors in the spot market in meeting quality requirements.

Factors

1 2 3 4 5

1. I appropriately classified, weighed and packed the potatoes I sold.
Strongly Disagree Strongly Agree
2. I sell/buy potatoes at a negotiated price. Strongly Disagree Strongly Agree
3. I deliver the potatoes when required. Strongly Disagree Strongly Agree
4. I buy Potatoes free from pest and diseases, physical injury and chemical residues.
Strongly Disagree Strongly Agree
5. I usually buy Potatoes which are fresh, clean, firm/crunchy and fully timmed.
Strongly Disagree Strongly Agree
6. I buy potatoes from sellers with good reputation. Strongly Disagree Strongly Agree
7. I buy adequate volume of potatoes to meet immediate demand.
Strongly Disagree Strongly Agree
8. I have adequate logistics to buy vegetables. Strongly Disagree Strongly Agree

E.5. Perception about their inabilities to meet the market intermediary's needs. Inabilities are the incapacibilities of the actors in the spot market in meeting quality requirements.

Factors

1 2 3 4 5

1. I am dependent on the quality/quantity of potatoes I produced/procured.
Strongly Disagree Strongly Agree
2. I have insufficient capital to produce/procure vegetables. Strongly Disagree Strongly Agree
3. I have limited control on the quality/quantity of potatoes I produced/procured and sold.

4. I largely depend from the prevailing market price. Strongly Disagree Strongly Agree
Strongly Disagree Strongly Agree
- E.6. Various constraints to improve/maintain the quality of fresh potatoes offered. Constraints are the barriers that hinders the actors in the spot market in meeting quality requirements.
- Factors 1 2 3 4 5
1. Inadequacy of logistic facilities/equipments. Strongly Disagree Strongly Agree
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments. Strongly Disagree Strongly Agree
3. Limited choices on vegetables. Strongly Disagree Strongly Agree
4. Less control in grading/packaging. Strongly Disagree Strongly Agree
5. Lack of cold storage facility in trading. Strongly Disagree Strongly Agree

