BIBLIOGRAPHY

LORENZO, EFREN C. APRIL 2011, Chain Actors' Perception on Quality of Cabbage in the Spot Market. Benguet State University La Trinidad, Benguet.

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ABSTRACT

Since cabbage is known as the major crop produced/procured in the Cordillera region, this study therefore was conducted to identify the chain actors' perception on quality of cabbage in the spot market. There were 193 respondents interviewed from the different spot markets.

The respondents had similarity of perception on product quality of cabbage and consider as one basis of buyers in choosing or buying cabbage. The chain actors gave more importance to variety, color, and size and followed by the firmness and crunchiness.

Chain actors have similar perception on service quality specifically in terms of extending credit terms and having loan/cash advance from the buyers but differs on giving notice to buyers about supply shortage and price changes and exerting effort in the production/procurement of cabbage. Furthermore, the chain actors are highly indifferent as to extending support services in the delivery and on adequacy of logistics in trading the cabbage

As to functional quality of cabbage, the respondents had different ways in choosing cabbage such as on delivering, product scheduling, ordering and invoicing but same perception as to classification/grading, accurate weighing/packing of cabbage.

As to abilities in meeting quality requirements, respondents do appropriately classify, weigh and pack the cabbage they produced/procured/sold. Although the chain actor have their own ways of choosing cabbage and differs on their perceived abilities in meeting quality requirements of cabbage, they still give much consideration concerning adequacy of logistics in trading cabbage and having adequate volume to meet immediate demand.

As to inabilities to meet quality requirements, chain actors largely depend on the quality/quantity of cabbage produced/procured/sold. Most respondents consider that they have insufficient capital; limited controls on quality/quantity of cabbage produced/procured and sold; and are largely dependent from the prevailing market price.

The respondents are faced with problems on inadequacy of logistic facilities/equipments, capital to acquire appropriate logistic facilities/equipments, less control in grading/packaging, and lack of cold storage facility in trading areas. Chain actors do not consider limitations on choices of cabbage as their constraints.

INTRODUCTION

Rationale

In the Cordillera Administrative Region, semi-temperate vegetables are known to its major products. Many households depends their livelihood from vegetable production.

Benguet recorded the highest production output from the year 2005-2007 with 58,775 metric tons; 58,391 metric tons; and 80,309 within the three years respectively. Mountain province was ranked second, but its production was way far behind the output of Benguet. Mountain Province had produced 10,042 metric tons for year 2005; 10,334 for year 2006; and 19,505 in the year 2007 which the area harvested in Benguet was almost four times the area harvested in Mountain Province.

For the three year period, Benguet registered the highest area and average yield followed by Mountain Province. In 2007, Benguet average yield was registered 18.5 metric tons per hectare followed by Mountain Province in 17.14 metric tons per hectare (Bureau of Agricultural Statistics, 2008).

Cabbage (*Brassica oleracia*) is the major crop produced in the region particularly in Benguet, Mountain Province, and Ifugao. This crop along with other vegetables are primarily sold in La Trinidad, Benguet; Baguio City; Bambang, Nueva Vizcaya and further traded to the different markets in the country.

Sometimes producers ignore important factors that may directly affect the product marketability. These farmers seem to be contented in production with little effort to the maintenance of quality of vegetables from the time of harvesting until it reaches the market. In this scenario, producers find no alternatives as the buyers determine the quality and price of the

products. Other factors affecting the quality of vegetables are (1) distance of the production area to the market (2) the poor road condition and (3) poor post harvest handling and packaging.

Along the vegetable supply chain, there are similarities and variations about the perception on quality among the different chain actors. Perceptions may depend according to the technical or physical aspect of the vegetable, service that it may serve and on functions as well.

In the spot market, information about the quality of vegetables is important as the different actors need to be addressed. Inadequate market information and the lack of knowledge on product quality requirements are common marketing problems encountered by the different chain actors.

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 particularly 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 (Robbins, 1988) and the descriptions and dimensions on quality as Gronroos (1990) - technical and functional quality; and Parasuraman (1998) - the service quality defined.

In this regard, it is valuable to conduct research about the perceptions on quality by the actors in the spot market chain for cabbage This will also help the different chain actors especially the producers to improve their strategies in the success of operation along the cabbage supply chain processes.

Statement of the Problem

This study aimed to answer the following questions:

1. What are the perceived quality criteria used by the buyers in spot market chains in terms of:

a. Product quality

b. Service quality

c. Functional quality

2. What are the perceived abilities to meet the criteria used by the buyers in the spot markets chain?

3. What are the perceived inabilities the chain actors' needs and the various constraints to meet the quality needs of buyers of cabbage offered for sale?

Objective of the Study

The main objective of this study is to identify and analyze the perceptions on quality of cabbage among actors at the different spot market chains. The study therefore seeks to address the perceptions on quality of cabbage in the spot market. Hence, the specific objectives are defined as follows:

1. To determine the perceived quality criteria used by the buyers in spot market chains in terms of:

a. Product quality

b. Service quality

c. Functional quality

2. To determine their perceived abilities to meet the criteria used by the buyers in the spot markets chain.

3. To determine the perceived inabilities the chain actors' needs and the various constraints to meet the quality needs of buyers of cabbage offered for sale.

Importance of the Study

Since cabbage is known as the top major crop produced and procured in the Cordillera Region and other markets in the country, the result of this study would then provide beneficial information among chain actor in the different levels of vegetable supply chain. This information would then help the different chain actors especially the producers in order for them to develop strategies for the success of operation along the supply chain of cabbage.

Furthermore, the study of perceptions on quality of cabbage in the spot market provides information on the expected quality requirements of the target market. This would address quality problems encountered by traders thus help to improve facilitate transactions and gain equal opportunities to make business decisions instead of having always one deciding.

Scope and Delimitation of the Study

This study is focused on the analysis of perceptions on quality of cabbage among chain actors at the different spot market chains. The study covers spot markets for cabbage produced in the region. Thus, the chain actors in the major markets will be considered in this study.

There are also limitation on the perceived quality wherein the researcher does not consider some scientific/ laboratory based qualifications on quality of cabbage. This is financing also affect the area coverage of the research, so the researcher limits only because of limitations

on finance available for the research, no access of the researcher for the laboratory equipments and limitation of time is also considered. So the researcher focused its study on the perceived quality of chain actors based on their: (a) experience and what they can see on the product in terms of size, shape, color, freshness and how the product is packed; (b) how the market is being delivered or bring to the market such as on the way it is produced, scheduling and the way it is stored for quality maintenance; and lastly (c) is the services it serves where it includes extra things a supplier is willing to do to retain its customers (e.g. providing technical assistance, innovative suggestions)

Limitations on financing also affect the area coverage of the research, so the researcher limits only from the point of production (Cordillera Administrative Region) to some part of Metro Manila.

REVIEW OF LITERATURE

Perceptions

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.

A perception is the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world. The lowest level at which an individual can perceive a specific stimulus is that person's absolute threshold. The minimal

difference that can be perceived between two stimuli is called the differential threshold on just noticeable difference. Consumers above the level of their conscious awareness perceive most stimuli; however, weak stimuli that can be perceive below the level conscious awareness (Schiffman and Kanuk, 2007).

Consumer selections of stimuli from the environment are base on the intersection of their expectations and motives with the stimuli itself. These factors give rise to four important concepts concerning perception: a consumer activity seek out messages that they found pleasant or with which they are sympathetic, and they actively avoid painful or threatening ones they also selectivity expose themselves to advertisement that reassure them of wisdom to purchase decisions this is called a selective exposure (Schiffman and Kanuk, 2007).

Exposure is not enough to significant influence to individual at least not based on a single trial (certain advertisement, or commercial exposure such as the "Swoosh" logo, can based on extensive repetition) rather than much conscious attention (Perner, 2008).

In order for stimuli to be consciously processed, attention is need. Attention means that consumer exercises a great deal of selectivity in terms of attention they give to commercial stimuli. Consumers also subconsciously screen out stimuli that they find psychological threatening this is called a perceptual defence (Perner, 2008).

Furthermore, individuals constantly bombarded with stimuli during every minute and every hour of everyday, thus consumer protect themselves by simply turning out, blocking such stimuli from conscious awareness. They do so self-protection because of the visually overwhelming nature of the world in which we live (Schiffman and Kanuk, 2007).

Supply Chain and Networks

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). 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.

Quality

Quality is determined by a customer determination is based upon the customer's actual experience with product measured against the customer's stated requirements (Fiegenbaum, 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).

Quality Dimensions

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).

Cabbage Perceived quality

Quality is a nebulous concept that must be given hard edges if it is to be useful in the tough, inflexible world of food trading. An individual shopper may be able to indulge the senses and make a final selection on the basis of taste, smell and an attractive appearance but that shopper will have assumed that other quality factors are in place. These assumptions include the food's nutritional value, that it is safe (from impurities, contaminants, residues), that it is suitable for the purpose intended (that it can be stored or processed, for example), that it meets legislative standards and, increasingly, that its production is environmentally acceptable. These are the factors that should weigh most heavily with producers for these can be quantified and regulated. Once the standards are met, the race is on to produce food that looks smells and tastes better than that produced by competitors. The key question is how to achieve this great diversity of quality factors.

Quality starts in the field. Exporters are unwilling to risk the purchase of inferior raw materials that may not comply with the quality standards of their trading partners. Processors take a similar view, knowing that poor quality from the field can create problems during processing when remedies are difficult and expensive to apply. Farmers do not want to lose potential markets but the problem in many developing countries is that they lack the technical

information on how to feed plants to produce the top quality food that buyers demand (Traill, 1999). Figure 1 shows the three dimensions of quality.

Definition of Terms

Producer- the one who produces the commodity (farmer)

Wholesaler- refers to middlemen who directly buy and sell cabbage to retailers in wholesale price.

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

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

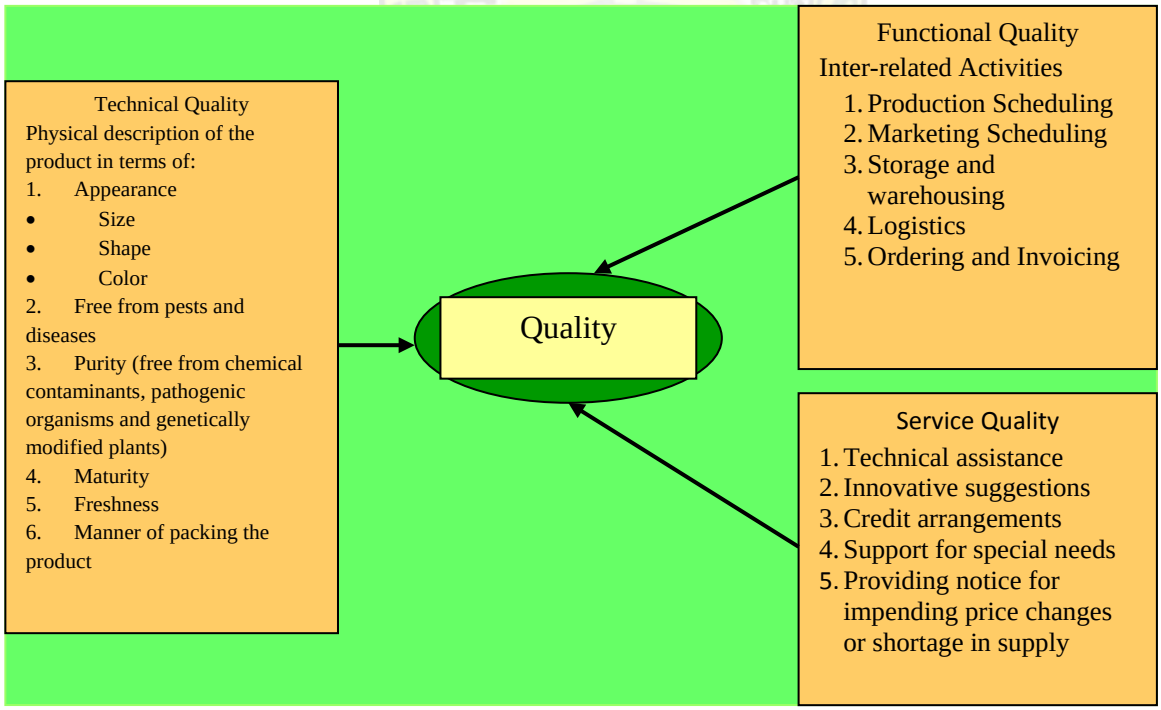


Figure 1. Dimensions of quality

Bagsakan- trading centers where the transactions are done and products are being delivered.

Retailer – individuals who buy and sell cabbage directly to the ultimate consumer.

Spot market –wet market where the product are being delivered and sold.

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

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

Perceived quality - Consumer's opinion of a product's (or a brand's) ability to fulfill his or her expectations.

Dimension – parameters used in the observation.

Conceptual Framework

The research relates how the key chain actors in the spot market manage their relationships with each other in relation to their specific roles and functions, perceptions and expectations on desired quality, resolve conflicts, and among other things.

In the frame of this study, the individuals (organizations) are the chain actors performing different functions in the flow of cabbage; operating their business dependently from the operation of the other and manage are self obliged to maintain good relationships with each other; and the exchange processes involves formal and informal way of activities and information flow.

This study will analyze the flow of cabbage in the Cordillera Administrative Region, Philippines, in accordance with the perceptions on quality of the different actors in the spot

market. Specifically, it shall focus on the perceived quality as to technical dimension, service and functions.

Figure 2 shows the conceptual framework to be followed and applied in this thesis.

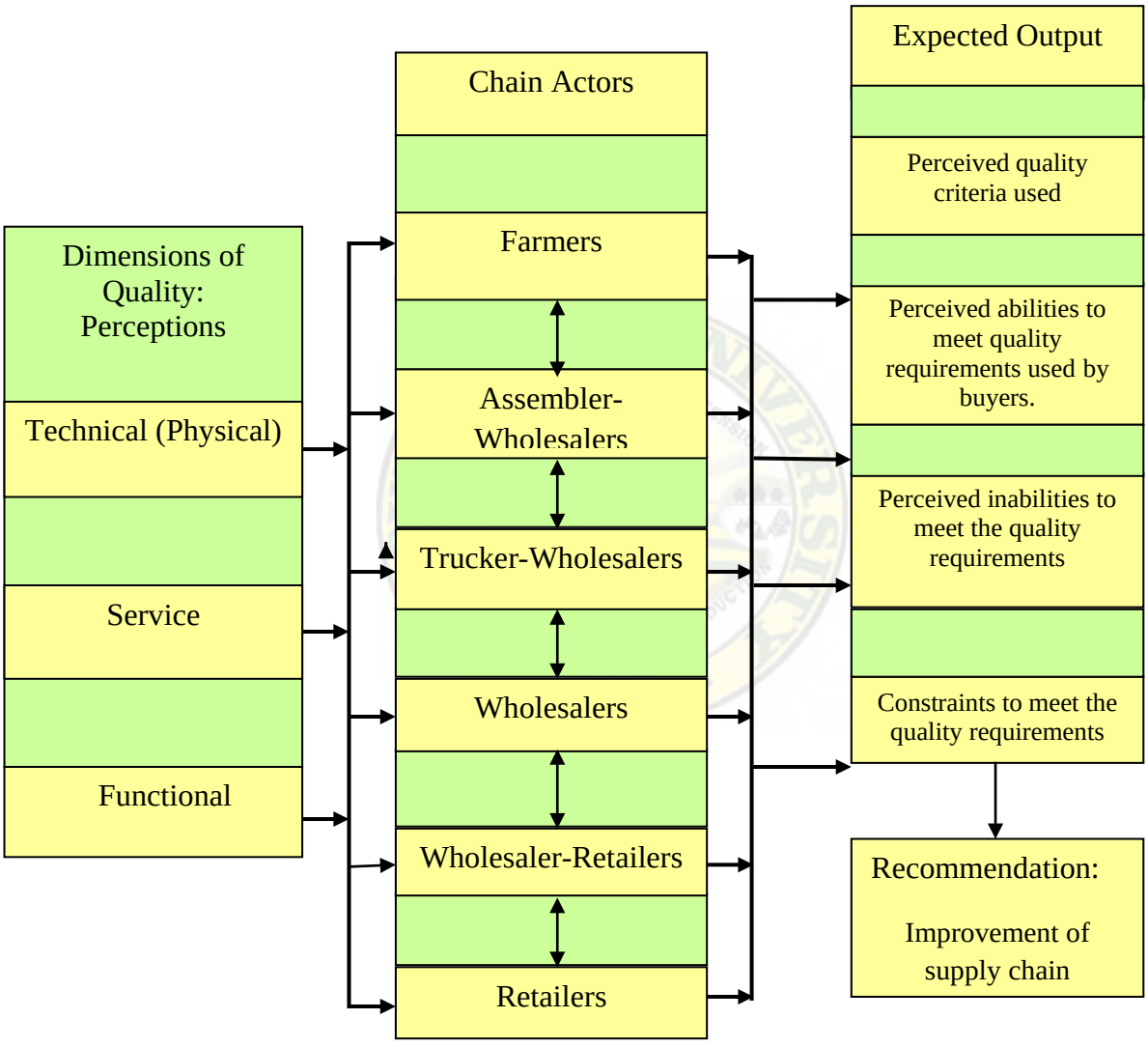


Figure 2. Conceptual framework

METHODOLOGY

Locale and Time of the Study

As earlier ascribed, the research locations followed the geographic flow of fresh semi-temperate vegetables particularly cabbage from the major source (production) to the major market assembly and collection, and the distribution and retail markets. The research areas are focused to selected major production and marketing areas.

The primary markets (assembly/collection) are concentrated at the La Trinidad Vegetable Trading Post, Merryland and Palmaville in La Trinidad, Benguet. Secondary markets (distribution) are the major vegetables trading centers (commonly called "bagsakan") in Balintawak, Quezon City and Urdaneta City. While the tertiary markets are the retail markets in Metro Manila and Pangasinan.

The research was conducted in November 2010-January 2011.

Respondents of the Study

The respondents represent the major actors in the spot market chains for cabbage. Specifically, the target respondents will be classified into four major groups as shown in.

Table 1. Four major group classifications of respondents.

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

The production group is composed of farmers producing cabbage. The next group of respondents is the primary buyers representing the assembly/collection group which consist of the assembler-wholesalers and the financier-assembler-wholesalers (supplier). Most of them are operating in the La Trinidad Vegetable Trading Post and Baguio City Hangar Market. The third group is the distributors consisting 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.

Sample size. The population of the different target groups is large; hence the quota sampling method was used in the study. Table 2 shows the distribution of samples by respondent groups. The total number of samples in the production group is 46. From the responses of farmers to whom the vegetables are sold, the assembly group was identified but a limited number were interviewed due to difficulty in locating them. Additional assemblers were interviewed to make a total sample of 34. Similarly, the same approach was used to identify respondents in the distribution group and a total of 36 were interviewed. The last group to be interviewed comprised 55 retailers in the wet markets. Overall, the research has a total sample of 135 respondents

Table 2. Distribution of sample size according to respondents group

RESPONDENTS GROUP	TOTAL SAMPLE SIZE
Production	46
Assembly/Collection: Assembler-Wholesaler	19
Financier-Assembler-Wholesalers	15
Distribution: Trucker-Wholesaler	12
Wholesaler	10
Wholesaler-Retailer	36
Retailing	55
TOTAL	193

Data Collection

Data for the study was obtained through interview schedules and observations. Producers group (farmers) were identified and interviewed in the trading post, similarly with the assembly or collection and distribution groups while other respondents like the wholesalers, wholesaler-retailers were interviewed in the "bagsakan" markets. On the other hand, retailers were identified from the secondary markets and followed them up in their retail market outlets.

Data Gathered

The data collected were the following:

1. The perceived quality criteria used by the chain actors in selling and procuring cabbage from the different points in the spot market chain.

   a. Technical/ Physical Quality

   b. Functional Quality

   c. Service Quality

2. Abilities to meet the criteria used by the chain actors in the spot markets.

3. Inabilities the chain actors' needs and the various constraints to meet the quality of cabbage offered for sale.

Data Analysis

The data collected were tabulated in the excel program and analyzed using SPSS version 16. For descriptive analysis, frequency counts and percentage and mean average were used while the statistical test, Kruskal-Wallis was used.

RESULTS AND DISCUSSION

Demographic Profile of Respondents

The demographic profile of the different respondents is presented on Table 3.

Age. In terms of age, most of the respondents have the age ranging from 21-40 years. Majority of the retailers have the age range from 41-50 years old. The producers are younger (21-30 years old) as compared to financier-assembler-wholesalers (31-40 years old).

The table further showed the average age of the different respondents groups. The data revealed that the distribution and production group s are slightly younger than the assembly group, while the retailing group are little older from the other groups.

Gender and marital status. As to their gender, most of the farmers and trucker wholesalers are male while there are more female among financier-assembler-wholesalers, wholesalers, wholesaler-retailers and retailers. It therefore implies that there is a significant variation of function between male and female in the vegetable business.

As to marital status, majority of them are married while there is a significant number of respondents that are single and few are either separated or widowed. This implied that regardless of their marital status that engaging in vegetable business is their source of income and occupation.

Religion. Religious affiliation indicated that most of the respondents are Catholic followed by Protestants. It was observed further that few respondents from production, assembly and retailing groups were affiliated with other religious denomination.

Educational Background. As presented on Table 3, most of the respondents have reached or have graduated high school and even college for some. A small number of

them finished or stepped elementary. There are two wholesaler-retailers who have taken up vocational course. This therefore, entails that majority of the chain actors in the spot market who were interviewed were literate and have enough education.

Table 3. Respondents' profile

CHARACTE-RISTICS	PRODUCTION		ASSEMBLY				DISTRIBUTION						RETAILING	
	F		A-W		F-A-W		T-W		W		W-R		R	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Age														
20 and below	5	11	2	11	0	0	0	0	4	40	3	8	2	4
21-30	18	39	6	32	1	7	5	42	3	30	12	33	12	22
31-40	10	22	6	32	7	47	4	33	1	10	14	39	10	18
41-50	9	20	4	21	4	27	2	17	1	10	3	8	21	38
51-60	3	7	1	5	3	20	1	8	1	10	3	8	8	15
61 and above	1	2	0	0	0	0	0	0	0	0	1	3	2	4
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100
AVERAGE AGE		33.22				37.47						32.69		40.87
Gender														
Male	42	91	13	68	5	33	8	67	4	40	12	33	9	16
Female	4	9	6	32	10	67	4	33	6	60	24	67	46	84
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100
Marital Status														
Single	16	35	2	11	1	7	5	42	6	60	15	42	9	17
Married	30	65	17	89	13	87	7	58	4	40	20	56	43	78
Separated	0	0	0	0	1	7	0	0	0	0	0	0	2	4
Widow	0	0	0	0	0	0	0	0	0	0	1	3	1	2
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100
Religion														
Catholic	33	72	14	74	11	73	12	100	9	90	23	64	45	82
Protestant	8	17	3	16	3	20	0	0	1	10	9	25	6	11
Others	5	11	2	11	1	7	0	0	0	0	4	11	4	7
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100
Educ. Background														
Elementary	13	28	1	5	2	13	2	17	1	10	4	11	10	18
High School	20	43	9	47	6	40	4	33	4	40	16	44	31	56
College	13	28	9	47	7	47	6	50	5	50	14	38	12	22
Vocational	0	0	0	0	0	0	0	0	0	0	2	6	2	4
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100

Legend: F=Farmers; A-W= Assembler-wholesalers; F-A-W= Financier-assembler-wholesalers; T-W= Trucker-wholesalers; W=Wholesalers; W-R= Wholesaler-retailer; R= Retailer

Number of Years Engaged in Vegetable Business

Table 4 indicates the number of years the different respondents are engaged in vegetable business. The respondents are classified based on their function as producers, assembly group, distribution group, and retailing group. Producers are the farmers, assembly group are those that perform assembling and selling, distribution group distributes cabbage either by wholesaling or wholesaling-retailing or as trucker wholesaler and lastly the retailers are those that sell in retail basis.

Among the different group of respondents, the result showed that most farmers were engaged in farming business from 1-20 years. It was also showed that majority of the respondents on assembly group have been doing business in 1-15 years and few have been trading in 21-25 years. On the distribution group, majority of the respondents are doing vegetable business 1-5 years and the rest are from 6-10 years. Most of the respondents on the retailing group have been engage in vegetable business in 1-10 years.

Thus taking the average of years they are engaged in vegetable business, the production group has 13.65; the assembly group has 9.09; distribution group has 4.66; and lastly the retailing group having 13.76.

Organizational Affiliations

Presented in Table 5 are the different organizational affiliations of each respondent. This indicates whether they belong to a farmers' association, cooperative, other organization or none at all.

The table indicates that most of farmers (89%) are not a member of any organization and few of them however are affiliated in a cooperative (2%) and farmers' association (2%). In the assembly group, majority of them were not affiliated to any

Table 4. Number of years engaged in vegetable business

NO. OF YEARS	PRODUCTION		ASSEMBLY				DISTRIBUTION						RETAILING	
	F		A-W		F-A-W		T-W		W		W-R		R	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Below 1 Yr.	0	0	1	5	0	0	0	0	1	10	0	0	2	4
1-5	17	37	9	47	4	27	4	33	6	60	32	89	17	31
6-10	6	13	5	26	2	13	3	25	3	30	4	11	9	16
11-15	6	13	3	16	7	47	4	33	0	0	0	0	5	9
16-20	9	20	0	0	0	0	0	0	0	0	0	0	11	20
21-25	2	4	1	5	2	13	1	8	0	0	0	0	2	4
26-30	2	4	0	0	0	0	0	0	0	0	0	0	8	15
31 and Above	4	9	0	0	0	0	0	0	0	0	0	0	1	2
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100
AVE. YEARS		13.65				9.09						4.66		13.76

Table 5. Organizational affiliation of respondents

ORG'L AFFILIATION	PRODUCTION		ASSEMBLY				DISTRIBUTION						RETAILING	
	F		A-W		F-A-W		T-W		W		W-R		R	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Farmer'sAssoc.	1	2	0	0	0	0	0	0	2	20	0	0	0	0
Cooperatives	1	2	2	11	4	27	3	25	1	10	8	22	2	4

Others	3	7	3	16	3	20	4	33	0	0	3	8	5	9
None	41	89	14	74	8	53	5	42	7	70	25	69	48	87
TOTAL	46	100	19	100	15	100	12	100	10	100	36	100	55	100

organization which constitute 74% and 53% to assembler-wholesalers and financier-assembler-wholesalers respectively. The rest of them are member in a cooperative or other organization.

Majority of the distribution group are not a member of any organization. Trucker-wholesalers, have 42%, wholesalers of 70% and wholesaler-retailers of 69%. Some of the trucker-wholesalers and wholesaler-retailers are member of other organization having 33% and 8% respectively.

Retailing group are mostly not engaged in an organization and only few of them bothered to be in an organization or cooperative.

Although the result shows that most of the respondents in the different groups have not affiliated to any organization, there are still some who have considered being a member of a cooperative or other organization

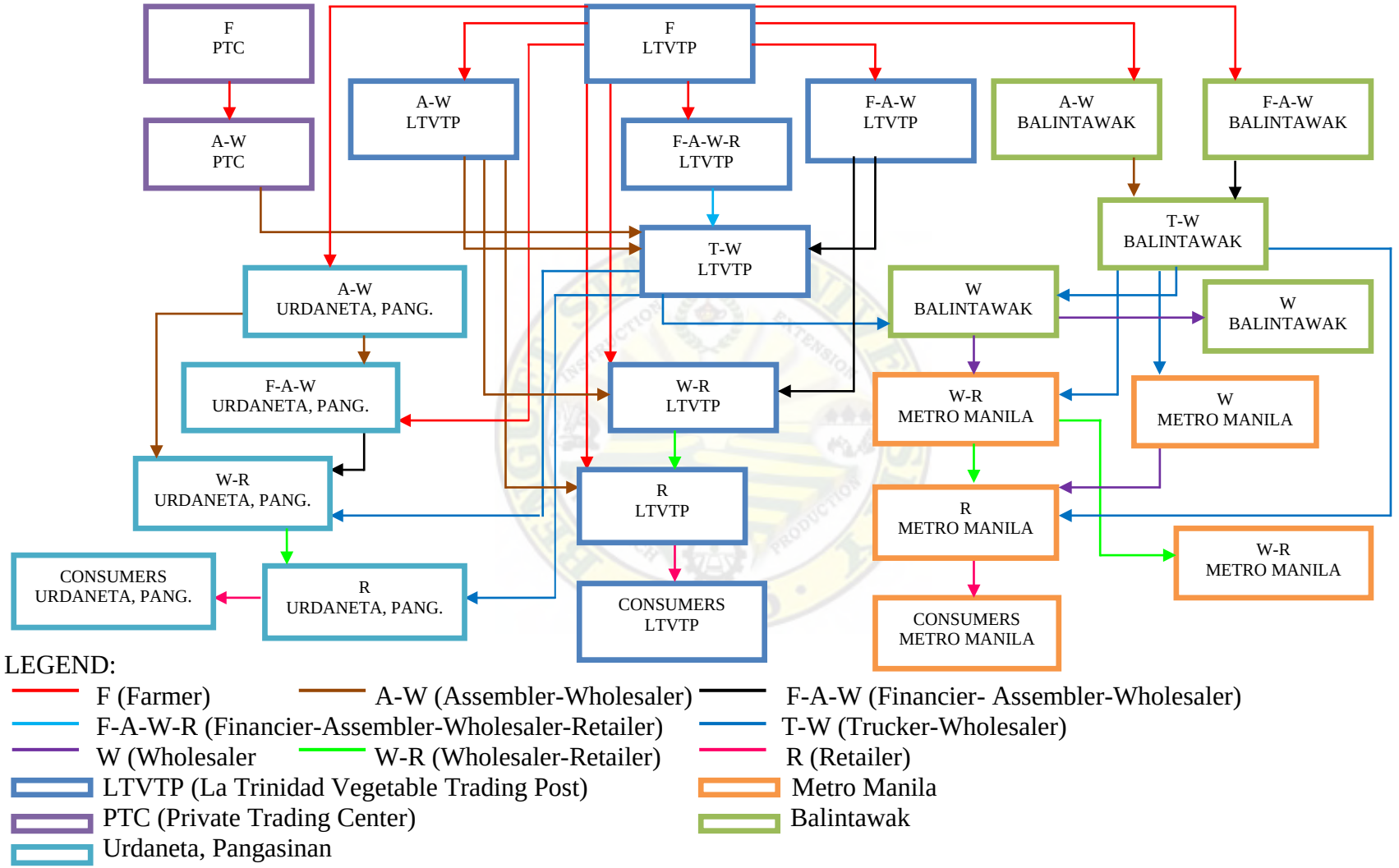
Spot Market Chain and Location for Cabbage

Figure 3 shows the different chain actors playing in the cabbage spot market. It shows whom and where the different chain actors trade in the procurement and selling of cabbage. This therefore shows the flow of cabbage in the spot market from its point of production to the final consumer.

The farmers have access to the different buyers in the spot market. Most of the buyers included the assembly group La Trinidad, Benguet, Urdaneta City, Pangasinan

and Balintawak, Quezon City. On the other hand, there were number of farmers from private trading center in La Trinidad that sold their cabbage to assembler-wholesalers at the same trading center. This revealed that majority of farmers sell their cabbage to assembly groups while some have direct access to other buyers in the spot market.

The assembly groups sell their cabbage to the distribution and retailing group in the spot markets in Urdaneta City, Balintawak, Quezon City. The distribution group specifically the trucker-wholesalers from La Trinidad Vegetable Trading Post deliver the cabbage to Urdaneta City and Balintawak and distributes to the wholesalers, wholesaler-


F
PTC
A-W
PTC
A-W
URDANETA, PANG.
F-A-W
URDANETA, PANG.
W-R
URDANETA, PANG.
R
URDANETA, PANG.
CONSUMERS
URDANETA, PANG.
F
LTVTP
A-W
LTVTP
F-A-W-R
LTVTP
T-W
LTVTP
W-R
LTVTP
R
LTVTP
CONSUMERS
LTVTP
F-A-W
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BALINTAWAK
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W
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W
BALINTAWAK
W-R
METRO MANILA
W
METRO MANILA
R
METRO MANILA
W-R
METRO MANILA
CONSUMERS
METRO MANILA
LEGEND:
F (Farmer)
A-W (Assembler-Wholesaler)
F-A-W (Financier- Assembler-Wholesaler)
F-A-W-R (Financier-Assembler-Wholesaler-Retailer)
T-W (Trucker-Wholesaler)
W (Wholesaler
W-R (Wholesaler-Retailer)
R (Retailer)
LTVTP (La Trinidad Vegetable Trading Post)
Metro Manila
PTC (Private Trading Center)
Balintawak
Urdaneta, Pangasinan

Figure 2. Spot market chain and location for cabbage

retailers and retailers. Similarly, the trucker-wholesaler from Balintawak distributes the cabbage to other distributors such as the wholesalers and wholesaler-retailers.

Furthermore, the wholesaler and wholesaler-retailers from the different spot markets sold the cabbage to retailers. The wholesalers and wholesaler-retailers also sold their cabbage to similar wholesalers and wholesaler-retailers. This indicated that the trading of cabbages also occur on the same group.

Finally, the actors on the retailing group from the different spot markets sold the cabbages to the final consumers and to the institutional buyers (restaurants).

Perception on Product Quality

Product (technical) quality refers to the physical description of cabbage. Table 6a shows the perceived product quality criteria used by the different market intermediaries in the procurement and selling of cabbage in the spot market and their respective responses. Weighted average of responses of the chain actors as producer (farmer), assembly group (assembler wholesaler and financier-assembler-wholesaler), distribution group (trucker-wholesaler, wholesaler, and wholesaler-retailer), and retailers on the different criteria was taken.

As to having cabbage free from chemical residue, most of the respondents from the different chain actors' group had strongly agreed. But also large numbers from them had not totally agreed and also were undecided. Based on the weighted average of their responses, the different chain actors interviewed had not totally agreed that the cabbage they produce/procure/sell were free from chemical residue.

Almost all of the chain actors interviewed believe much and some had moderately agreed on having cabbage free from pest, diseases and physical injury. Same as to

Table 6a. Perception on product quality

STATEMENTS	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. Farmer											
1. Free from chemical residue.	2	4	2	4	14	30	12	26	16	35	3.83
2. Free from pests and diseases.	0	0	4	9	8	17	13	28	21	45	4.11
3. Variety, color and size of cabbage are specified.	1	2	4	9	7	15	8	17	26	57	4.17
4. Free from physical injury.	0	0	1	2	14	30	14	30	17	37	4.02
5. Fresh, clean and fully trimmed.	0	0	2	4	8	17	9	20	27	59	4.33
6. Firm and crunchy.	0	0	0	0	6	13	14	30	26	57	4.43
B. Assembler-Wholesaler											
1. Free from chemical residue.	1	5	1	5	3	16	6	32	8	42	4
2. Free from pests and diseases.	0	0	1	5	2	11	3	16	13	68	4.47
3. Variety, color and size of cabbage are specified.	0	0	1	5	0	0	5	26	13	68	4.58
4. Free from physical injury.	0	0	0	0	0	0	8	42	11	58	4.58
5. Fresh, clean and fully trimmed.	0	0	0	0	2	11	5	26	12	63	4.53
6. Firm and crunchy.	0	0	0	0	0	0	6	32	13	68	4.68
C. Financier-Assembler-Wholesaler											
1. Free from chemical residue.	1	6	3	18	5	29	2	12	6	35	3.53
2. Free from pests and diseases.	1	6	2	12	5	29	2	12	7	41	3.71
3. Variety, color and size of cabbage are specified.	0	0	1	6	4	24	5	29	7	41	4.06
4. Free from physical injury.	0	0	1	6	8	47	3	18	5	29	3.71
5. Fresh, clean and fully trimmed.	0	0	2	12	3	18	4	24	8	47	4.06
6. Firm and crunchy.	0	0	0	0	4	23	3	18	10	59	4.35
D. Trucker-Wholesaler											
1. Free from chemical residue.	1	8	0	0	1	8	3	25	7	58	4.25
2. Free from pests and diseases.	0	0	0	0	2	17	3	25	7	58	4.42

3. Variety, color and size of cabbage are specified.	1	8	0	0	2	17	0	0	9	75	4.33

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

Table 6a. Continued…

STATEMENTS	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
D. Trucker-Wholesaler											
4. Free from physical injury.	1	8	0	0	1	8	3	25	7	58	4.25
5. Fresh, clean and fully trimmed.	0	0	1	8	0	0	1	8	10	83	4.67
6. Firm and crunchy.	0	0	0	0	2	17	0	0	10	83	4.67
E. Wholesaler											
1. Free from chemical residue.	0	0	2	20	0	0	2	20	6	60	4.2
2. Free from pests and diseases.	1	10	1	10	2	20	2	20	4	40	3.7
3. Variety, color and size of cabbage are specified.	0	0	0	0	2	20	2	20	6	60	4.4
4. Free from physical injury.	2	20	1	10	2	20	3	30	2	20	3.2
5. Fresh, clean and fully trimmed.	1	10	0	0	1	10	0	0	8	80	4.4
6. Firm and crunchy.	0	0	1	10	3	30	1	10	5	50	4
F. Wholesaler-retailer											
1. Free from chemical residue.	2	6	1	3	9	25	9	25	15	42	3.94
2. Free from pests and diseases.	1	3	1	3	4	11	10	28	20	56	4.31
3. Variety, color and size of cabbage are specified.	1	3	0	0	2	6	12	33	21	58	4.44
4. Free from physical injury.	1	3	3	8	5	14	12	33	15	42	4.03
5. Fresh, clean and fully trimmed.	1	3	1	3	3	8	10	28	21	58	4.36
6. Firm and crunchy.	0	0	0	0	4	11	17	47	15	42	4.31
G. Retailer											
1. Free from chemical residue.	6	11	6	11	6	11	13	24	24	44	3.78
2. Free from pests and diseases.	1	2	9	16	4	7	9	16	32	58	4.13
3. Variety, color and size of cabbage are specified.	6	11	1	2	8	14	13	24	27	49	3.98
4. Free from physical injury.	3	5	4	7	7	13	13	24	28	51	4.07

5. Fresh, clean and fully trimmed.	1	2	4	7	2	4	11	20	37	67	4.44
6. Firm and crunchy.	1	2	3	5	3	5	12	22	36	65	4.44

specifying cabbage according to variety, color, size and is fresh, clean, fully trimmed, firm and crunchy. Most of the financier-assembler-wholesalers were undecided and some strongly agreed as to having cabbage free from physical injury. Most of the wholesalers had moderately agreed and some strongly agreed on having it firm and crunchy. As shown on Table 6b, the weighted average of responses revealed that the farmers, financier-assembler-wholesaler, wholesalers and retailers moderately agreed that the cabbage they produce/procure/sell were free from pest and diseases (with weighted mean of 4.11, 3.71, 3.70, and 4.13 respectively). The assembler-wholesalers, trucker-wholesalers, and wholesaler-retailer had strongly agreed as revealed by their average responses of 4.47, 4.42, and 4.31 respectively. The farmers, financier-assembler-wholesalers and retailers moderately agreed that cabbage were specified according to variety, color, size and the assembler-wholesalers, trucker-wholesalers, and wholesaler-retailer had strongly believe. In terms of being free from physical injury, all the respondents moderately agreed except for farmers and financier-assembler-wholesalers who had moderately agreed and for wholesalers who were undecided. All the chain actors interviewed strongly agreed that the cabbage they produce/procure/sell were fresh, clean, and fully trimmed except for financier-assembler-wholesaler who moderately agreed. As to having it firm and crunchy, the wholesaler moderately agreed and the rest of them had strongly agreed.

Based on the overall average responses on Table 6a, the different respondents strongly agreed that the cabbage they produce/procure/sell were free from pest, diseases

and physical injury. They also strongly agreed that the cabbage are specified according to variety, color and size and are fresh, clean, fully trimmed, firm and crunchy. As to having cabbage free from chemical residue, the different respondents had moderately agreed.

Statistical testing was done for further validation of the data frequency results. Kruskal-Wallis test of statistics was used and had taken the asymptotic significance.

It was revealed that respondents gave more importance to variety, color, and size and followed by the firmness and crunchiness. Having the cabbage free from chemical residue and physical injury also follows. The chain actors are giving less consideration in terms of freshness, cleanliness and if fully trimmed.

Table 6b showed the asymptotic significance of responses on the different criteria/statements. The result showed that the different respondents had similarity of perception on product/technical quality of cabbage. The result implied that the different chain actors in the spot markets believe the cabbage to be free from chemical residue, pest, diseases and physical injury; specified according to variety, color, and size; and are fresh (clean, fully trimmed, firm and crunchy).

The result confirmed Gronroos (1990) definition about the technical (product) quality wherein it describes the customer's specifications. Therefore, the actors consider physical quality as one basis of buyers in choosing or buying cabbage.

Table 6b. Descriptive and test statistics

STATEMENTS	MEAN	CHI-SQUARE	DF	ASYMP. SIG.
1. Free from chemical residue.	3.88	1.815	3	0.612
2. Free from pests and diseases.	4.15	0.66	3	0.883
3. Variety, color and size of cabbage are specified.	4.23	3.768	3	0.288
4. Free from physical injury.	4.04	1.481	3	0.687

5. Fresh, clean and fully trimmed.	4.41	1.126	3	0.771
6. Firm and crunchy.	4.42	2.358	3	0.502

Perceived Service Quality as Basis in Buying Cabbage

Service qualities are the additional requirement a supplier is willing to do to retain customers in business. The criteria used were the different perceived service qualities the chain actors are using in procuring/producing cabbage in the spot markets. Tables 7a showed the different criteria used and the level of responses of the chain actors.

As to extending credit term to buyers, being the supplier, most (42%) of the trucker-wholesalers and wholesaler-retailers (39%) had strongly agreed while majority of the retailers (29%) together with the assembler-wholesaler (37%) had moderately agreed. Large number from the farmers (26%) and wholesalers (30%) strongly disagreed but also the same number from the farmers was undecided. Most (29%) of the financier-assembler-wholesalers were undecided.

The average responses showed that the different chain actors were undecided on extending credit term to buyers except on the wholesaler-retailers wherein they had moderately agreed.

As to having outstanding loan/cash advance from the buyer, most of the farmers were undecided (26%) and had strongly disagreed. Most of the financier- assembler-wholesalers, wholesaler and retailers had also strongly agreed. Majority of the assembler-wholesalers and trucker-wholesalers had moderately agreed and mostly from the wholesaler-retailer had strongly agreed with 22%. Average responses of the different respondents showed that farmers, assembler-wholesalers, and wholesaler-retailers are

undecided whether they really had an outstanding loan/cash advance from their buyers and the financier-assembler-wholesalers, wholesaler-retailers and retailers had moderately disagreed.

Table 7a. Perceived service quality as basis in buying cabbage

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. Farmers											
1. Supplier (seller) extend credit term to buyers of cabbage.	12	26	8	17	12	26	6	13	8	17	2.78
2. Supplier has an outstanding loan/cash advance from the buyer.	13	28	7	15	13	29	4	9	9	20	2.76
3. Supplier gives notice to the buyers about supply shortage and the price changes.	7	15	9	20	6	13	8	17	16	25	3.37
4. Supplier exerts effort to produce/procure cabbage ordered.	2	4	6	13	11	24	8	17	19	41	3.78
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	10	22	11	24	9	20	12	27	4	9	2.76
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	4	9	20	43	11	24	9	20	2	4	2.67
B. Assembler-Wholesaler											
1. Supplier (seller) extend credit term to buyers of cabbage.	4	21	2	11	2	11	7	37	4	21	3.26
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 cabbage ordered.	0	0	1	5	6	32	6	32	6	32	3.89
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	0	0	3	16	8	42	5	26	3	16	3.42
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	1	5	2	11	7	37	5	26	4	21	3.47
C. Financier-Assembler-Wholesaler											
1. Supplier (seller) extend credit term to buyers of cabbage.	4	24	2	12	5	29	2	12	4	24	3
2. Supplier has an outstanding loan/cash advance from the buyer.	7	41	1	6	4	24	3	18	2	12	2.53

3. Supplier gives notice to the buyers about supply shortage and the price changes.	1	6	3	18	4	24	1	6	8	47	3.71
4. Supplier exerts effort to produce/procure cabbage ordered.	1	6	3	18	2	12	3	18	8	47	3.82

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

Table 7a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. Financier-Assembler-Wholesaler											
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	2	12	1	6	5	29	5	29	4	24	3.47
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	2	12	2	12	2	12	7	41	4	24	3.53
D. Trucker-wholesaler											
1. Supplier (seller) extend credit term to buyers of cabbage.	0	0	1	8	3	25	4	33	4	33	3.92
2. Supplier has an outstanding loan/cash advance from the buyer.	2	16	2	17	2	17	1	8	5	42	3.42
3. Supplier gives notice to the buyers about supply shortage and the price changes.	3	25	3	25	1	8	4	8	1	8	2.75
4. Supplier exerts effort to produce/procure cabbage ordered.	1	8	1	8	0	0	3	25	7	58	4.17
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	0	0	0	0	1	8	1	8	10	83	4.75
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	3	25	0	0	1	8	2	17	6	50	3.67
E. Wholesaler											
1. Supplier (seller) extend credit term to buyers of cabbage.	3	30	1	10	2	20	2	20	2	20	2.9
2. Supplier has an outstanding loan/cash advance from the buyer.	5	50	3	30	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	3.2
4. Supplier exerts effort to produce/procure cabbage ordered.	1	10	0	0	2	20	1	10	6	60	4.1

5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	3	30	0	0	2	20	2	20	3	30	3.2
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	2	20	1	10	3	30	2	20	2	20	3.1
F. Wholesaler-Retailer											
1. Supplier (seller) extend credit term to buyers of cabbage.	3	8	4	11	5	14	10	28	14	39	3.78
2. Supplier has an outstanding loan/cash advance from the buyer.	8	22	6	17	7	19	7	19	8	22	3.03
3. Supplier gives notice to the buyers about supply shortage and the price changes.	2	6	4	11	3	8	13	36	14	39	3.92

Table 7a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
F. Wholesaler-Retailer											
4. Supplier exerts effort to produce/procure cabbage ordered.	1	3	1	3	8	22	8	22	18	50	4.14
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	5	14	2	6	10	28	11	31	8	22	3.42
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	1	3	7	19	11	31	14	39	3	8	3.31
G. Retailer											
1. Supplier (seller) extend credit term to buyers of cabbage.	15	27	5	9	8	14	16	29	11	20	3.05
2. Supplier has an outstanding loan/cash advance from the buyer.	21	38	6	11	13	24	10	18	5	9	2.49
3. Supplier gives notice to the buyers about supply shortage and the price changes.	14	25	8	15	7	13	11	20	15	27	3.09
4. Supplier exerts effort to produce/procure cabbage ordered.	13	24	4	7	7	13	13	24	18	33	3.35
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	25	45	5	9	6	11	10	18	9	16	2.51
6. Supplier has adequate logistics (facilities, equipments, workforce) in trading the cabbage.	15	27	16	29	11	20	9	16	4	7	2.47

As to giving notice to buyers about supply shortage and price changes, most farmers (35%), financier-assembler-wholesalers (47%), trucker-wholesalers (58%),

wholesalers (39%), wholesalers-retailers (39%) and retailers (27%) had strongly agreed. Most of the assembler-wholesalers (42%) had moderately agreed and some (37%) had strongly agreed. But also a considerable number from the financier-assembler-wholesalers (23%) and wholesalers (30%) were undecided and 45% from the retailers had strongly disagreed. Some from farmers moderately disagreed. As a result, the weighted average on Table 7a showed that all the respondents moderately agreed except for wholesaler and retailer who were undecided as to giving notice to buyers about supply shortage and price changes.

In terms of exerting effort to produce/procure cabbage ordered, most of the farmers (41%), assembler-wholesalers (32%), financier-assembler-wholesalers (47%), retailers (33%) had strongly agreed. Fifty percent of the wholesaler-retailers strongly agreed and majority of the wholesalers and trucker-wholesalers also strongly agreed but a considerable number from the retailers had strongly disagreed. The Table further showed and revealed that the respondents moderately agreed except for retailers who were undecided as to exerting effort in the production/procurement/selling of cabbage.

As to extending support services (*comboys*, packing) to the buyer in the delivery of cabbage, 50% from the financier-assembler-wholesalers and wholesaler-retailers (31%) had moderately agreed and 37% from the assembler-wholesalers were undecided. Considerable number from the wholesalers and retailers strongly agreed. Average responses revealed that the financier-assembler-wholesalers, trucker-wholesalers, and wholesaler-retailers extend support services to buyers in the delivery of cabbage. The farmers, assembler-wholesalers and wholesalers were undecided and the retailers moderately disagreed.

As to adequacy of logistics in trading cabbage, most of the assembler-wholesalers (37%) and wholesalers (30%) were undecided and large number from the financier-assembler-wholesalers (41%) and wholesalers (39%) moderately agreed. Most respondents for farmers and retailers moderately agreed. The average responses showed that the assembler-wholesalers, financier-assembler-wholesalers, and trucker-wholesalers moderately agreed of having adequate logistics in trading cabbage while the retailers moderately disagree. The farmers, wholesalers and wholesaler-retailers are undecided.

The different respondents moderately agreed that they do extend credit term to buyers, gives notice to buyers about supply shortage and price changes. Also the same response in terms of extending support services (*comboys,* packing) to the buyer in the delivery, exerting effort to produce/procure cabbage ordered, and on adequate logistics (facilities, equipments, workforce) in trading the cabbage. But they had slightly disagreed that they do have outstanding loan/cash advance from the buyer.

As showed on Table 7b, suppliers give priority on having adequate logistics (facilities, equipments, and workforce) in trading cabbage. Extending support services (*comboys*/packing) to buyer in the delivery and exerting effort to produce/procure cabbage ordered follows. Giving notice to buyers about supply shortage and price changes and extending credit term to buyers follows. The least is of having outstanding loan/cash advance from the buyers.

Results (Table 7b) showed that respondents have similar perception on the service quality specifically in terms of extending credit terms and having loan/cash advance from the buyers. However, the respondents differ significantly in giving notice to buyers about supply shortage and price changes and exerting effort in the production/procurement of cabbage. But as to extending support services in the delivery and on adequacy of logistics

in trading the cabbage, all the respondents are highly indifferent. Therefore, the findings implied differences in the perception about service quality. In some condition expand the description as defined by Parasuraman (1998) about service quality as to performing extra things in order to retain customers in business and similar on what Hutt and Speh (1995) had cited such as providing technical assistance, innovative suggestions, credit arrangements, support for special needs, or providing advance notice of impending price changes or shortages in supply.

Table 7b. Descriptive and test statistics

	MEAN	CHI-SQUARE	DF	ASYMP. SIG.
1. Supplier (seller) extend credit term to buyers of cabbage.	3.15	7.741	3	0.052
2. Supplier has an outstanding loan/cash advance from the buyer.	2.71	1.838	3	0.067
3. Supplier gives notice to the about supply shortage and the price changes.	3.46	9.072	3	0.028*
4. Supplier exerts effort to produce/procure cabbage ordered.	3.83	9.969	3	0.019*
5. Supplier extends support services (comboys, packing) to the buyer in the delivery of cabbage.	3.06	13.312	3	0.004**
6. Supplier has adequate logistic (facilities, equipments, workforce) in trading the cabbage.	3.02	24.592	3	0.000**

Legend: *= significant **= highly significant

Perception on Functional Quality

Functional quality, describes the way a supplier goes about delivering the product to the customer. By implications, it involves many inter-related activities such as production, scheduling, storage and warehousing, logistics, ordering and invoicing

(Groonroos, 1990). Table 8a showed the responses of the different chain actors in the spot market on the different criteria used as to perceived functional quality of cabbage.

Being the supplier (seller), most of the financier-assembler-wholesalers (33%), wholesaler-retailers (39%), retailers (38%) and 50% from the trucker- wholesalers strongly agreed that they do adhere to production/procurement/delivery. Most of the farmers (29%), assembler-wholesalers (42%), wholesalers (40%), wholesaler-retailers (39%) and significant number from financier-assembler-wholesalers moderately agreed. Average responses showed that the different chain actors moderately agree on adhering to production/procurement/delivery targets except for trucker-wholesalers who had strongly agree and for farmers who were undecided.

Table 8a. Perception on functional quality

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. Farmer											
1. Supplier (seller) adhere to production /procurement/delivery targets.	6	13	8	17	11	24	13	28	8	17	3.20
2. Supplier classifies/grades the cabbage properly.	6	13	5	11	10	22	9	20	16	35	3.52
3. Supplier accurately weighed and packed the cabbage.	8	17	5	11	9	20	7	15	17	37	3.43
4. Supplier has adequate supply of cabbage when the buyers want it.	1	2	13	28	20	43	7	15	5	11	3.04
5. Supplier accepts orders and delivers the cabbage when needed.	12	26	10	22	8	17	8	17	8	17	2.78
5. Supplier is flexible in pricing cabbage and accepts payment term.	4	9	9	20	16	35	13	28	4	9	3.09
B. Assembler-wholesaler											
1. Supplier (seller) adhere to production /procurement/delivery targets.	1	5	0	0	7	37	8	42	3	16	3.63
2. Supplier classifies/grades the cabbage properly.	0	0	3	16	5	26	4	21	7	37	3.79
3. Supplier accurately weighed and packed the cabbage.	0	0	1	5	4	21	7	37	7	37	4.05
4. Supplier has adequate supply of	0	0	2	11	3	16	8	42	6	32	3.95

cabbage when the buyers want it.											
5. Supplier accepts orders and delivers the cabbage when needed.	0	0	2	11	3	16	7	37	7	37	4
6. Supplier is flexible in pricing cabbage and accepts payment term.	0	0	1	5	3	16	8	42	7	37	4.11
C. Financier-assembler-wholesaler											
1. Supplier (seller) adhere toproduction/ procurement/delivery targets.	0	0	3	20	2	13	5	33	5	33	3.80
2. Supplier classifies/grades the cabbage properly.	1	7	1	7	3	20	5	33	5	33	3.80
3. Supplier accurately weighed and packed the cabbage.	0	0	1	7	4	27	4	27	6	40	4
4. Supplier has adequate supply of cabbage when the buyers want it.	0	0	2	13	3	20	4	27	6	40	3.93

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

Table 8a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. Financier-assembler-wholesaler											
5. Supplier accepts orders and delivers the cabbage when needed.	1	7	1	7	3	20	3	20	7	47	3.93
6. Supplier is flexible in pricing cabbage and accepts payment term.	1	7	1	7	4	27	4	27	5	33	3.73
D. Trucker-wholesaler											
1. Supplier (seller) adhere to production /procurement/delivery targets.	0	0	0	0	1	8	5	42	6	50	4.42
2. Supplier classifies/grades th cabbage properly.	2	17	0	0	0	0	2	17	8	67	4.17
3. Supplier accurately weighed and packed the cabbage.	0	0	0	0	1	8	4	33	7	58	4.5
4. Supplier has adequate supply of cabbage when the buyers want it.	0	0	0	0	1	8	5	42	6	50	4.42
5. Supplier accepts orders and delivers the cabbage when needed.	0	0	0	0	2	17	3	25	7	58	4.42
6. Supplier is flexible in pricing cabbage and accepts payment term.	0	0	0	0	0	0	4	33	8	67	4.67
E. Wholesaler											
1. Supplier (seller) adhere to production /procurement/delivery targets.	2	20	0	0	1	10	4	40	3	30	3.6

2. Supplier classifies/grades the cabbage properly.	1	10	1	10	1	10	2	20	5	50	3.9
3. Supplier accurately weighed and packed the cabbage.	1	10	0	0	3	30	2	20	4	40	3.8
4. Supplier has adequate supply of cabbage when the buyers want it.	0	0	0	0	3	30	5	50	2	20	3.9
5. Supplier accepts orders and delivers the cabbage when needed.	0	0	0	0	2	20	3	30	5	50	4.3
6. Supplier is flexible in pricing cabbage and accepts payment term.	0	0	0	0	4	40	1	10	5	50	4.1
F. Wholesaler-retailer											
1. Supplier (seller) adhere to production /procurement/delivery targets.	0	0	3	8	5	14	14	39	14	39	4.08
2. Supplier classifies/grades the cabbage properly.	3	8	2	6	4	11	15	42	12	33	3.86
3. Supplier accurately weighed and packed the cabbage.	2	6	1	3	4	11	13	36	16	44	4.11
4. Supplier has adequate supply of cabbage when the buyers want it.	0	0	1	3	8	22	11	31	16	44	4.17

Table 8a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
F. Wholesaler-retailer											
5. Supplier accepts orders and delivers the cabbage when needed.	1	3	0	0	8	22	14	39	13	36	4.06
6. Supplier is flexible in pricing cabbage and accepts payment term.	1	3	0	0	6	17	15	42	14	39	4.14
G. Retailer											
1. Supplier (seller) adhere to production /procurement/delivery targets.	5	9	9	16	10	18	21	38	10	18	3.40
2. Supplier classifies/grades the cabbage properly.	3	5	5	9	11	20	20	36	16	29	3.75
3. Supplier accurately weighed and packed the cabbage.	2	4	6	11	6	11	19	35	22	40	3.96
4. Supplier has adequate supply of Cabbage when the buyers want it.	1	2	5	9	15	27	19	35	15	27	3.76
5. Supplier accepts orders and delivers	5	9	8	15	12	22	15	27	15	27	3.49

the cabbage when needed.											
6. Supplier is flexible in pricing cabbage and accepts payment term.	3	5	4	7	9	16	18	33	21	38	3.91

Most of the farmers (35%), assembler-wholesalers (37%) and financier-assembler-wholesalers (34%) strongly believe that they as a supplier properly classify/grades the cabbage. Significant number from the farmers (22%) and assembler-wholesalers (26%) were undecided. Majority of the trucker-wholesalers (67%), 50% of the wholesalers and some of the wholesaler-retailer and retailers strongly agreed. Large number from the wholesaler-retailers (42%) and farmers (34%) moderately agreed. Weighted average of responses showed that the respondent does not totally agree that they classifies/grade the cabbage properly.

As to accurate weighing and packing of cabbage, all of the respondents except farmers strongly agreed and a significant number had also moderately agreed. Weighted average showed that the respondents moderately agreed as to accurate weighing and packing of cabbage except for trucker-wholesalers who had strongly agreed.

Most of the assembler-wholesaler (42%), retailers (35%) and 50% of wholesalers had not totally agreed in terms of having adequate supply of cabbage when buyers want it and some from the wholesalers (30%) are undecided. Fifty percent of the trucker-wholesalers and majority of the financier-assembler-wholesalers (40%) and wholesaler-retailer (44%) strongly agreed and large numbers from the farmers are undecided to disagree to this indicator. The weighted average shown that trucker-wholesalers, wholesalers and retailers strongly agree as to having adequate supply when buyers want it and the assembler-wholesalers, financier-assembler-wholesalers and wholesaler-retailer had moderately agreed while the farmers were undecided.

As to accepting orders and delivering the cabbage when needed, most (26%) farmers strongly disagreed and some (22%) had moderately disagreed. Majority of the trucker-wholesalers (58%), 50% of the wholesalers and most of the financier-assembler-wholesalers (47%) and retailers (28%) strongly agreed. Mostly from wholesaler-retailers (39%), some wholesalers and retailer had moderately agreed. As implied by their weighted average, the assembler-wholesalers, financier-assembler-wholesalers, and wholesaler-retailers moderately agreed as to accepting orders and delivering when required and the trucker-wholesalers, wholesalers, and retailers had strongly agreed. The farmers were undecided in their responses.

As to flexibilty in pricing cabbage and accepting payment term, most of the farmers (35%) are undecided and some (28%) had moderately agreed. Majority of the trucker-wholesalers (67%) and 50% of the wholesalers strongly agreed. Most of the financier-assembler-wholesalers (33%) and some retailers and trucker-wholesalers also strongly agreed. Most of the farmers (35%) and significant number from the financier-assembler-wholesalers (27%) are undecided. As implied by their average responses, the respondents had moderately agreed except for trucker-wholesalers who strongly agreed.

The different respondents moderately agreed on the quality of cabbage they procure/sell according to its function. This are in terms of: adhering to production/procurement/delivery targets; proper classification and grading; accurate weighing and packing; adequacy of supply when buyers want it; accepting orders and delivering when needed; and flexibility in pricing and accepts payment term.

In maintaining the functional quality of cabbage, the respondents as a supplier are much focused on having adequate supply when buyers want it followed by flexibility in pricing and accepting payment term. Respondents also consider accepting orders and

ensuring to deliver when needed and adhere to production/procurement/delivery targets. They give less consideration on accurate weighing, packing, classification/grading the cabbage as it was shown on Table 8b.

The results shows that the different respondents groups very significantly differ on their perceived functional quality of cabbage specifically in terms of having the supplier (seller) adhere to production/procurement/delivery targets (level of significance at 0.001); adequacy of supply when buyers want it (0.000); supplier accepts orders and delivers when needed (0.000); flexibility in pricing and accepting payment term (0.000). But in terms proper classification/grading, accurate weighing and packing of cabbage, the result showed similarity of perceptions among respondents.

The result revealed that the respondents had different ways of choosing/selecting cabbage as to its functional quality such as on deliverin when customer want it such as

Table 8b. Descriptive and test statistics

	MEAN	CHI-SQUARE	DF	ASYMP. SIG.
1. Supplier (seller) adhere to production/ procurement/delivery targets.	3.61	16.264	3	0.001**
2. Supplier classifies/grades the cabbage properly.	3.74	2.673	3	0.445
3. Supplier accurately weighed and packed the cabbage.	3.94	6.876	3	0.076
4. Supplier has adequate supply of cabbage when the buyers want it.	3.75	30.648	3	0.000**
5. Supplier accepts orders and delivers the cabbage when needed.	3.61	24.386	3	0.000**
6. Supplier is flexible in pricing cabbage and accepts payment term.	3.81	29.912	3	0.000**

Legend:*=Significant **=highly significant

product scheduling, ordering and invoicing. The result further showed similarities of perception as to classification/grading, accurate weighing/packing of cabbage.

Perceived Abilities to Meet the Quality Requirements

Table 9a represents the responses of the respondents as to perceived abilities to meet quality requirements. Abilities refer to the capabilities of the different chain actors in meeting buyers' requirements.

As to appropriate classification/weighing and packing of cabbage, 50% of the assembler-wholesalers and wholesalers had strongly agreed and some had moderately agreed. Majority of the assembler-wholesalers (58%) had strongly agreed and also mostly from the farmers (41%), financier-assembler-wholesaler (47%) and wholesalers (40%). Considerable numbers from the financier-assembler-wholesaler (33%) are undecided and 30% of wholesalers strongly agree. The weighted average revealed that respondents moderately agreed except for wholesalers who were undecided as to appropriate classification, weighing and packing of cabbage.

As to selling/buying cabbage at a negotiated price and delivering when required, most of the respondents from the assembler-wholesalers, financier-assembler-wholesaler,

Table 9a. Perceived abilities to meet the quality requirements

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. Farmer											
1. I had appropriately classified, weighed and packed	7	15	4	9	8	17	8	17	19	41	3.61
2. I sell/buy at a negotiated price.	5	11	3	7	14	30	15	33	9	20	3.43
3. I deliver when required.	14	30	6	13	14	30	7	15	5	11	2.63
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	8	17	8	17	5	11	16	35	9	20	3.22
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	8	17	4	9	9	20	13	28	12	26	3.37
6. I buy cabbage from sellers with good reputation.	8	17	9	20	9	20	12	26	8	17	3.07
7. I buy adequate volume of cabbage to meet	9	20	9	20	15	33	7	15	6	13	2.83

immediate demand.											
8. I have adequate logistics to buy cabbage.	7	15	15	33	16	35	5	11	3	7	2.61
B. Assembler-Wholesaler											
1. I had appropriately classified, weighed and packed	1	5	3	16	2	11	2	11	11	58	4
2. I sell/buy at a negotiated price.	0	0	0	0	4	21	6	32	9	47	4.26
3. I deliver when required.	0	0	3	16	5	26	3	16	8	42	3.84
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	1	5	4	21	2	11	3	16	9	47	3.79
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	0	0	3	16	0	0	2	11	14	74	4.42
6. I buy cabbage from sellers with good reputation.	0	0	0	0	6	32	3	16	10	53	4.21
7. I buy adequate volume of cabbage to meet immediate demand.	0	0	0	0	3	16	9	47	7	37	4.21
8. I have adequate logistics to buy cabbage.	0	0	3	16	3	16	9	47	4	21	3.74
C. Financier-Assembler-Wholesaler											
2. I had appropriately classified, weighed and packed	0	0	2	13	5	33	1	7	7	47	3.87
2. I sell/buy at a negotiated price.	0	0	1	7	3	20	4	27	7	47	4.13
3. I deliver when required.	1	7	2	13	3	20	4	27	5	33	3.67

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

Table 9a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. Financier-Assembler-Wholesaler											
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	0	0	2	13	4	27	3	20	6	40	3.87
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	0	0	1	7	5	33	3	20	6	40	3.93
6. I buy cabbage from sellers with good reputation.	0	0	4	17	2	13	5	33	4	27	3.60
7. I buy adequate volume of cabbage to meet immediate demand.	0	0	2	13	3	20	3	20	7	47	4
8. I have adequate logistics to buy cabbage.	0	0	3	20	3	20	7	47	2	13	3.53

D. Trucker-Wholesaler											
1. I had appropriately classified, weighed and packed	0	0	0	0	1	8	5	42	6	50	4.42
2. I sell/buy at a negotiated price.	0	0	0	0	1	8	5	42	6	50	4.42
3. I deliver when required.	3	25	0	0	2	17	3	25	4	33	3.42
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	0	0	1	8	3	25	2	17	6	50	4.08
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	0	0	0	0	1	8	2	17	9	75	4.67
6. I buy cabbage from sellers with good reputation.	0	0	0	0	4	33	4	33	4	33	4
7. I buy adequate volume of cabbage to meet immediate demand.	0	0	0	0	3	25	3	25	6	50	4.25
8. I have adequate logistics to buy cabbage.	0	0	1	8	2	17	6	50	3	25	3.92
E. Wholesaler											
1. I had appropriately classified, weighed and packed	3	30	1	10	0	0	2	20	4	40	3.3
2. I sell/buy at a negotiated price.	0	0	0	0	2	20	1	10	7	70	4.5
3. I deliver when required.	2	20	1	10	2	20	1	10	4	40	3.4
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	0	0	1	10	2	20	4	40	3	30	3.9
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	1	10	0	0	3	30	1	10	5	50	3.9
6. I buy cabbage from sellers with good reputation.	1	10	0	0	2	20	4	40	3	30	3.8
7. I buy adequate volume of cabbage to meet immediate demand.	0	0	1	10	2	20	4	40	3	30	3.9
8. I have adequate logistics to buy cabbage.	1	10	0	0	4	40	3	30	2	20	3.5
F. Wholesaler-Retailer											
1. I had appropriately classified, weighed and packed	0	0	3	8	4	11	11	31	18	50	4.22
2. I sell/buy at a negotiated price.	0	0	1	3	3	8	7	19	25	69	4.56
3. I deliver when required.	6	17	1	3	10	28	7	19	12	33	3.50

Table 9a. Continued…

STATEMENT	1	2	3	4	5	AVE.

	N	%	N	%	N	%	N	%	N	%	
F. Wholesaler-Retailer											
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	0	0	1	3	5	14	16	44	14	39	4.19
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	0	0	0	0	2	6	18	50	16	44	4.39
6. I buy cabbage from sellers with good reputation.	0	0	1	3	11	31	10	28	14	39	4.03
7. I buy adequate volume of cabbage to meet immediate demand.	0	0	1	3	6	17	12	33	17	47	4.25
8. I have adequate logistics to buy cabbage.	3	8	4	11	8	22	14	39	6	17	3.36
G. Retailer											
1. I had appropriately classified, weighed and packed	1	2	5	9	7	13	14	25	28	51	4.15
2. I sell/buy at a negotiated price.	1	2	2	4	6	11	25	45	21	38	4.15
3. I deliver when required.	16	29	7	13	11	20	13	24	8	15	2.82
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	2	4	9	16	8	15	14	25	22	40	3.82
5. I usually buy cabbages which are fresh, clean,firm and fully trimmed.	1	2	5	9	10	18	16	29	23	42	4
6. I buy cabbage from sellers with good reputation.	1	2	9	16	12	22	17	31	16	29	3.69
7. I buy adequate volume of cabbage to meet immediate demand.	3	5	10	18	12	22	17	31	13	24	3.49
8. I have adequate logistics to buy cabbage.	15	27	13	24	13	24	10	18	4	7	2.55

trucker-wholesalers, wholesalers and wholesaler-retailers had strongly agree. Most of the farmers (33%) had moderately agreed as to selling/buying at a negotiated price and 30% of them are undecided while 45% of the retailers moderately agreed. Most farmers (30%) are undecided in terms delivering when required and the same number had strongly disagreed. Significant number from the assembler-wholesaler (26%) and wholesaler-retailers (28%) are undecided and large number of the retailers strongly disagreed as to delivering cabbage on time.

Weighted average showed that the respondents moderately agreed on selling/buying cabbage at a negotiated price except for wholesalers-retailers who strongly agreed and to retailers that are undecided. All the respondents moderately agreed as to

having the cabbage delivered on time except for farmers who moderately agree and retailers who are undecided.

As to buying cabbage free from pest, diseases, physical injury and chemical residue, most of the assembler-wholesalers (47%), financier-assembler-wholesaler (40%), trucker-wholesalers (50%) and retailers (40%) had strongly agreed while a significant number from assembler-wholesalers (21%) had strongly disagreed and financier-assembler-wholesaler (27%) who were undecided. Most of the farmers (35%), wholesalers (40%) and wholesaler-retailers had moderately agreed. As implied by the weighted average, the different chain actors in the spot market moderately agreed as to producing/procuring/buying cabbage free from pest, diseases, physical injury and chemical residue except for farmers who were undecided.

As to producing/buying cabbage which is fresh, clean, firm and fully trimmed, majority of the assembler-wholesalers (74%), trucker-wholesalers (75%), 50% of the wholesalers and most of the financier-assembler-wholesaler (40%) and retailers (42%) had strongly agreed. A significant number from the financier-assembler-wholesaler (33%) are undecided. Large number from the farmers (28%) and 50% of the wholesaler-retailers moderately agreed. Average responses on Table 9a showed that the respondents moderately agreed on producing/buying cabbage which are fresh, clean, firm and fully trimmed except to trucker-wholesalers and wholesaler-retailers who strongly agreed and farmers who are undecided.

Most of the farmers (26%), financier-assembler-wholesaler (33%), wholesalers (40%), retailers (31%), majority (53%) of the assembler-wholesalers and 39% of wholesaler retailers moderately agreed as to selling/buying from sellers of good reputation and. Large number from the assembler-wholesalers (32%) and wholesalers-

retailers (39%) are undecided and the same number of the trucker-wholesalers (33%) had strongly/moderately agreed and was undecided. The same number from the farmers (20%) were undecided and had strongly disagreed.

Most of the wholesalers (40%), retailers (31%) and farmers (33%) were undecided as to producing/buying adequate volume of cabbage to meet immediate demand. Fifty percent of the trucker-wholesalers and most of the assembler-wholesalers (37%), financier-assembler-wholesaler (47%) and wholesalers-retailers (47%) had strongly agreed.

As implied in the weighted average (Table 9b), all the chain actors in the spot market moderately agreed as to selling/buying to sellers with good reputation and selling/buying adequate volume to meet immediate demand except for farmers who are undecided in their responses.

As to adequacy of logistics in trading cabbage, most farmers (35%), and wholesalers (40%) are undecided but 33% of the farmers had moderately disagreed. Most of the assembler-wholesalers (47%), financier-assembler-wholesaler (47%), wholesaler-retailers (39%) and 50% of the trucker-wholesalers strongly agreed. Most retailers (27%) had strongly disagreed and 22% from wholesaler-retailers were undecided. The weighted average have shown that the assembler-wholesalers, financier-assembler-wholesaler, trucker-wholesalers, and wholesalers moderately agreed on having adequate logistics in selling/producing/buying cabbage while the farmers, wholesaler-retailers and retailers were undecided.

As shown on Table 9a, the mean responses revealed that respondents moderately agreed appropriate classification, weighing and packing; delivering when required; buying cabbage free from pest and diseases, physical injury, chemical residues and are

fresh and fully trimmed; buy from sellers with good reputation; buy adequate volume to meet immediate demand; and that they have adequate logistics. Only in terms of selling/buying at a negotiated price where they strongly agreed.

Table 9b shows the statistical results about the perceived abilities to meet quality requirement of the different market intermediaries in the spot market.

Respondents are giving much consideration on adequacy of logistics in trading cabbage and having adequate volume to meet immediate demand. Next to this are selling/buying cabbage at a negotiated price and delivering when required. Buying cabbages which are fresh, fully trimmed and having sellers of good reputation follows. The least is in terms of buying cabbage free from pest, diseases, physical injury, chemical residue and appropriate classification (weighing and packing) of cabbage.

The result showed no significant differences among the respondents as to appropriate classification, weighing, and packing therefore confirms as what Batt (2005) had cited in meeting quality requirements such as proper packing and of approporiate quantity. On the other hand, result further revealed that respondents have highly significant differences in almost all the criteria. It implies that the chain actors have their own ways of choosing cabbage. Furthermore, the chain actors had no similarities on their perceived abilities in meeting quality requirements of cabbage.

Table 9b. Descriptive and test statistics

STATEMENTS	MEAN	CHI-SQUARE	DF	ASYMP. SIG.
1. I had appropriately classified, weighed and packed	3.97	3.439	3	.329
2. I sell/buy at a negotiated price.	4.11	30.501	3	.000**
3. I deliver when required.	3.13	17.693	3	.001**
4. I buy cabbage free from pest and diseases physical injury and chemical residues.	3.77	11.005	3	.012**

5. I usually buy cabbages which are fresh, clean, firm/crunchy and fully trimmed.	3.99	16.238	3	.001**
6. I buy cabbage from sellers with good reputation.	3.67	13.639	3	.003**
7. I buy adequate volume of cabbage to meet immediate demand.	3.64	34.109	3	.000**
8. I have adequate logistics to buy cabbage.	3.08	35.667	3	.000**

Legend: *= significant **= highly significant

Perceived Inabilities of Chain Actors' to Meet Buyers' Quality Requirements

Inabilities refer to the incapabilities of the different chain actors in the spot market in meeting quality requirements.

Majority of the respondents from the trucker-wholesalers (58%), wholesalers (60%), and wholesaler-retailers strongly agreed that they are dependent on the quality/quantity of cabbage produced/procured. Most of the assembler-wholesalers (42%) And retailers (47%) had strongly agreed too. More than 50% of the financier-assembler-wholesalers and 35% of the farmers had moderately agreed. Average of responses showed that the respondents moderately agree that they were dependent on the quality/quantity of cabbage they produce/procure/sell except for trucker-wholesalers who strongly agreed as it was shown on Table 10a.

There were 40% wholesalers who strongly disagreed that they have insufficient capital in trading cabbage but 30% had strongly agreed. As to assembly group, there were 32% assembler-wholesalers and 47% financier-assembler-wholesalers who had moderately agreed. Farmers (33%) and trucker-wholesalers (33%) had moderately disagreed. It was revealed by the weighted average of responses that all the respondents were undecided except for trucker-wholesalers who moderately disagreed that they have insufficient capital to produce/procure cabbage.

The same number of the wholesalers (30%) interviewed strongly disagreed that they have limited control on the quality/quantity of cabbage they produce/procure and sold. There were 28% as having the largest number from the wholesaler-retailers who

Table 10a: Perceived inabilities of chain actors' to meet buyers' quality requirements

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
A. Farmer											
1. I am dependent on the quality/quantity of cabbage I produced/procured.	0	0	1	2	15	33	16	35	14	30	3.93
2. I have insufficient capital to produce/procure cabbage.	2	4	15	33	10	22	12	26	7	15	3.15
3. I have limited control on the quality/ quantity of cabbage I produced/procured and sold.	4	9	13	28	11	24	14	30	4	9	3.02
4. I largely depend from the Prevailing market price.	4	9	6	13	11	24	14	30	11	24	3.48
B. Assembler-Wholesaler											
1. I am dependent on the quality/quantity of cabbage I produced/procured.	0	0	1	5	5	26	5	26	8	42	4.05
2. I have insufficient capital to Produce/procure cabbage.	3	16	5	26	4	21	6	32	1	5	2.84
3. I have limited control on the quality/quantity of cabbage I Produced/procured and sold.	2	11	3	16	5	26	6	32	3	16	3.26
4. I largely depend from the Prevailing market price.	0	0	1	5	13	68	1	5	4	21	3.42
C. Financier-Assembler-Wholesaler											
1. I am dependent on the quality/quantity of cabbage I produced/procured.	0	0	1	7	2	13	8	53	4	27	4
2. I have insufficient capital to Produce/procure cabbage.	2	13	2	13	3	20	7	47	1	7	3.20

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

. Table 10a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	
C. Financier-Assembler-Wholesaler											
3. I have limited control on the quality/quantity of cabbage	0	0	5	33	5	33	5	33	0	0	3

Produced/procured and sold.											
4. I largely depend from the Prevailing market price.	1	7	0	0	6	40	5	33	3	20	3.60
D. Trucker-Wholesaler											
1. I am dependent on the quality/quantity Of cabbage I produced/procured.	0	0	0	0	1	8	4	33	7	58	4.50
2. I have insufficient capital to Produce/procure cabbage.	3	25	4	33	3	25	2	17	0	0	2.33
3. I have limited control on the quality/quantity of cabbage I Produced/procured and sold.	1	8	3	25	2	17	3	25	2	17	2.92
4. I largely depend from the Prevailing market price.	2	17	1	8	3	25	3	25	3	25	3.33
E. Wholesaler											
1. I am dependent on the quality/quantity of cabbage I produced/procured.	1	10	1	10	1	10	1	10	6	60	4
2. I have insufficient capital to Produce/procure cabbage.	4	40	1	10	1	10	1	10	3	30	2.8
3. I have limited control on the quality/quantity of cabbage I Produced/procured and sold.	3	30	1	10	1	10	2	20	3	30	3.1
4. I largely depend from the Prevailing market price.	0	0	1	10	4	40	1	10	4	40	3.8
F. Wholesaler-Retailer											
1. I am dependent on the quality/quantity Of cabbage I produced/procured.	0	0	2	6	6	17	9	25	19	53	4.25
2. I have insufficient capital to Produce/procure cabbage.	8	22	7	19	10	28	6	17	5	14	2.81
3. I have limited control on the quality/quantity of cabbage I Produced/procured and sold.	2	6	9	25	10	28	6	17	9	25	3.31
4. I largely depend from the Prevailing market price.	1	3	6	17	9	25	8	22	12	33	3.67
G. Retailer											
1. I am dependent on the quality/quantity Of cabbage I produced/procured.	2	4	1	2	6	11	20	36	26	47	4.22
2. I have insufficient capital to Produce/procure cabbage.	6	11	11	20	7	13	14	25	17	31	3.45
3. I have limited control on the quality/quantity of cabbage I Produced/procured and sold.	4	7	13	24	9	16	11	20	18	33	3.47
4. I largely depend from the Prevailing market price.	2	4	7	13	13	24	15	27	18	33	3.73

Were undecided and 26% from the assembler-wholesalers. Most of the farmers (30%) had moderately agreed and the same numbers from the financier-assembler-wholesalers (33%) had moderately disagreed, agree and were undecided. Most of the assembler-wholesalers (32%) and trucker-wholesalers (25%) had moderately agreed. The weighted

average of the responses revealed that the trucker-wholesalers, wholesalers, assembler-wholesalers and farmers were undecided and the wholesaler-retailers, retailers, and financier-assembler-wholesalers moderately agreed that they have limited control on the quality/quantity of cabbage produced/procured and sold.

Average responses on Table 10a showed that the different respondents largely depend on the quality/quantity of cabbage produced/procure/sell. They moderately consider that they have insufficient capital to produced/procure/sell; have limited control on quality/quantity of cabbage they produce/procure and sold; and being largely depend from the prevailing market price.

Table 10b showed the statistical results used in determining whether there are differences on respondents' perceptions on their inabilities in meeting buyers' quality requirements.

Most respondents' inabilities were on insufficiency of capital to produce cabbage and being dependent on the quality/quantity of cabbage they produce/procure/sell. This was followed by having limited control on the quality/quantity of they produce/procure/sell and last is being largely dependent on prevailing market price.

The result showed that the different respondents have no significant difference on their perceived inabilities such as being dependent on the quality/quantity of cabbage they produce/procure (level of significance at 0.075); limited control on quality/quantity of cabbage they produce/procure and sell (0.315); and largely dependent from market

Table 10b. Descriptive and test statistics

STATEMENTS	MEAN	CHI- SQUARE	DF	ASYMP. SIG.
1. I am dependent on the quality/quantity of cabbage I produced/procured.	4.13	6.897	3	0.075

2. I have insufficient capital to produce/procure cabbage.	3.08	8.593	3	0.035*
3. I have limited control on the quality/ quantity of cabbage I produced/procured and sold.	3.23	3.542	3	0.315
4. I largely depend from the prevailing market price.	3.61	1.816	3	0.611

Legend: *= Significant

Prevailing price (0.611). The result further showed that the respondent significantly differ on their perceptions as to insufficiency of capital to produce/procure cabbage with (level of significance of 0.035).

This implied that the different respondents considers the different criteria used as their inabilities and not all are having problems on capital insufficiency in the production/procurement of cabbage.

Constraints to Improve/Maintain Quality Requirements

Table 11a presents the constraints that hinder the different chain actors on improving/maintaining the quality of cabbage offered for sale.

As to inadequacy of logistic facilities and equipment, most of the farmers (32%), assembler-wholesalers (32%), financier-assembler-wholesalers (53 %), wholesalers (40%) and wholesaler-retailers (28%) are undecided. Fifty percent of the trucker-wholesalers had moderately disagreed and 31% of the retailers had moderately agreed. As showed by the weighted average, the trucker-wholesalers moderately disagree while retailers moderately agree that they have adequate logistic facility and equipment in trading cabbage. The rest of the respondents were undecided in their responses.

Table 11a. Constraints to improve/maintain quality requirements

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	

A. Farmer											
1. Inadequacy of logistic facilities/equipments.	1	2	7	15	20	43	10	22	8	17	3.37
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	1	2	12	26	5	11	22	48	6	13	3.43
3. Limited choices on cabbage.	6	13	20	53	13	28	3	7	4	9	2.54
4. Less control in grading/packaging.	6	13	15	33	16	35	3	7	6	13	2.74
5. Lack of cold storage facility in trading.	4	9	2	4	6	13	1	2	33	72	4.24
B. Assembler-Wholesaler											
1. Inadequacy of logistic facilities/equipments.	1	5	3	16	6	32	6	32	3	16	3.37
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	1	5	5	26	3	16	8	42	2	11	3.26
3. Limited choices on cabbage.	4	21	9	47	2	11	3	16	1	5	2.37
4. Less control in grading/packaging.	3	16	2	11	9	47	3	16	2	11	2.95
5. Lack of cold storage facility in trading.	0	0	3	16	3	16	2	11	11	58	4.11
C. Financier-Assembler-Wholesaler											
1. Inadequacy of logistic facilities/equipments.	1	7	2	13	8	53	2	13	2	13	3.13
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	0	0	5	13	4	27	4	27	2	13	3.20
3. Limited choices on cabbage.	0	0	6	40	6	40	2	13	1	7	2.87
4. Less control in grading/packaging.	1	7	5	33	4	27	5	33	0	0	2.87
5. Lack of cold storage facility in trading.	3	20	2	13	2	13	1	7	7	47	3.47
D. Trucker-Wholesaler											
1. Inadequacy of logistic facilities/equipments.	2	17	6	50	1	8	2	17	1	8	2.5
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	2	17	6	50	1	8	1	8	2	17	2.58
3. Limited choices on cabbage.	5	42	4	33	2	17	0	0	1	8	2

Numerical and descriptive value:

1= 1-1.8= Strongly Disagree
2=1.8-2.6= Disagree
3=2.6-3.4= Undecided
4=3.4-4.2= Agree
5=4.2-5= Strongly Agree

Table 11a. Continued…

STATEMENT	1		2		3		4		5		AVE.
	N	%	N	%	N	%	N	%	N	%	

D. Trucker-Wholesaler											
4. Less control in grading/packaging.	1	8	6	50	2	17	2	17	1	8	2.67
5. Lack of cold storage facility in trading.	3	25	1	8	1	8	1	8	6	50	3.5
E. Wholesaler											
1. Inadequacy of logistic facilities/equipments.	1	10	2	20	4	40	2	20	1	10	3
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	4	40	0	0	4	40	0	0	2	20	2.6
3. Limited choices on cabbage.	3	30	1	10	3	30	2	20	1	10	2.7
4. Less control in grading/packaging.	1	10	0	0	3	30	3	30	3	30	3.7
5. Lack of cold storage facility in trading.	2	20	2	20	2	20	0	0	4	40	3.2
F. Wholesaler-Retailer											
1. Inadequacy of logistic facilities/equipments.	3	8	10	28	10	28	9	25	4	11	3.03
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	6	17	8	22	7	19	12	33	3	8	2.94
3. Limited choices on cabbage.	7	19	8	22	8	22	10	28	3	8	2.83
4. Less control in grading/packaging.	1	3	11	31	5	14	12	33	7	19	3.36
5. Lack of cold storage facility in trading.	12	33	2	6	4	11	5	14	13	36	3.14
G. Retailer											
1. Inadequacy of logistic facilities/equipments.	6	11	6	11	11	20	17	31	15	27	3.53
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	7	13	12	22	6	11	13	24	17	31	3.38
3. Limited choices on cabbage.	12	22	14	25	9	16	18	33	2	4	2.71
4. Less control in grading/packaging.	3	5	11	20	11	20	16	29	14	25	3.49
5. Lack of cold storage facility in trading.	11	20	5	9	2	4	5	9	32	58	3.76

In terms of inadequacy of capital to acquire appropriate logistics facilities/equipments, 33% of the financier-assembler-wholesalers and 50% of the trucker-wholesalers had moderately disagreed. Most of the retailers (31%) had strongly disagreed but there were 23.64% who moderately agreed. Most from farmers (48%), assembler-wholesalers (42%) and wholesaler-retailers (33%) had moderately agreed. The

weighted average of responses showed that the respondents are undecided on having inadequate capital to acquire appropriate logistic facility and equipment except for farmers who had moderately agreed and wholesalers who moderately disagreed.

Most of the farmers (43%), assembler-wholesalers (47%) and financier-assembler-wholesalers (40%) had moderately disagreed of having limited choices on cabbage to produce/procure/sell. There were 42% of the trucker-wholesalers and 30% wholesalers who were undecided and had strongly disagreed. Weighted average of responses revealed that farmers and trucker-wholesalers moderately disagreed on having limited choices on cabbage and the rest of the chain actors interviewed are undecided.

Fifty percent from the trucker-wholesalers and 33% of the financier-assembler-wholesalers moderately disagreed of having less control in grading/packaging cabbage. Most of the farmers (35%), assembler-wholesalers (48%) and financier-assembler-wholesalers (33%) are undecided. The same numbers of the wholesalers (30%) are undecided, had moderately and strongly agreed. Average of responses showed that all the respondents were undecided except for wholesalers who moderately agreed that they have less control in grading/packaging of cabbage they produce/procure or sell.

Majority of the farmers (72%), retailers (58%) and 50% of the trucker-wholesalers strongly agreed that they lack cold storage facility in trading cabbage. Most of the assembler-wholesalers, financier-assembler-wholesalers (47%), wholesalers (40%), wholesaler-retailers (36%) had also strongly agreed. There were 20% of the financier-assembler-wholesalers and retailers and 33% from the wholesaler-retailers who strongly disagree. The weighted average response revealed that the farmers, assembler-wholesalers, trucker-wholesalers, and retailers moderately agree that they lack cold

storage facility in trading cabbage while the financier-assembler-wholesalers, wholesaler-retailers and wholesaler are undecided.

The average responses on Table 11a revealed that the respondents are facing problems in terms of inadequacy of logistic facilities/equipments, inadequacy of capital to acquire appropriate logistic facilities/equipments, less control in grading/packaging, and lack of cold storage facility in trading. They slightly disagree that they have limited choices on cabbage to produce/procure or sell.

Table 11b showed significant difference among respondents on their perceived constraints as to inadequacy of logistic facilities/equipments (level of significance at 0.013); less control in grading/packaging (0.030); and lack of cold storage facility in trading cabbage (0.022). It implies that these factors are not considered by all the respondents as constraint in doing vegetable business. Moreover, the result showed no significant differences of perception as to inadequacy of capital to acquire appropriate logistic facilities/equipments (level of significance at 0.108) and limited choices on vegetable having 0.904 significance. This means that chain actors consider insufficiency of capital and limited choices on cabbage as constraints in doing vegetable business.

Table 11b. Descriptive and test statistics

STATEMENTS	MEAN	CHI-SQUARE	DF	ASYMP.SIG.
1. Inadequacy of logistic facilities/equipments.	3.24	10.822	3	.013*
2. Inadequacy of capital to acquire appropriate logistic facilities/equipments.	3.22	6.071	3	.108
3. Limited choices on cabbage.	2.62	.565	3	.904
4. Less control in grading/packaging.	3.13	8.983	3	.030*
5. Lack of cold storage facility in trading.	3.76	9.639	3	.022*

Legend: *=Significant

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

This study was purposely to identify the perceptions of the different chain actors on quality of cabbage in the spot market. This is to determine the perceived quality criteria used by the chain actors in buying/selling cabbage, the abilities and inabilities in meeting quality requirements of buyers, and the constraints that hinder them in meeting quality requirement of cabbage offered for sale.

The study was conducted in the different spot markets for cabbage in the Cordillera Administrative Region specifically in La Trinidad Vegetable Trading Post in La Trinidad, Benguet and on selected markets in Metro Manila such as Balintawak Market, Nepa-Q Market and other retailing markets nearby. Respondents were taken through quota sampling method and are classified according to their functions as to producers (pertaining to farmers), assembly group (assembler-wholesalers and financier-assembler-wholesalers), distribution group (wholesalers, trucker-wholesalers and wholesaler-retailers) and retailing group.

Average age of respondents from the different group were taken wherein farmers had an average age of 33.22, assembly group of 37.47, distribution group of 32.69 and retailing group of 40.87. Also average number of years engaged in vegetable business was taken: having the farmers engaged for 13.65, assembly group for 9.09, distribution group for 4.66 and on retailer groups for 13.76 years.

Product (technical) quality refers to the physical description of cabbage. The respondents had similarities in perception about product/technical quality of cabbage and consider as one basis of buyers in choosing or buying cabbage. The chain actors gave

more importance to variety, color, and size and followed by the firmness and crunchiness. Having the cabbage free from chemical residue and physical injury also follows. The chain actors are giving less consideration in terms of freshness, cleanliness and if fully trimmed.

Service qualities are the additional requirement a supplier is willing to do to retain customers in business. Chain actors have similar perception on the service quality specifically in terms of extending credit terms and having loan/cash advance from the buyers but differs on giving notice to buyers about supply shortage and price changes and exerting effort in the production/procurement of cabbage. Furthermore, the chain actors are highly indifferent as to extending support services in the delivery and on adequacy of logistics in trading the cabbage

As to functional quality of cabbage, it was found out that the respondents had different ways of choosing/selecting cabbage such as on delivering, product scheduling, ordering and invoicing but same perception as to classification/grading, accurate weighing/packing of cabbage.

The chain actors as a supplier are much focused on having adequate supply when buyers want it followed by flexibility in pricing and accepting payment term. Respondents also consider accepting orders and ensuring to deliver when needed and adhere to production/procurement/delivery targets. They give less consideration on accurate weighing, packing, classification/grading the cabbage.

As to abilities in meeting quality requirements, respondents do appropriately classify, weigh and pack the cabbage they produced/procuredsold. Although the chain actors have their own ways of choosing cabbage and had no similarities on their perceived abilities in meeting quality requirements of cabbage, they still give much

consideration concerning adequacy of logistics in trading cabbage and having adequate volume to meet immediate demand. Also a considerable attention is given in selling/buying cabbage at a negotiated price and delivering when required. Freshness also is one factor that the chain actors could never ignore since this was always considered by every buyer for choosing cabbage.

As to inabilities to meet quality requirements, the different chain actors largely depend on the quality/quantity of cabbage produced/procure/sell. Most respondents consider that they have insufficient capital to produced/procure/sell; have limited control on quality/quantity of cabbage they produce/procure and sold; and are largely dependent from the prevailing market price.

Constraints are that barriers/factors that hinder the chain actors in the spot market in meeting quality requirements. The different respondents are facing problems in terms of inadequacy of logistic facilities/equipments, inadequacy of capital to acquire appropriate logistic facilities/equipments, less control in grading/packaging, and lack of cold storage facility in trading. Chain actors don't consider limitations on choices of cabbage as their constraints.

Conclusions

Based on the findings of the study, the following findings were derived:

1. As to product quality, the different chain actors in the spot market believed that the cabbage they produce/procure/sell were fresh (clean, fully trimmed, firm, crunchy), free from pest, diseases, physical injury and are specified according to variety, size and color.

2. Chain actors differ on their perception as to giving notice to buyers about supply shortage and price changes and exerting effort in the production/procurement of cabbage and are highly indifferent as to extending support services in the delivery and on adequacy of logistics in trading the cabbage

3. The chain actors properly classify, grade, accurately weighed and packed the cabbage and not all have adequate supply when buyers want it; accepts orders and delivers when needed; and are flexible in pricing cabbage and accepts payment term.

4. As to functional quality of cabbage, it was found out that the respondents had different ways of choosing/selecting cabbage such as on delivering, product scheduling, ordering and invoicing.

5. As to abilities to meet quality requirements, the chain actors give much consideration concerning adequacy of logistics in trading cabbage and having adequate volume to meet immediate demand. Also a considerable attention is given in selling/buying cabbage at a negotiated price and delivering when required. Freshness also is one factor that the chain actors could never ignore since this was always considered by every buyer for choosing cabbage.

5. As to inabilities to meet quality requirements, the different chain actors largely depend on the quality/quantity of cabbage produced/procure/sell. Most chain actors consider that they have insufficient capital to produced/procure/sell; have limited control on quality/quantity of cabbage they produce/procure and sold; and are largely dependent from the prevailing market price.

6. The different respondents are facing problems in terms of inadequacy of logistic facilities/equipments, inadequacy of capital to acquire appropriate logistic

facilities/equipments, less control in grading/packaging, and lack of cold storage facility in trading.

Recommendations

1. Adequacy of logistics (workforce, facilities, and equipment) in trading cabbage is much important in improving/maintaining quality. This could help avoid the different factors that induce quality reduction especially on transporting from its point of production to its final consumption.

2. The chain actors should try to exert more effort in giving notice about supply shortage and price changes and on extending support services buyers for this would also help establish good relationship between actors.

3. The chain actors should establish some quality standards that would be used by everyone to have an efficient and effective negotiation between actors. Variation on the perceptions on quality specifically on functional quality could make negotiations difficult and could effect to one actor deciding over the other.

4. Problem on insufficiency of capital could be addressed through availing of the loans or assistance being lend by governments or other private agencies.

5. Although cold storage facilities provided by government are not really enough, the different chain actors should still try to maximize the use of those already given available.

6. The government should intense its programs on providing support to vegetable industry as to providing state of the art equipments and facilities. This would help reduce problems on uncontrolled quantity of cabbage in the spot markets and also reduce physical damages manifested during handling (transporting).

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APPENDIX A

Letter to the Respondents

COLLEGE OF AGRICULTURE
Department of Agricultural Economics and Agribusiness Management
Benguet State University
La Trinidad, Benguet
November 2010

Dear Respondent,

I am a fourth year student of Benguet State University, taking up Bachelor of Science in Agribusiness; I am currently conducting a study on "Chain Actors' Perception on Quality of Cabbage in the Spot Market".

In connection with this, may I request your full cooperation and assistance in gathering data by answering the questionnaire sincerely and honestly, which help me in the success of this research. Rest assured that all information gathered in this study will be dealt with utmost confidence

Thank you and May God Bless You in all your undertakings.

Truly Yours,

EFREN C. LORENZO
Researcher

Noted by:

LEOPOLDO N. TAGARINO
Adviser

APPENDIX B

Research Questionnaire

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

Age: _____
Gender: _____ Male _____ Female
Marital status: [ ] Single [ ] Married [ ] Separated [ ] Widowed
Religion: [ ] Catholic [ ] Protestant [ ] others, specify_____
Educational background: [ ] Elementary [ ] High School
[ ] College [ ] Vocational
Numbers of years engage in vegetable business: _____
7. Organizational affiliation: [ ] Farmers' Association [ ] Cooperatives
[ ] Others, specify _____

B. What are the cabbage you frequently produce/procure and sell in the market?
[ ] Potato [ ] Cabbage [ ] Chayote [ ] others, specify_____

C. Who are the buyers of cabbage you produced/procured?
[ ] Assembler-Wholesalers [ ] Financier-Assembler-Wholesalers
[ ] Financier-Assembler-Wholesaler-Retailer [ ] Trucker-Wholesalers
[ ] Wholesalers [ ] Wholesaler-Retailers [ ] Retailers

D. Where do you sell the cabbage produced/procured?
[ ] La Trinidad Cabbage 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 cabbage?

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

Factors	1 2 3 4 5
1. Free from chemical residue.	StronglyDisagree□□□□□Strongly Agree
2. Free from pests and diseases.	StronglyDisagree□□□□□Strongly Agree
3. Variety, color and size of cabbage are specified.	StronglyDisagree□□□□□Strongly Agree
4. Free from physical injury.	StronglyDisagree□□□□□Strongly Agree
5. Fresh, clean and fully trimmed.	StronglyDisagree□□□□□Strongly Agree
6. Firm and crunchy.	StronglyDisagree□□□□□Strongly Agree

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

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

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

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

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

Factors	1 2 3 4 5
1. Supplier (seller) adheres to production/procurement/delivery targets.	StronglyDisagree□□□□□Strongly Agree
2. Supplier classifies/grades the cabbage properly.	StronglyDisagree□□□□□Strongly Agree

3. Supplier accurately weighed and packed the cabbage. StronglyDisagree□□□□□Strongly Agree
4. Supplier has adequate supply of cabbage when the buyers want it. StronglyDisagree□□□□□Strongly Agree
5. Supplier accepts orders and delivers the cabbage when needed. StronglyDisagree□□□□□Strongly Agree
6. Supplier is flexible in pricing the cabbage and accepts payment term. StronglyDisagree□□□□□Strongly Agree

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

Factors	12345
1. I appropriately classified, weighed and packed the cabbage I sold.	Strongly Disagree□□□□□Strongly Agree
2. I sell/buy at a negotiated price.	Strongly Disagree□□□□□Strongly Agree
3. I deliver when required.	Strongly Disagree□□□□□Strongly Agree
4. I buy cabbage free from pest and diseases, physical injury and chemical residues.	Strongly Disagree□□□□□Strongly Agree
5. I usually buy cabbage which are fresh, clean, firm/crunchy and fully trimmed.	Strongly Disagree□□□□□Strongly Agree
6. I buy cabbage from sellers with good reputation.	Strongly Disagree□□□□□Strongly Agree
7. I buy adequate volume of cabbage to meet immediate demand.	Strongly Disagree□□□□□Strongly Agree
8. I have adequate logistics to buy cabbage.	Strongly Disagree□□□□□Strongly Agree

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

Factors	12345
1.I am dependent on the quality/quantity of cabbage I produced/procured.	Strongly Disagree□□□□□Strongly Agree
2.I have insufficient capital to produce/procure cabbage.	Strongly Disagree□□□□□Strongly Agree
3.I have limited control on the quality of cabbage I produced/procured and sold.	Strongly Disagree□□□□□Strongly Agree
4.I largely depend from the market prevailing price.	Strongly Disagree□□□□□Strongly Agree

E.6. Various constraints to to improve/maintai the quality of fresh cabbage offered. Constraints are the barriers that hinder the actors inthe spot market in meeting quality requirements.

Factors	12345
1.Inadequacy of logistics facilities/equipments.	Strongly Disagree□□□□□Strongly Agree
2.Inadequacy of capital to acquire appropriate logistics facilities/equipments.	Strongly Disagree□□□□□Strongly Agree
3.Limited choices on vegetanles.	Strongly Disagree□□□□□Strongly Agree
4.Less control in grading/packaging.	Strongly Disagree□□□□□Strongly Agree

5. Lack of cold storage facility. Strongly Disagree□□□□□Strongly Agree