

# Regoverning Markets

Small-scale producers in modern agrifood markets

## Innovative Practice

### The Philippines

## Keys to inclusion of small farmers in dynamic vegetable markets: The case of NorminVeggies in the Philippines

Sylvia D. Concepcion, Larry Digal and Joan C. Uy

University of the Philippines in Mindanao  
Northern Mindanao Vegetable Producers' Association

# **The Philippines**

**Keys to inclusion of small farmers in dynamic  
vegetable markets**

**The case of NorminVeggies in the Philippines**

*Sylvia D. Concepcion*

*Larry Digal*

*Joan C. Uy*

**University of the Philippines in Mindanao**

**Northern Mindanao Vegetable Producers' Association**

**2007**

## **Regoverning Markets**

Regoverning Markets is a multi-partner collaborative research programme analyzing the growing concentration in the processing and retail sectors of national and regional agrifood systems and its impacts on rural livelihoods and communities in middle- and low-income countries. The aim of the programme is to provide strategic advice and guidance to the public sector, agrifood chain actors, civil society organizations and development agencies on approaches that can anticipate and manage the impacts of the dynamic changes in local and regional markets.

## **Innovative Practice**

Innovative Practice is a series of country case studies from the Regoverning Markets programme, providing examples of specific innovation in connecting small-scale producers with dynamic markets at local or regional level. Based on significant fieldwork activities, the studies focus on four drivers of innovation: public policy principles, private business models, collective action strategies by small-scale farmers, and intervention strategies and methods of development agencies. The studies highlight policy lessons and working methods to guide public and private actors.

## **The case studies were coordinated by:**

Julio Berdegúe, RIMISP - Latin American Centre for Rural Development, Chile (contact: [jberdegue@rimisp.org](mailto:jberdegue@rimisp.org))

Lucian Peppelenbos, Royal Tropical Institute (KIT), Netherlands (contact [l.peppelenbos@kit.nl](mailto:l.peppelenbos@kit.nl))

Estelle Bienenabe, Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), France (contact: [estelle.bienabe@cirad.fr](mailto:estelle.bienabe@cirad.fr)).

## **Other publication series from the Regoverning Markets programme**

### **Agrifood Sector Studies**

These studies look at specific agrifood sectors within a country or region. Research studies have been carried out in China, India, Indonesia, Mexico, South Africa, Turkey, Poland and Zambia covering the horticulture, dairy and meat sectors. Part A of the studies describe the observed market restructuring along the chains. Part B explores the determinants of small-scale farmer inclusion in emerging modern markets. Using quantitative survey techniques, they explore the impacts on marketing choices of farmers, and implications for rural development.

### **Innovative Policy**

These are short studies addressing a specific policy innovation in the public or private sector that improves the conditions for small-scale producers to access dynamic markets at national, regional and global level.

### **Country Studies**

These provide a summary of market changes taking place at national level within key high value agrifood commodity chains.

### **Policy Briefs**

These are short policy-focused summaries targeted at each stakeholder group.

**Authors**

Sylvia B. Concepcion (corresponding author)  
School of Management  
University of the Philippines in Mindanao  
Mintal, Davao City 8000  
Philippines  
Tel 6382 222 5304  
Fax 6382 227 0750

Larry Digal  
School of Management  
University of the Philippines in Mindanao

Joan C. Uy  
Northern Mindanao Vegetable Association

**Acknowledgments**

Funding for this work was provided by:  
UK Department for International Development (DFID)  
International Development Research Centre (IDRC), Ottawa, Canada  
ICCO, Netherlands  
Cordaid, Netherlands  
Canadian International Development Agency (CIDA)  
US Agency for International Development (USAID).

The views expressed in this paper are not necessarily those of the funding agencies.

**Citation:** Concepcion, S.B. L. Digal, J.C. Uy (2007), *Keys to inclusion of small farmers in the dynamic vegetable market: The case of NorminVeggies in the Philippines*, Regoverning Markets Innovative Practice series, IIED, London.

**Permissions:** The material in this report may be reproduced for non-commercial purposes provided full credit is given to the authors and the Regoverning Markets programme.

**Published by:**

Sustainable Markets Group  
International Institute for Environment and Development (IIED)  
3 Endsleigh Street  
London WC1H 0DD  
www.iied.org  
Tel: +44(0)20 7388 2117, email: sustainablemarkets@iied.org

**Cover design:** smith+bell

Further information and publications from the Regoverning Markets programme are available at: [www.regoverningmarkets.org](http://www.regoverningmarkets.org).

# Contents

1	Executive summary .....	1
2	Background and rationale .....	2
3	Framework of analysis, objectives and data collection .....	4
3.1	Analytical framework.....	4
3.2	Objectives of the study .....	5
3.3	Data collection .....	6
4	The external environment: the Philippine vegetable industry.....	7
4.1	Production, consumption, trade and policies .....	7
4.2	Vegetable supply chains in the Philippines .....	10
4.2.1	Dualistic vegetable supply chain.....	10
4.2.2	Types of vegetable supply chain designs in the Philippines.....	12
4.3	Implications to small vegetable farmers.....	16
5	Keys to inclusion: the case of NorminVeggies .....	17
5.1	The organization .....	17
5.1.1	Objectives .....	17
5.1.2	Normincorp .....	18
5.1.3	Membership and organizational structure.....	20
5.2	The innovation.....	25
5.2.1	The context and history of innovation.....	26
5.2.2	Elements of organizational innovation of NorminVeggies: its key strategies.....	30
5.3	Participation of Normin in chain management.....	38
5.3.1	Traditional (spot) market.....	38
5.3.2	First pillar: specialized wholesalers .....	38
5.3.3	Second pillar: preferred suppliers .....	40
5.3.4	Forward integration.....	41
6	Keys to inclusion: lessons learned .....	45
6.1	Critical success factors of inclusion.....	45
6.1.1	Benefits or incentives of organizing.....	45
6.1.2	Shared core values .....	46
6.1.3	Learning organization .....	46
6.1.4	Leadership and managerial competence.....	47
6.2	Benefits and costs of inclusion .....	47
6.2.1	Increased net benefits for all cluster players.....	47
6.2.2	Benefits and costs by type of farmers.....	51
6.2.3	Sustainability of Benefits for Small Scale Farmers .....	56

7	Conclusions and recommendations .....	60
8	References .....	62

# **1 Executive summary**

This case discusses the strategies of a group of farmers called the Northern Mindanao Vegetable Producers' Association or NorminVeggies, who were able to successfully market their products by using a business model not previously used in the Philippine vegetable industry. Its organizational structure and marketing clusters enabled the farmers to be responsive to the constantly changing market.

Key informant interviews were conducted among stakeholders in the Philippine vegetable supply chain like farmers' groups from Benguet, Mountain Province, Bukidnon, Cotabato, Davao del Sur and Campostela Valley; traders, consolidators and supermarket suppliers, vegetable processors, food chain managers, hotel representatives and supermarkets in Metro Manila and Mindanao, as well as with NorminVeggies and Normincorp who form the marketing division of NorminVeggies..

Farmers of NorminVeggies were able to successfully participate in the dynamic vegetable chains primarily because of the organizational structures they chose by which to respond: a corporation. This enabled them to take on the agility needed for each development in the supply chain while being in an association enabled access to development assistance. The corporation is paid a facilitation fee for its marketing services ensuring its sustainability. The association also earns from storage fees in the use of NorminVeggies Consolidation Centre (NVCC).

The association formed marketing clusters, based on farmers' capability, interest and capitalization. They follow a quality assurance plan for each product, have training for good agricultural practices, and designated lead farmers to act as quality managers and coaches. Small farmers are clustered with independent farmers who help jumpstart quality production. Benefits and accountability for quality are shared with all the cluster members. Products are traceable to the farm and farmer who supplied each pack or crate of produce. Farmers maintain ownership of their own products up to the institutional market and therefore have a greater participation in the chain.

## **2 Background and rationale**

This study looks at the case of NorminVeggies, an association of vegetable farmers and stakeholders in the Southern Philippines who saw the need to organize and implement strategies and innovations through its marketing group, Normincorp, to improve its capability to access dynamic markets in the Philippines, particularly fast foods, supermarkets and vegetable processors. The vegetable farmers work together to build their membership base. They assist each other in the production of quality vegetables; create a group identity, articulate their needs and interests and access support from various groups. They organize to meet the challenges of a rapidly restructuring market by forming marketing clusters and setting up a marketing corporation. By looking at the factors that help explain their success in these markets, we are able to gain insights and lessons in linking small farmers to markets.

Traditionally, marketing has not been performed by small farmers and many failed attempts have been made in the Philippines by farmers to market their produce collaboratively. These attempts were made under cooperative structures. While Manalili (2000) talks about the high failure rates, she also posits that cooperatives 'by virtue of their size, technology requirement, and proximity to and knowledge of the area of production – are still the better option to service the marketing needs of rural agricultural producers'. The key, however, 'is effective management rather than the level of sophistication of the marketing system. Measures should therefore be geared towards enhancing cooperative organizational management and operational efficiencies. Strategies should capitalize on competency-enhancing linkages that enable cooperatives to acquire the capacities of their partners while at the same time 'learning the ropes' of the business.'

In a study conducted in Benguet, spot exchange is the most common marketing arrangement used by 58 per cent of producers and traders of the La Trinidad Trading Post and Baguio City market. (Milagrosa, A.P. and Viane, Ir. J. 2002). The same practices prevail for the rest of the country. While this is risky for the farmers and even the traders, it can sometimes be highly profitable. Frequent transactions occurring in uncertain environments heighten the probability of conflict, thus formal organization is needed. According to Milagrosa and Viane, the type of governance needed is hybrid. The level of uncertainty of spot markets is very high, moderate specificity of assets are involved, where market forces are increasingly unstable and may give false signals to players (at the price levels) making them respond erroneously. While vertical integration may be an option, this is not at all possible for small farmers because of the immense financial and organizational requirements involved.

In this case study, a group of farmers marketed their produce collaboratively and had forward integrated by the last quarter of 2005. They have been surviving and growing for the past six years. The factors that may explain the performance of NorminVeggies in these

dynamic markets are set in a framework discussed in section 3. This framework becomes the basis of analyzing and organizing the discussion of data gathered in the study. In section 4, the changes or restructuring that are taking place in the Philippine vegetable industry are examined. This is followed by a discussion of the case of NorminVeggies in Section 5 particularly on their innovations, responses and strategies in linking to dynamic markets. The discussion in Section 6 focuses on lessons learned from the case study and the keys to inclusion of small farmers in these markets. Finally, recommendations and concluding comments are presented in Section 7.

### **3 Framework of analysis, objectives and data collection**

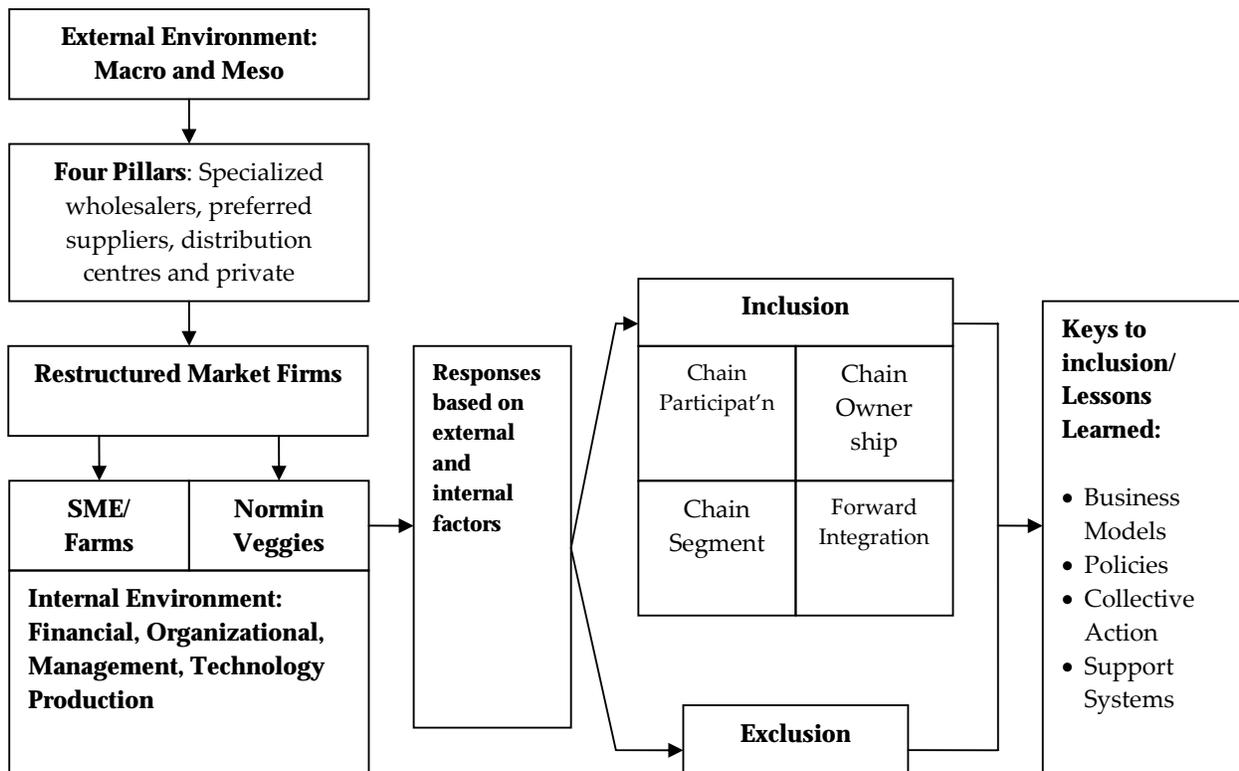
#### **3.1 Analytical framework**

Figure 3.1 shows the overall framework of the study adopted from the regoverning markets programme (Berdegué, J.A. and Peppelenbos, L. 2005). The study aims to understand the keys to inclusion of small farmers to dynamic markets in the case of producers belonging to NorminVeggies and assisted by Normincorp. Their strategies and innovations are responses to the dynamic external environment where they operate, taking into account their core competencies and constraints faced.

The dynamic external environment comprises the macro and meso environments on two levels. One level is the immediate environment where NorminVeggies operates - the Philippine vegetable industry. Here, the restructuring of the downstream firms is critical as it implies changes or adjustments for the farmers, particularly the small operators and the small and medium enterprises (SMEs). The other level is the macro level, which refers to the agribusiness and macroeconomic factors that affect performance of firms operating in the vegetable industry.

Changes in the external environment such as increasing quality and food safety standards require changes for the suppliers. These may include upgrading technology, improving organizational set up or increasing capital. On the other hand, the internal factors pertain to the resources, competencies and constraints within NorminVeggies. These include financial, organizational, management, and technology production.

**Figure 3.1: Framework of analysis**



These external and internal factors form the basis of NorminVeggies’ strategies and responses in these dynamic markets, which will result in the inclusion or exclusion of NorminVeggies farmers. It is important to understand the key components of this framework and their relationships to expose the underlying factors to the inclusion or exclusion of small farmers.

### **3.2 Objectives of the study**

Based on this framework, the study aims to achieve the following objectives:

- To describe the key elements of the innovation and its context at the level of the supply chain and of the relevant meso and macro trends, policies and institutions.
- To explain how the innovation emerged over time and how it resulted in greater inclusion of small farmers and/or rural SMEs.
- To map the critical stages and the critical success factors in the evolution of the innovation.

- To identify evidence of inclusion, the costs and benefits of the innovation, and how are they distributed across different actors in the supply chain particularly small farmers and/or rural SMEs gain and whether results are sustainable.
- To determine the drivers towards greater degree of inclusion particularly in terms of policy principles, business models, collective action and support systems.
- To explore the implications for potential upscaling and/or replication and their challenges.

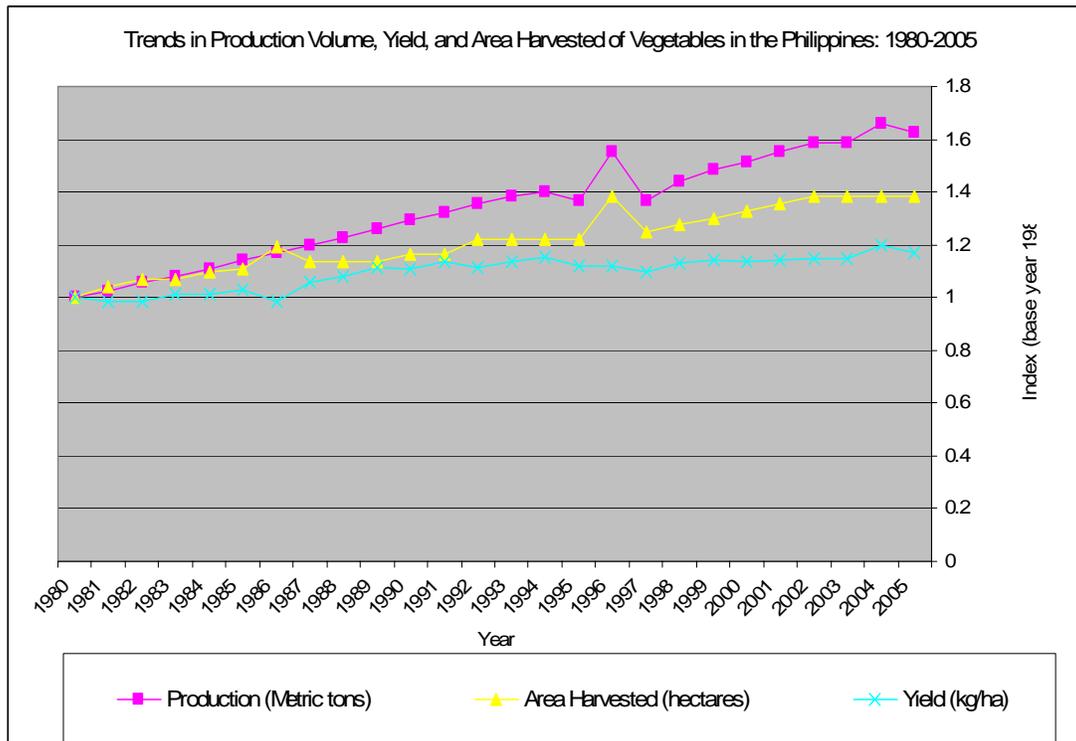
### **3.3 Data collection**

Following this framework of analysis, both primary and secondary data were used. The primary data on NorminVeggies and its marketing group, Normincorp, and the structure of the marketing firms in the vegetable industry were gathered using key informant interviews. These included interviews with; NorminVeggies and Normincorp stakeholders of the Philippine vegetable industry, such as vegetable processors, food chain managers, hotel representatives, supermarkets and vegetable consolidators in Metro Manila and Mindanao; and farmer groups from Benguet, Mountain Province, Bukidnon, Cotabato, Compostela Valley and Davao del Sur.

It was recognized early on that the success of the case study would depend on the participation of the key subject organizations (Douthwaite, B., and Ashby, J. 2005) such as NorminVeggies, NorminCorp, and Kaanib Foundation Inc (KFI) who would provide the majority of the data to document and analyze innovations. To this end, Ms. Joan Cua Uy was made part of the research team. She is the president of Normincorp and a member of the Board and Vice-President for Marketing of NorminVeggies. She also runs Green Haven Farm and is one of the independent farmers of NorminVeggies/Normincorp. On the other hand, secondary data on Philippine vegetable industry were gathered from Department of Agriculture, Bureau of Agricultural Statistics, FAOSTAT, internet searches and Planet Retail.

## 4 The external environment: the Philippine vegetable industry

**Figure 2: Production, yield and area harvested for philippine vegetables, 1980-2005**  
(Source: FAOSTAT 2006)

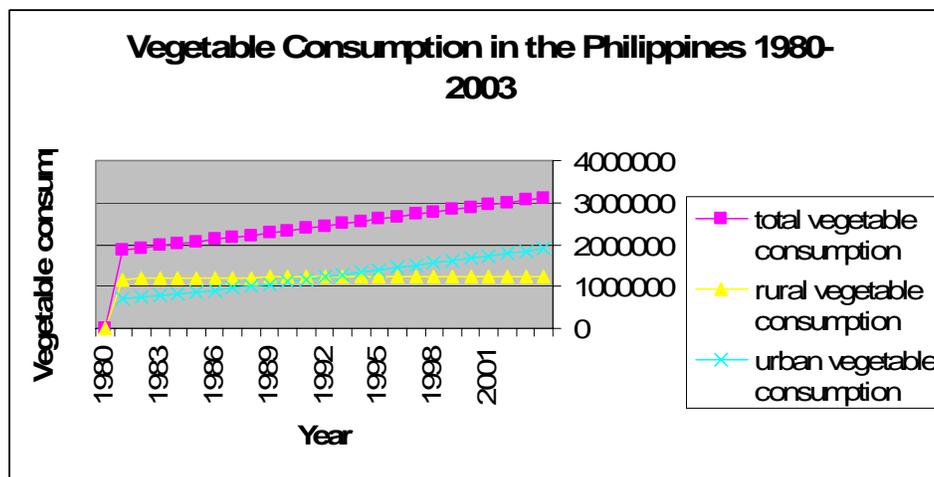


To understand the external environment that affects the performance of NorminVeggies, it is important to provide a picture of the vegetable supply chain and the changes or restructuring in the market. An overview of the Philippine vegetable industry is presented in 4.1 followed by a discussion of the vegetable supply chains and the restructuring that is taking place in section 4.2. Implications of these on small farmers are examined in section 4.3.

### 4.1 Production, consumption, trade and policies

Average annual vegetable production for the last 25 years (1980 to 2005) is estimated at 3.6 million metric tons. Total area devoted to vegetable production during this period is recorded at 438,962 hectares. This translates to an average annual yield of about 8.21 metric tons per hectare. From 1980 to 2005, production, area harvested and yield all posted positive growth rates. Production increased by 1.34 per cent, faster than the growth in the area devoted to vegetable production which was 1.21 per cent. This produces a positive yield growth of 1.09 per cent per year. These trends are shown in Figure 4.1 with data translated into indices with base year at 1980.

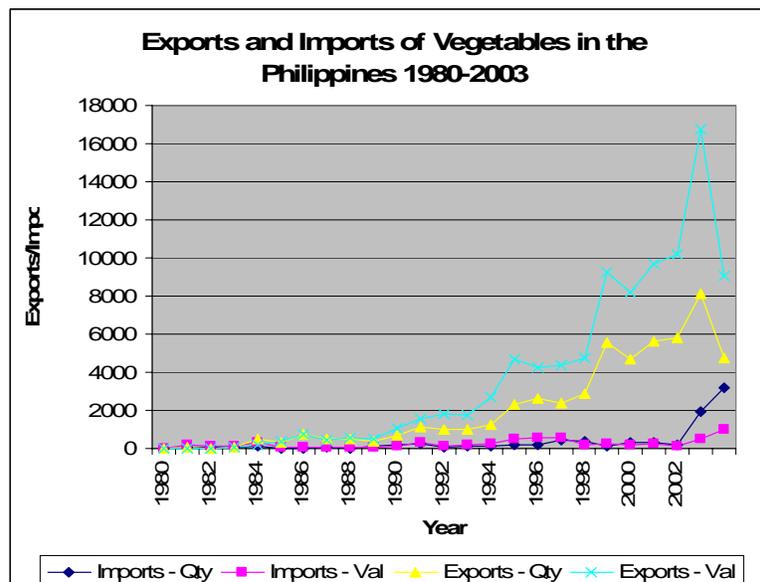
**Figure 4.2: Vegetable consumption in the Philippines, urban and rural. (Source: FAOSTAT 2006)**



Consumption, on the other hand is also increasing. Based on the estimate of the Food and Nutrition Research Institute (FNRI) in 1993, a Filipino consumes 39 kilos of vegetables per year. This data was used to estimate vegetable consumption of the urban and rural population from 1980 to 2003 and graphed in Figure 4.2. This shows that the increase in vegetable consumption is largely due to the increase in urban consumers. Urban consumption grew by 4.42 per cent while rural consumption increased by 0.2 per cent. However, based on a survey in Davao, Cagayan de Oro and General Santos Cities in 2004, vegetable consumption per capita has increased to about 87 kilos for Davao and Cagayan de Oro Cities and to 105 kilos for General Santos City (Concepcion, S.B. 2005).

Top selling vegetables are squash, eggplant, potato, string beans, cabbage, bitter melon, okra, tomato, carrots and native pechay. A recent trend observed by industry players is the increasing demand for high value salad vegetables like lettuce, bell pepper and tomatoes from the urban Filipino market. As incomes of Filipinos improve, demand for high value vegetables increases. Moreover, Filipino consumers are getting health conscious, further driving the demand for vegetables. Fast food outlets, restaurants and hotels are responding to this opportunity, offering new products that make use of vegetables like salads.

**Figure 3.3: Exports and imports of vegetables in the Philippines, 1980-2003. (Source: FAOSTAT 2006)**



As shown in Figure 4.3, vegetable trade in the Philippines is also expanding. The value of imports increased by 38 per cent per year from 1980 to 2003. Exports increased even higher by 54 per cent during the same period although they experienced a drastic decline between 2002 to 2003. Philippines exports asparagus to Japan and US markets and imports lettuce, and frozen vegetables from Australia and China.

Government, non-government organizations and development agencies are involved in implementing policies and programmes to develop the industry, which is largely dominated by small and poor farmers. There are credit programmes implemented by the Quedan and Rural Credit Guarantee Corporation (QUEDANCOR), Development Bank of the Philippines, Land Bank of the Philippines and Small Business Guarantee and Finance Corporation.

The Agricultural Training Institute of the Department of Agriculture also provides training programmes. These include production and post-harvest as well as marketing capacity programmes where the local government units are also involved. The Growth with Equity in Mindanao funded by USAID as well as other development resource organizations like the Catholic Relief Service and the Lutheran World Relief Service in partnership with non-government organizations joined the efforts in assisting farmers and farmer organizations.

In sum, there are both opportunities and challenges in the Philippine vegetable industry. Demand is increasing, which is mainly propelled by an increasing population, higher

income as well as changes in lifestyles. Trade is also expanding while government and development agencies are implementing programmes to develop the industry. As discussed below, these changes have resulted to some restructuring in the supply chain.

## 4.2 Vegetable supply chains in the Philippines

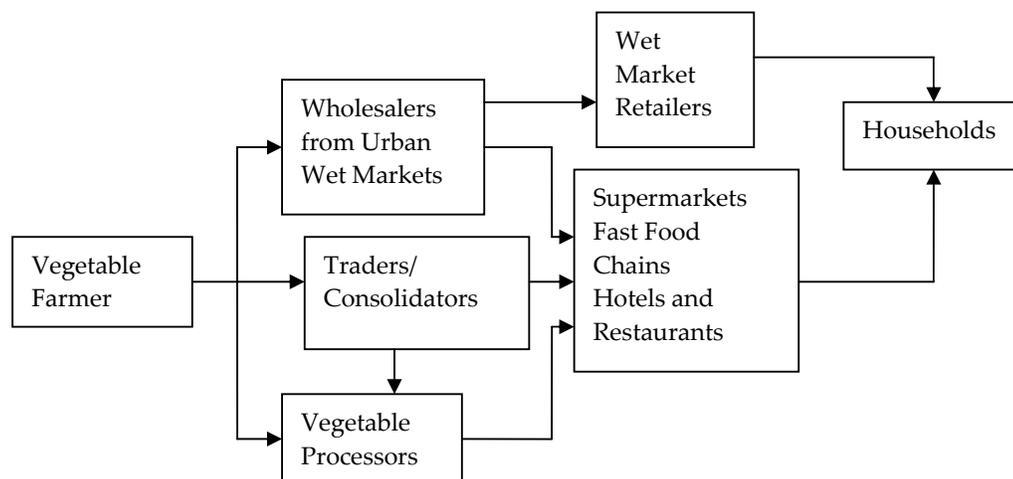
The changes in demand structure and competition in the Philippine vegetable industry have led to changes in supply chains. The typical or ‘mainstream’ supply chain is described below, followed by a discussion on the changes and emerging supply chains in the Philippine vegetable industry.

### 4.2.1 Dualistic vegetable supply chain

Vegetables in the Philippines are grown primarily by small farmers although in recent years, large agribusiness firms with their main business in banana and pineapple cultivation for exports, such as Dole Philippines and Lapanday Foods Corporation have ventured into vegetable production. The latter invested in the industry to produce vegetables primarily for exports but eventually shelved the project.

As shown in Figure 4.4, the vegetable supply chain in the country follows a traditional chain where these farmers sell their produce at the spot market to traders, wholesalers in the wet markets, consolidators and vegetable processors. Wholesalers usually sell their vegetables in wet markets while some traders, particularly consolidators and vegetable processors, sell to institutional markets such as supermarkets, fast food and hotels and restaurants. Very few farmers supply directly to vegetable processors and institutional markets.

**Figure 4.4: The Philippine Vegetable Supply Chain**



The retail market for vegetables is still dominated by wet markets for a number of reasons. Consumers generally buy fresh produce like vegetables in wet markets that offer more variety and assortment than supermarkets do and at lower prices. In Mindanao, 90 per cent of households prefer to buy from wet markets and talipapas<sup>1</sup>, in smaller quantities, three times a week (Concepcion 2005). Farmers, on the other hand, rely on traders who sell to these wet markets and consolidators who in turn supply institutional buyers such as supermarkets, hotels and restaurants.

However, higher incomes and changing lifestyles of urban Filipinos have not only contributed to increased consumption of high value vegetables, they have also played a role in the proliferation of fast food outlets and one-stop shopping malls and supermarkets. High income markets demand convenience. These have triggered changes in the supply chain of vegetables. Firstly, the number of consumers buying their vegetables from supermarkets has increased, particularly those in the urban areas (Digal and Concepcion, 2004). This is consistent with the increased growth of vegetable consumption in urban areas presented in Figure 4.2. This is an opportunity now being tapped by supermarkets and fast food outlets.

An example of this is a large supermarket in Metro Manila, which expanded its number of shelves from two 12 foot long counters in 2001 to three 12 foot long counters in 2004 (Digal and Concepcion 2004). Secondly, with increasing display area and assortment, supermarkets have decreased the number of suppliers and prefer to deal with consolidators and concessionaires. Thirdly, as they attract high income consumers who are more quality conscious, they impose higher standards.

In the Philippines, the differences between low and high income consumers create a wedge in the supply chain resulting to a dualistic vegetable supply chain: the traditional chain (wet market) and modern chain. This is illustrated in Figure 4.5. Curve A represents the high income segment served by modern downstream firms such as supermarkets, and fast food outlets. Procurement systems in this segment change rapidly, responding to consumer demand and competition. Curve B is the traditional wet market that serves low income consumers. Wholesalers in the wet markets supply the small retailers and some modern retailers in the Philippines continue to source from this traditional chain.

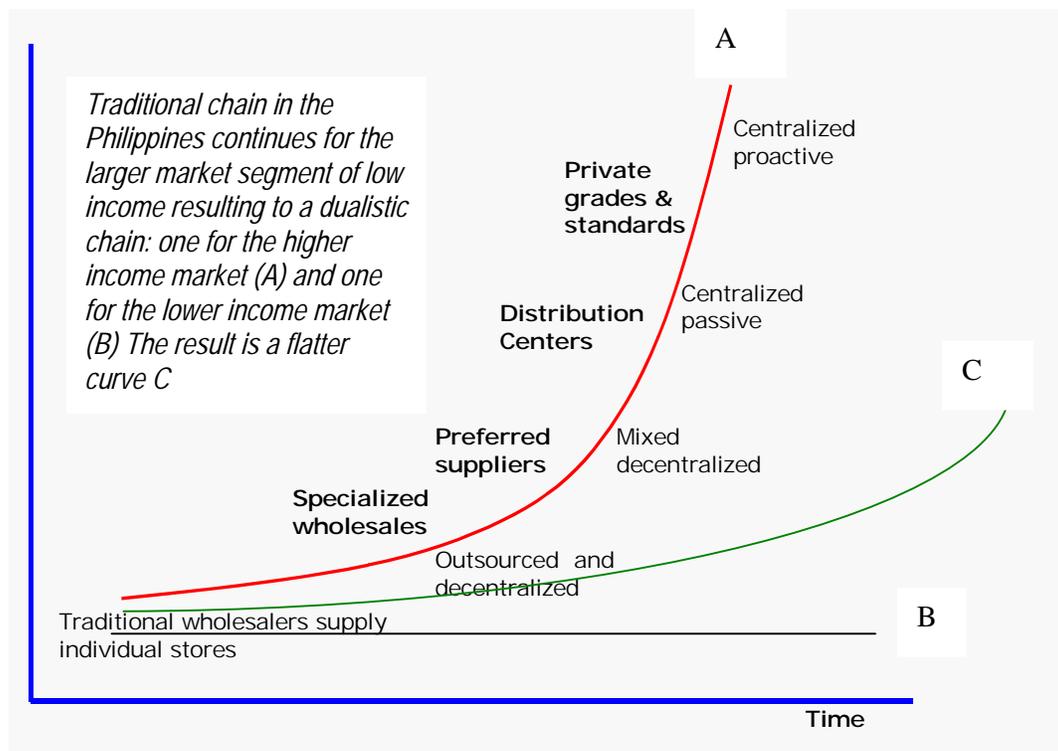
Due to this dualistic nature, the rate of change of the procurement systems may not be as fast as in other countries resulting to a flatter curve C. To some extent, chains A and B are substitutes and therefore they compete and affect one another. One large

---

<sup>1</sup> Talipapa are smaller neighborhood wet markets which source their produce from the central wet market and backyard gardens.

supermarket in the Philippines has lowered the price of vegetables to compete with wet markets. In addition, the Philippine government has launched a programme called ‘Huwarang Palengke (Model Wet Markets).’ This is a competition of wet markets or ‘palengkes’ in the country to encourage these markets to improve services, particularly in the areas of cleanliness, food safety, and good retail practices for consumer welfare. These changes in the procurement systems are reflected in the types of vegetable chain designs discussed below. The traditional vegetable chain in the Philippines continues operating for the larger market segment of low income consumers resulting in a dualistic chain, one for the higher income market (A) and one for the lower income market (B) The result is a flatter curve C.

**Figure 4.5: Pillars of dynamic supply chains and Philippine vegetable chain**



#### 4.2.2 Types of vegetable supply chain designs in the Philippines

Around 75-85 per cent of vegetables in the Philippines are sold through the traditional supply chain, where the wet markets and vegetable traders play major roles. Farmers are generally price takers, accepting what the traders give them at the spot market.

Alternative chain designs have developed over the last three years. Interviews with the different players of the chain from Benguet and the Mountain Province in the

Northern island of Luzon to Southern Mindanao, the southernmost part of the Philippines have yielded data which can be typified as alternative chains.

#### 4.2.2.1 Chain managed by a food processor

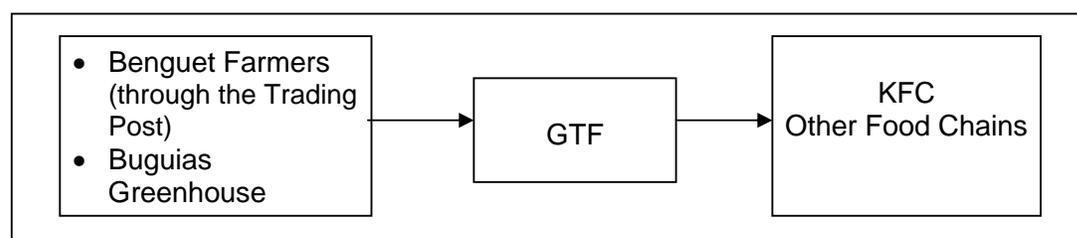
The traditional vegetable chain has been the main source of many restaurants and hotels in most parts of the country. In recent years, fast food chains became drivers for change across the chain. In their need to streamline their own operations and cut costs, the fast food chains no longer wanted to purchase unprocessed vegetables. They increasingly turned to vegetable processors to supply their need.

They wanted to buy only processed vegetables in the form of washed and cut salad vegetables and processed coleslaw. Their former suppliers who used to be vegetable traders and consolidators were therefore forced to adapt to their demands. Many of these traders went into vegetable processing. Suppliers who could not supply the required processed vegetables had to find processors who would become their new markets.

In effect, farmers who used to consolidate and sell to the fast food chains, now find themselves excluded from the fast food chain market unless they could find a processor who would take their products. Small farmers can be part of this chain if they can supply a processor or if the trader who buys from them at the spot market sells to a vegetable processor.

An example of such a development is Glorious Taste Foods<sup>2</sup> (GTF), a food processor who supplies coleslaw to Kentucky Fried Chicken (KFC), Kenny Rogers and other fast food chains. The company sources vegetables from Benguet farmers through the La Trinidad Trading Post and is now closely collabourating with a farmer from Buguias, Benguet, who was able to borrow money to put up greenhouses for the production of different varieties of lettuce for the fast food chain salads.

**Figure 4.6: Sample chain managed by a food processor**



<sup>2</sup> Names in this case are disguised to protect the privacy of the company.

#### 4.2.2.2 *Product specialist chain*

Apart from the traditional supply chain of vegetables, which used to be the main source of supply for supermarkets, a specific chain devoted mainly to tomatoes developed in response to the needs of this market segment.

Tomatoes are grown in most parts of the Philippines, but more predominantly in the cooler regions such as Bukidnon in Mindanao and Baguio in Northern Luzon. Tomato varieties suitable for the lowlands are also grown in lowland areas like Quezon province, Ilocos Sur, Nueva Ecija and Batangas provinces.

One such chain is managed by a large agribusiness corporation, Fresh Corporation (FreshCorp) that has operations in Cagayan de Oro, Cebu City, Quezon City and Davao City. They source their tomatoes mostly from Cavite, Ilocos Norte and Bukidnon and control 15-20 per cent of the supply of tomatoes in Metro Manila from July to December. They brand their tomatoes and all their other fresh produce. Their main markets are the supermarket chains in the Philippines. They transact a volume of 10,000 crates<sup>3</sup> of native tomatoes per week during the peak season and 1000 crates during the off season. They give assistance to farmers in terms of agronomic support, production advice and in a few occasions, financing agricultural inputs.

FreshCorp purchases from the spot market in Luzon and through marketing contracts with farmers in Mindanao. The seasonality of tomatoes is addressed by tapping farmers from different regional areas. The Luzon farmers supply tomatoes January to June, while the Mindanao farmers supply July to November.

Tomato farmers in Mindanao, who want to supply FreshCorp, sign a marketing contract wherein the farmers commit to a specific weekly volume and a price ceiling. Such quantities are determined by the farmer himself. FreshCorp commits to sell the specified quantity for the farmers and sets a price floor. Deliveries and payments are weekly. Production scheduling is done by the farmers so that they are able to comply with the required regularity of delivery.

FreshCorp has around 20 farmers in Mindanao in this kind of contract each with two to 10 hectares, of either owned or leased land. The high cost of transport from Mindanao necessitated the use of contracts with farmers from the area. FreshCorp acts as a marketer for the produce and provides the farmers with the quality specifications of the supermarkets. Farmers pay FreshCorp 22.5 per cent commission for the sale.

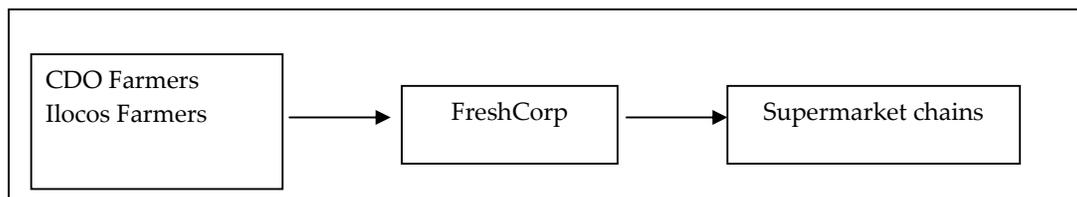
---

<sup>3</sup> A crate of tomatoes is usually 23-25 kilos.

Different supermarket chains have different purchasing arrangements with FreshCorp. With one supermarket chain, FreshCorp has a concession, and is responsible for filling the shelves with produce, cleaning, wrapping, replacing, coding plus other tasks. The supermarket earns from shelf rental as well gaining a percentage of sales. With other supermarket chains, FreshCorp has an outright purchase agreement where the buyer orders and pays after seven to 15 days.

Because FreshCorp has control over the majority of the quality tomato supply, they provide the reliability when it comes to this specific product. Even their competitors purchase tomatoes from them in periods of scarcity. They are able to maintain their relationship with the supermarket chains and supply them with other items as well. Their ability to specialize in one product gives them open doors to other products.

**Figure 4.7: Sample product specialist chain**



#### 4.2.2.3 Market specialist chain

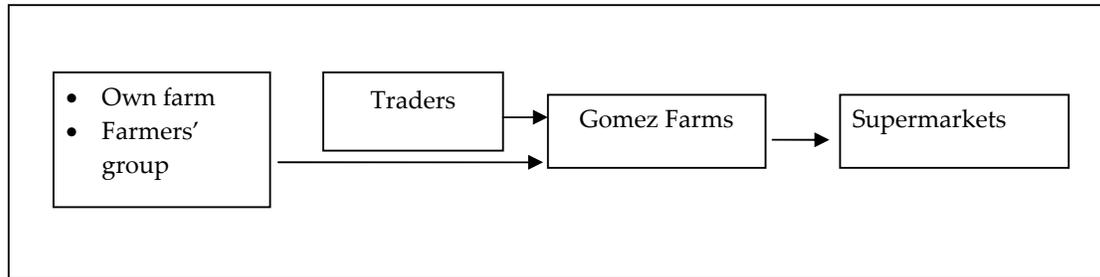
Another arrangement recently observed in the Philippines is the market specialist chain where the supermarket suppliers will focus their strategies on providing the supermarket chains with anything that they need. In the words of one of the respondents, 'we will give them whatever they want'.

This means that the market specialist provides a wide array of vegetables including minimally processed, pre-cut and mixed, packed, coded and tagged, and any other combination thereof. They brand their products, particularly their packed salads. The company name is visible in the price code of each pack of vegetables. The market specialist is given the assurance by the supermarket chain that they are the preferred supplier and all needs for fruits and vegetables will be sourced through them.

One of the bigger market specialists, Gomez Farms, has a strong relationship with the biggest supermarket chain in the Philippines and supplies almost all the larger supermarket chains. Major supermarkets have designated Gomez Farms as their preferred supplier and give them priority when purchasing fruits and vegetables, to the extent of protecting them from suppliers who want to have a share of the supermarket business.

In this type of relationship, supermarkets benefit because their preferred supplier will get them anything they need at the frequency and quality they require. In order to satisfy the supermarkets Gomez Farms get varying produce from their own farm and from multiple sources including other vegetable consolidators, domestic suppliers, and importers. The ability to source whatever product the supermarket needs gives Gomez Farms the edge over competitors.

**Figure 4.8: Sample market specialist chain**



### **4.3 Implications to small vegetable farmers**

The Philippine vegetable industry is restructuring. This is largely driven by demand factors such as increasing population and income and changing lifestyles of urban consumers. These create opportunities for the modern chains to respond, particularly supermarkets and fast food chains. Their procurement systems also change to respond to these opportunities and to remain competitive. Increasing demand for salads prompted fast food chains to source processed instead of unprocessed vegetables. This requires changes in production protocols for farmers who supply to vegetable processors.

Large supermarkets deal with preferred suppliers who also brand their vegetables. As large supermarkets continue to raise standards, the volume of vegetables sold that are branded are expected to increase. This will result in larger consolidators, who also venture into vegetable processing particularly cut vegetables and packed salad vegetables. This in turn will require changes in production protocols if farmers are to be part of this chain. Small farmers will have difficulty responding to these opportunities in the modern chains as these would mean investments to produce quality vegetables.

However, small farmers cannot be dismissed as a wide variety of vegetables is an integral part of a supermarkets' merchandising strategy. In what follows, we examine the case of NorminVeggies to provide example on how an organization of small and medium farmers respond to opportunities and challenges in the market.

## **5 Keys to inclusion: the case of NorminVeggies**

### **5.1 The organization**

NorminVeggies was set up by small farmers ensure involvement in the development of the vegetable industry in Northern Mindanao. Vegetables were not a priority for government support. However, Northern Mindanao is the alternative source to Benguet/North Luzon for vegetables during Luzon's wet season. It has available land suitable for year-round commercial vegetable production. Vegetable production can be undertaken by any farmer, and is a source of nutritious food for the farmer's family (food security).

Specifically, NorminVeggies wanted to:

- Create a voice for the thousands of vegetable farmers in Northern Mindanao.
- Provide a venue where small farmers can interact, share concerns, opportunities, and be more aware about the directions of the industry, with the intention of increasing the income of the vegetable farmers.
- Be pro-active in developing the vegetable industry.
- Communicate with government and other development support organizations.

#### **5.1.1 Objectives**

NorminVeggies aims to be competitive in the vegetable industry producing high quality commodities for the domestic and international markets.

Its specific objectives are:

- On Production: Increase and sustain production of 'safe and healthy' assorted vegetables through sustainable agriculture to meet market demand. Innovative technologies for nurseries, tropical rain shelters, use of mulching and drip irrigation systems are just some of the few adapted technologies used by the farmers of NorminVeggies, to move towards sustainable agriculture.
- On Food Safety: Use and adopt environment friendly technologies. Farmers of NorminVeggies undergo training on the use of biological control agents to control pests whenever the technologies are available, vermiculture and composting to reduce dependence on the more expensive inorganic fertilizers, and the use of 'category 4' crop protection inputs.
- On Market: Sustain and expand existing markets and access new markets, through a system of market information sharing, promotions through branding, packaging and processing, and the establishment of a vegetable consolidation centre.

- On Post-harvest: Emphasis is given to the consistency of quality produce for all the farms involved in a marketing cluster. They also work at maintaining the same quality as the produce moves downstream along the supply chain, at competitive costs and minimal post-harvest losses.
- On Advocacy: Advocate policies that will reduce the cost of business; influence government's decisions on how to maximize limited resources for maximum impact on industry development; and actively participate in the Philippine vegetable industry and key networks.

NorminVeggies conducted several activities to fulfill their objectives. These pointed towards the establishments of a presence in Metro Manila, Visayas and Mindanao markets. They carried out trials (simulation) of shipping vegetables using reefer van, conducted trial planting and prioritized the development of key crops where Northern Mindanao would be most competitive in the market. They then conducted training on production technologies for their members, post-harvest handling and marketing.

Production protocols that were successful were freely shared with the members. They printed and distributed booklets on production technologies of selected vegetables. The clustering approach was used to attain the volumes to deliver to the institutional markets. Normincorp, linked farmers to consolidators at the local wholesale vegetable trading centre (Agora) as well as to buyers in the neighboring provinces of Mindanao and in the Visayas and Manila markets.

Aside from these activities, NorminVeggies also participated in trade exhibits, hosted several Vegetable Congresses, convened the Phil. Vegetable Industry Development Board (PVIDB), and provided valuable inputs to the preparation of the Department of Agriculture's Southern Philippines Vegetables Industry Roadmap.

NorminVeggies also successfully tapped government resources for two reefer trucks, two chillers, one pre-cooling/cold storage facility, and use of reefer van and the establishment of a vegetable consolidation centre in the Agora Wholesale market in Cagayan de Oro.

### **5.1.2 Normincorp**

There are two organizations closely reinforcing each other. One is NorminVeggies and the other is Normincorp. NorminVeggies is a non-stock, non profit organization.

It is a servicing organization for its current 85 members comprised of various types who commonly share a stake in advancing the vegetable industry. Members include:

- Independent farmers – those who are small farmers but have a financial base and can independently pursue technologies and markets;
- Small farmers – those small farmers needing special development interventions to undertake vegetable production and marketing;
- Development foundations assisting small farmers;
- Corporate farms who can vertically integrate business operations;
- Input and service providers – such as seed companies and
- Local government units – particularly their departments servicing directly the vegetable farmers.

NorminVeggies is the organization that accesses support from government and from private resource organizations like Growth with Equity in Mindanao-USAID (GEM-USAID) and the Food Agriculture Organization of the United Nations (FAO), and also work to advocate for pro-vegetable farmer policies and programme in the government.

Normincorp is the marketing group, a corporation of five incorporators who organize the marketing for a core of independent farmers and the lead farmers for various crops. They are:

- Wilfredo Javier, heading three clusters with his farm, Valley Fresh Farm producing mainly bell pepper, broccoli, cabbage, Chinese pechay, sweet corn and romaine lettuce, (b) Hector San Juan – Helms Farm producing mainly iceberg lettuce, cabbage, salad tomato and broccoli.
- Queritess Queja with her farm, TriQ Farm, producing romaine and iceberg lettuce.
- Juanita Montalvan with her farm, Bukidnon Plateau Gardens, growing mainly strawberry and herbs.
- Joan Cua Uy, heading the lettuce cluster, with her farm Green Haven Farm producing mainly iceberg lettuce, broccoli, Chinese pechay, sweet corn, and backing up farmers' supply for squash.

Two other independent growers were invited to join Normincorp, namely:

- Antonio Fernandez with his farm, CountryVeg Farm, and
- Carol Yu with her farm, Betina Green Farm.

At present, Normincorp services the marketing needs of 23 independent farmers plus a core of 60 small farmers. They are assisted by Kaanib Foundation, Inc. (a NorminVeggies member) in partnership with its development resource organization, Lutheran World Relief Services (LWR) and Catholic Relief Services (CRS). They grow mainly cabbage, carrots, sweet pea, spring onions and tropical vegetables: squash and bitter gourd.

### 5.1.3 Membership and organizational structure

NorminVeggies has increased membership from 15 members in April 1999, to 85 members of good standing as of July 2006 (Table 5.1).

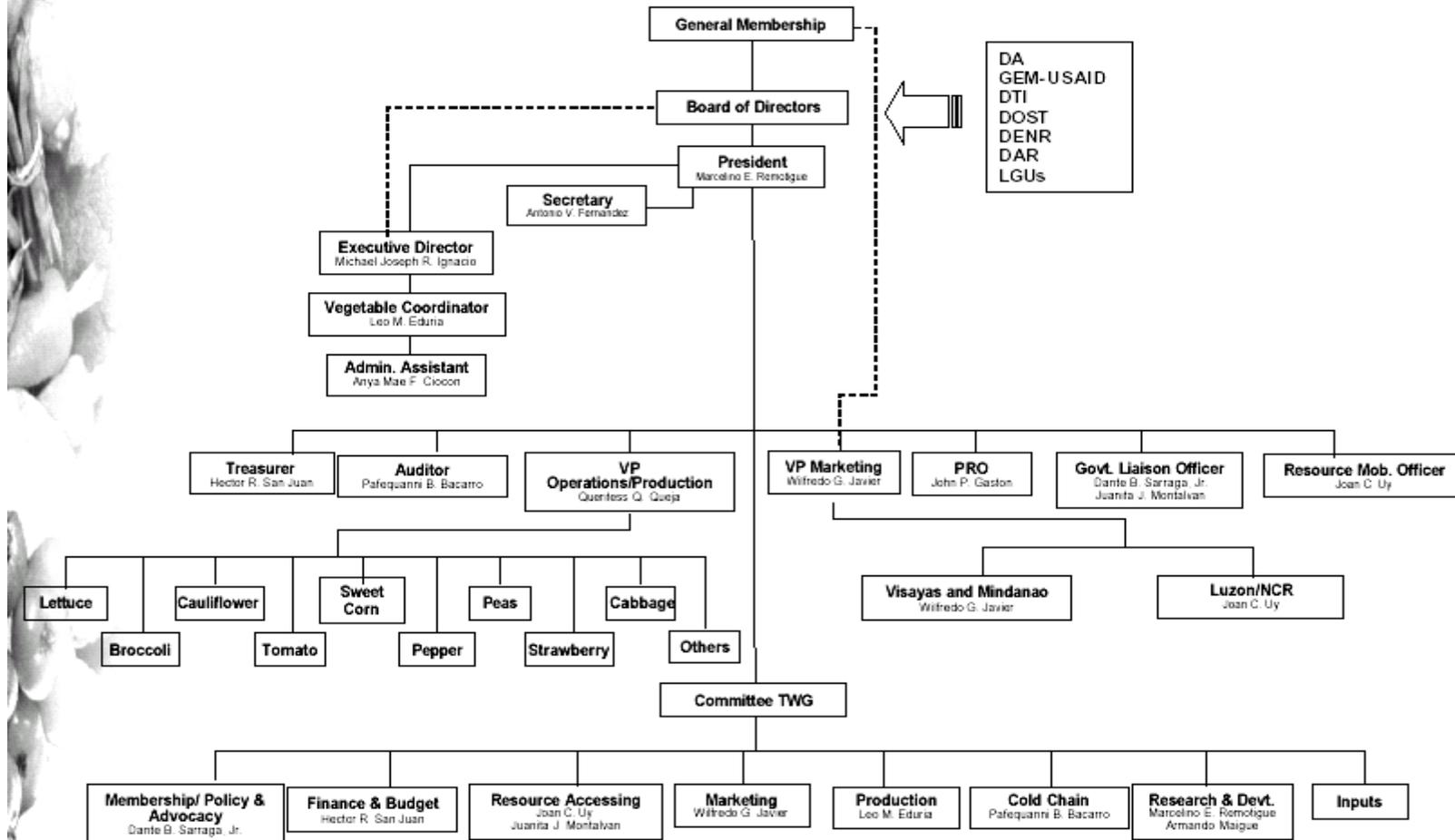
**Table 5.1: Members of NorminVeggies, as of July 2006**

<b>Farmers</b>		<b>72</b>
Individual Producers	<b>52</b>	
Development Foundations	<b>2</b>	
Corporate Farms	<b>7</b>	
Farmers' Associations	<b>4</b>	
Farmer's Cooperatives	<b>7</b>	
<b>Associate</b> (Inputs/Service Providers)		<b>9</b>
<b>Honorary</b> (Institutional Partners)		<b>4</b>
<b>Total</b>		<b>85</b>

NorminVeggies' organizational structure is presented on the next page.

Figure 5.1: Northern Mindanao Vegetable Producers Association

## EXISTING ORGANIZATIONAL STRUCTURE



### *5.1.3.1 Types of farms working in NorminVeggies*

There are three types of producers in NorminVeggies: corporate farms, independent farmers, and small farmers.

The corporate farms are those that are vertically integrated and carry out their own marketing. However, in this case, the focus is on the independent farmers and small farmers as they are the ones involved in vegetable production clustering, and they are considered small and medium farms.

Independent farmers have farms with agro-enterprises that can be referred to as SMEs, with the owners having high educational backgrounds, entrepreneurial capacities, a financial base and access to their own technologies and services. Small farmers, on the other hand, are those with limited capital who need external support to improve farm production and access markets. These small farmers are serviced by the NGO member of NorminVeggies, which is the Kaanib Foundation, Inc (KFI).

Normincorp services regularly 23 independent growers and a core of 90 small farmers supported by Kaanib with assistance from its development partners: Lutheran World Relief Services and Catholic Relief Services. Clustering is being tried out on a core group that is willing to undertake programming of production and market planning. Other NorminVeggies' growers continue to market under spot trading practice (whenever they have harvests) at the wet market.

Also, there are many small farmers assisted by Kaanib growing home garden vegetables and they gradually become part of the cluster when they start to transition from home consumption to producing at least one marketable vegetable under programmed production for a targeted market.

The independent farmers have other investments or sources of income other than vegetable farming (owned independently or as a family business). These include corn trading, commercial poultry and piggery production (for integrators), commercial poultry production, restaurant and food catering business, and chicken hatchery. In terms of area, farm size ranges from five to 20 hectares. All share a passion for farming, agree to take up the challenge to advance the vegetable industry, and have accepted that Normincorp is to be opened to assist especially the small farmers.

The small farmers involved are in the Kaanib project area in the Municipality of Impasug-ong, Bukidnon. This geographical focus is to enhance the project support and the monitoring process. These farmers are considered marginal but they have an asset base, particularly land (ownership or access through rental or use for free in the case of a common family owned farm, draft animals (70 per cent owning),

ploughs (70 per cent) and garden tools (60 per cent). Their farms are family operated so most of the labour requirement is provided by the family members. They have some experience in vegetable farming enabling them to build on existing production. Tenants are not included because they will not be able to make independent decisions on their farming and their produce.

The LWR assisted group of 40 farmers is located in the highlands (i.e. 1000 metres above sea level areas) so crops are mainly cabbages and carrots. Their areas are vegetable growing so they are exposed to commercial vegetable farming under the traders. Modifications were made in the production-marketing arrangements to make them favourable to the farmers under project assistance. On the other hand, the CRS assisted group of 50 farmers is located in the lower elevation areas (between 600 to 900 metres above sea level).

The latter group is composed mostly of rice and corn farmers, and vegetable is a diversification crop. Vegetable products are sweet pea, squash, bitter gourd and spring onions. It is a new venture for them so the approach towards markets and commercialization is gradual (i.e. with a framework of agro-enterprise development that guides the interventions to prepare first the farmers to engage the market, followed by trial marketing activities before the commercialization stage).

Age profile ranges from 24 to 61 years old; with fairly even distribution of those below 40, between 41 to 50, and above 50 years old. Those assisted in LWR projects have experience in commercial vegetable farming under the local trader/financier. Those in the CRS areas have experience in backyard vegetable production. About 70 per cent are from within Impasug-ong while the rest are from families that migrated from other provinces in Mindanao, Visayas, and from Benguet.

The main infrastructure constraint is the poor road condition. Most of these farms are accessed through a dirt road for animal drawn carts because they are not alongside the barangay roads. At times, when rains are heavy and continuous, farmers have to resort to manual hauling to bring their products to the road accessible by a vehicle. This has implication on their efficiency of product movements at certain times.

#### *5.1.3.2 Roles in marketing cluster*

At this stage when small farmers are still being organized into a functional sub-cluster together with the vegetable clusters in marketing, much of the decision making on markets rests on the independent farmers. Normincorp continuously seeks good markets. These are presented to Kaanib as options that can be discussed and decided on by the farmers themselves. The mechanism of assigning certain products (i.e. cabbage, carrots, squash, bitter gourd, spring onions and sweet pea) to be grown with small farmers in the cluster means that

decisions will always have to be made by them because they will form part of the supply source for the vegetables.

The Kaanib project officer is the key link between Normincorp and the six sub-clusters of farmers. He introduces situations as opportunities for capability building of the farmers as they are initiated into commercial marketing operations.

Production protocols are adjusted from time to time, based on the requirements of the markets. These are reviewed in NorminVeggies by a core of growers involved in the production facilitated by the association's Vice-president for production. NorminVeggies has a Vegetable Coordinator who checks the members' production situation, relative to the production protocols recommended. The Vegetable Coordinator links directly with Kaanib for the farmers.

Normincorp's President decides with the cluster heads and lead growers on the post harvest arrangements per crop. These are circulated to all the growers involved in the form of a post production guide. Kaanib is part of the group on behalf of the farmers. Independent farmers are assumed to take care of their post harvest needs. Kaanib organizes the post harvests operations with the farmers with the Municipal Economic Enterprise Development Office of the Local Government of Impasugong since Kaanib maintains a close collaboration with the LGU for the CRS project.

Normincorp's President also decides with the core of 23 independent growers and with Kaanib regarding the markets to be chosen after pricing and terms/conditions are openly discussed. Kaanib consults the farmers and represents the group in the decision making. This is a transition phase. After a capability building period of about a year, farmers who can be trained to be sub-cluster heads can directly represent the farmers in the deliberations.

Independent farmers take care of their own capital or credit requirements. Kaanib facilitates the credit requirements of the small farmers. It should be noted that the credit package is designed by Kaanib with the farmers and is part of the development assistance from its partners (See section 5.2.2.5). In the past six months, Kaanib deposited a leverage fund from the CRS project in the local cooperative (Kauyagan Savers Coop) and the coop with financing from the Land Bank of the Philippines, matched this with 75 per cent to finance the squash farmers under a trial financing scheme.

Normincorp is a corporation operated with staff. Day to day activities are handled by paid staff (both at the consolidation centre and for outshipment to buyers).

### *5.1.3.3 Factors of inclusion/exclusion for each type of farmers in the clusters*

In the case of the independent farmers, the inclusion is by invitation of the old cluster members. The important consideration is that the grower can work in a group as observed in his/her participation in NorminVeggies' activities. The grower should be a serious producer with existing vegetable farm interested to go into programmed plantings with the cluster for the group marketing. Moreover, the grower should be willing to have his farm visited anytime by other members, especially the small farmers, and ready to teach others as s/he has been taught at the start. Emphasis is given on the core value of sharing, because this is at the heart of the success of clustering and group marketing.

In the case of small farmers, the inclusion is decided initially by the Kaanib project staff with a core of lead growers/farmers in the barangay. Additional members are invited by the rest of the farmers based on certain criteria. At this stage, screening and decision making is done with the Kaanib project staff. Criteria applied for screening are as follows:

- Has own farm or has access to land that can be rented or used for free (in the case of family farms).
- Has the basic assets (owned or access to): draft animal, plough, garden tools.
- Has a family operated farm (external labour is only about 25 per cent).
- Has experience in vegetable farming (either commercial or backyard).
- Does not have a big obligation to the local traders/financiers (to eliminate tensions).
- Has demonstrated willingness to work in a group (willing to work with scheduled planting to come up with a reliable supply weekly with the rest of the farmers).
- Has road access (even if just for animal drawn cart).
- Has potential access to water.
- Can work with the group.

## **5.2 The innovation**

NorminVeggies in partnership with Normincorp has successfully overcome obstacles to tap dynamic markets. They have become preferred suppliers due to their ability to respond to changes in market requirements, and have recently ventured into forward integration by setting up their own wholesale outlet at the Agora Vegetable Wholesale Market in Cagayan de Oro City. The key to this linkage is the organizational-set up which is discussed in section 5.2.2 and its core elements: the structure, the people and the strategies they employ and the network of support. Included in the innovation is the involvement of development foundations, with the non-governmental organization working together with NorminVeggies for the development intervention targeting the need of the small farmers. First, it is appropriate to discuss its context and history.

### **5.2.1 The context and history of innovation**

There are now many farmers in the Philippines forming groups to market their products as one. Small farmers are increasingly becoming aware of the need to collaborate their production and marketing efforts in order to maintain their access to markets.

In response to the challenge of accessing more stable markets, farmers from Northern Mindanao collaborated with each other to coordinate their production and marketing efforts. As marketing clusters, they were able to achieve economies of scale in transporting produce, accessing development assistance from the government and NGOs, sharing market intelligence, production and post harvest technologies. The uniqueness of the innovation is the organizational set-up that the Northern Mindanao farmers adopted. The collective action did not stop at membership but was implemented at different nodes of the supply chain from production, post harvest and marketing up to collection.

They also organized a private corporation, which acted as a marketing arm and charged a percentage market facilitation fee. This marketing arrangement is very attractive to farmers because they retain ownership of their products up to the end buyer or institutional market. They receive the sale of their products minus the facilitation fee for the marketing services they received.

In 1999, Joan Uy, who owns Green Haven Farm, became dissatisfied with the way her lettuces were being sold at the Agora vegetable wholesale market in Cagayan de Oro City. The traders at the Agora market would automatically remove 20-25 per cent from the weight of the lettuce even if the quality of the lettuce was better than those coming from other farms. She started to seek out other markets. In January 2000, Joan supplied local fast foods and restaurants in Cagayan de Oro, supplying them weekly. She adjusted to the weekly deliveries by planting weekly. By April, she was supplying 200 kgs of lettuce to Cebu weekly. In July, she entered Metro Manila market by supplying a supermarket consolidator. She sent 400 kgs of lettuce by plane weekly to Manila. Metro Manila is considered an important domestic market because it is the largest and most densely populated area in the Philippines. It also has the largest concentration of upper and middle income households than any other part of the country.

Production of lettuce was improving and Green Haven started to produce larger heads of iceberg lettuce. Unfortunately, the supermarket supplier did not want larger heads, and the improvement in production made Green Haven lose its supermarket market. By January 2001, Joan stopped supplying the supermarket.

Green Haven started to target the Metro Manila fast food market who wanted larger iceberg lettuce heads.

By February 2001, one vegetable processor supplying McDonald's fast food chain, responded to Green Haven's offer to supply. After farm visits and negotiations, Blue Dairy Corporation, the McDonalds vegetable processor, placed a weekly order of 400 kgs of lettuce to be delivered by plane every Tuesday from Green Haven. Another farm in Bukidnon supplied Blue Dairy with 400 kgs every Thursday.

In the six months that followed, Green Haven had to learn to produce the quality required by Blue Dairy. Its manager, Mr. Ped Miguel, provided technical advice and post harvest techniques to Green Haven. By August 2001, Blue Dairy suggested refrigeration to preserve the quality of the produce. At the same time, Blue Dairy was willing to increase the volume of lettuce purchased from Mindanao. The challenge was then to fill a 20-foot refrigerated container van with 3.5 tons of lettuce weekly.

To respond to the challenge, Joan invited five other farmers who previously expressed interest to grow lettuce, to form a marketing cluster. To facilitate the development of the group, she shared production technologies and market information. At about the same time, these farmers started to join Northern Mindanao Vegetable Producers' Association (NorminVeggies), to be able to access assistance from development agencies. They would later join her as incorporators to put up Normincorp. The lettuce cluster shared their experience with the other vegetable farmers and other vegetables clusters were formed: the carrot cluster, strawberry cluster, etc.

While the innovation started to be formed outside of a larger farmers' group, it achieved maturity as an idea when the entire farmers' association adopted it as a strategy to assist small farmers gain access to stable markets aside from the spot market transactions of the wet market.

A summary of the history of innovation and responses of NorminVeggies to dynamic changes in the market is presented in Table 5.2.

**Table 5.2: History of innovation and responses, NorminVeggies**

<b>Date</b>	<b>Supply chain event</b>	<b>Innovation event</b>
Jan 2000	<ul style="list-style-type: none"> <li>• Difficult traders market</li> <li>• Weekly deliveries were required by the fast food market</li> </ul>	<ul style="list-style-type: none"> <li>• Trial of Green Haven Farm to find alternative markets like supplying direct to local restaurants and fast food markets</li> <li>• Trial crop programming</li> </ul>
April 2000	<ul style="list-style-type: none"> <li>• Encouraging results from the field</li> <li>• Distant markets</li> <li>• Strict quality standards of the fast food markets and year round supply needed</li> </ul>	<ul style="list-style-type: none"> <li>• Used Cagayan de Oro contacts to connect to Cebu fast food markets</li> <li>• Utilized vegetable distributors as a response to distant markets</li> <li>• Supplied the wet markets after the produce was sorted, giving the better quality products to the fast food markets. Farmer planted extra rows of crops as back-up in case of crop failure of some of the farmers. This necessitated programming and production scheduling.</li> </ul>
July 2000	<ul style="list-style-type: none"> <li>• Recurring typhoons in Luzon where 60 per cent of temperate vegetables are produced.</li> <li>• Fast food processors resorted to imports</li> <li>• Strict supplier evaluation procedure, included visits to farms</li> <li>• Distance from the Manila market complicated the relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Used its track record to build links with the fast food processors who supplied international fast food chains operating in Luzon.</li> <li>• Promoted products as import substitutes.</li> <li>• Weekly plantings on field with post harvest procedures to show that the farmer can respond to the market</li> <li>• Manila based intermediary was utilized (received goods, turned over for receiving at the processor, got results, communicated to Cagayan De Oro, and then transferred payment based on terms)</li> </ul>
April to Sept 2001	<ul style="list-style-type: none"> <li>• Difficult quality standards</li> <li>• Buyers challenged the farmers by saying that volume will be increased if they can refrigerate.</li> </ul>	<ul style="list-style-type: none"> <li>• Green Haven worked hard in post harvest, quality and supply chain management.</li> <li>• Innovations and adjustments done by trial and error.</li> <li>• Green Haven Farms sought other farmers; started the idea of clustering because the demand was 3 tons of lettuce weekly supplied in refrigerated van</li> <li>• Cluster requested processor for a period of 6 months to build production.</li> </ul>
March 2002	<ul style="list-style-type: none"> <li>• Government support and GEM – USAID support to build a vegetable farmers’ organization <ul style="list-style-type: none"> <li>○ trade fairs</li> <li>○ trainings</li> <li>○ research</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Green Haven Farm and other lettuce farmers formed the lettuce cluster. This group became the transition group to the formation of a business entity.</li> <li>• NorminVeggies supported the formation of marketing clusters and became the rallying point for accessing government, private and development agency support</li> </ul>
June 2002	<ul style="list-style-type: none"> <li>• GEM linked the group with business service providers</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigerated truck loan. NorminVeggies got to be known. Inquiries were received.</li> </ul>

<b>Date</b>	<b>Supply chain event</b>	<b>Innovation event</b>
July 2003	<ul style="list-style-type: none"> <li>• Other buyers (i.e., supermarkets distributors) contacted not just for lettuce but other products as well.</li> </ul>	<ul style="list-style-type: none"> <li>• Opened new markets</li> <li>• Other clusters formed</li> <li>• Produce sent to supermarkets suppliers</li> <li>• Learned of the seasonality of supply in Luzon and adjusted production programme</li> </ul>
Mar 2004	<ul style="list-style-type: none"> <li>• Fast food chain which bought from the processor switched processors. This processor in turn stopped buying from the lettuce cluster</li> </ul>	<ul style="list-style-type: none"> <li>• Lettuce cluster attempted to follow the fast food chain market by moving to other processors but found it difficult because they were not preferred by the new processor.</li> </ul>
Aug 2004	<ul style="list-style-type: none"> <li>• Another fast food chain required supply</li> <li>• Typhoon in Luzon opened a window of opportunity</li> </ul>	<ul style="list-style-type: none"> <li>• Opened links with the new fast food operator</li> <li>• Use of the Manila intermediary was stopped and the newly formed Normincorp started to handle the marketing instead. They hired a marketing coordinator.</li> </ul>
Jan 2005	<ul style="list-style-type: none"> <li>• Lettuce demand in the fast food chain market changed from fresh to processed form</li> <li>• New product launched (salad greens)</li> <li>• Corporate farms entered the industry. Competition from big, forward integrated companies.</li> </ul>	<ul style="list-style-type: none"> <li>• Transacted with the fast food processor</li> <li>• NorminCorp withdrew from the fast food market in Manila to study options. Retained the fast food market in Visayas and Mindanao, which were still buying unprocessed vegetables.</li> </ul>
Mar 2005	<ul style="list-style-type: none"> <li>• NorminVeggies has no retail outlet</li> </ul>	<ul style="list-style-type: none"> <li>• Opened Veggie corner</li> <li>• Tapped Department of Agriculture (DA) for 2 chillers.</li> </ul>
July 2004 to 2005	<ul style="list-style-type: none"> <li>• Inventories required by new type of buyers</li> <li>• Government support for cold chain</li> </ul>	<ul style="list-style-type: none"> <li>• Rented commercial storage space.</li> <li>• Broccoli and strawberry air freighted 3x a week.</li> <li>• Tapped DA refrigerated van facility at Metromart as storage and contact point</li> <li>• Rented refrigerated truck in Manila</li> </ul>
July 2005	<ul style="list-style-type: none"> <li>• Supermarkets supplier gave Normincorp requirements for July to Dec 2005</li> <li>• Continuous year round requirement in Visayas and neighbouring Mindanao provinces</li> </ul>	<ul style="list-style-type: none"> <li>• Expanded with more vegetables (tomato, sweet pea, carrots, squash)</li> <li>• Partnership with DA and Growth with Equity in Mindanao</li> <li>• Base of supply built in Agora market through trader contacts</li> </ul>
May 2006 up to present	<ul style="list-style-type: none"> <li>• A core of buyers from Mindanao, Visayas with regular requirement from Normincorp</li> </ul>	<ul style="list-style-type: none"> <li>• NorminVeggies opened NorminVeggies Consolidation Centre (NVCC) at the Agora Wet Market</li> <li>• Supply for Luzon buyer during the months of July to December</li> <li>• Year round supply for supermarket and fast food distributors as well as other wholesalers/retailers in Visayas. &amp; Mindanao. (Supply from 18 independent and 60 small farmers)</li> <li>• Distributors tapped in Visayas &amp; Mindanao</li> </ul>

## **5.2.2 Elements of organizational innovation of NorminVeggies: its key strategies**

### *5.2.2.1 The clustering strategy*

Normincorp's regular supply comes from 12 marketing clusters which are product based. These 12 clusters are: lettuce, broccoli, Chinese pechay (wongbok), bell pepper, sweet pepper, cucumber, cabbage, sweet pea, Kentucky beans, bitter gourd, eggplant and squash. The first half of these clusters is comprised only of independent growers, while the remaining six clusters are a combination of the independent farmers and the small farmers assisted by Kaanib. The groups of Kaanib assisted farmers based on the barangays (villages) constitute sub-clusters of the NorminVeggies marketing clusters.

A cluster is an informal group of five to ten small scale farmers who commit to undertake a common marketing plan for a particular product (or set of products) for identified markets. Each product cluster has a designated lead farmer, who acts as the coordinator of the production of all the farms involved in the cluster. The lead is the farmer who is the best farmer for that type of vegetable. S/He is also responsible for teaching the other farmers in the cluster of applicable production techniques in order to maintain the quality specified by the market. Usually, the lead farmer is one of the independent farmers, since they are more educated and financially independent. These clusters are comprised of the core of 18 independent farmers and 60 small farmers. The 60 small farmers are organized into six sub-cluster based in six barangays in the municipality of Impasugong, Bukidnon.

A marketing cluster can be formed to take advantage of an opportunity at a certain period of time. For the high demand of tomatoes in Manila during July to December, a tomato cluster is formed just for that period. The next year, it can be formed again but not necessarily with the same members/farmers. Similarly, servicing the Manila supermarket distributors with a set of vegetables will require the formation of a Manila cluster just for the season of supply. It has been observed though that cluster members tended to stay the same in the succeeding years.

The cluster may appear loose but commitment of supply and the cluster agreements holds it together. Important cluster agreements include the volume of supply per farmer, delivery schedule, and compliance to a common quality standard that necessitates agreement on practices in plant/farm management, harvest and post harvest management. The cluster, therefore, is not just an ordinary grouping. It is one with a marketing objective and a management system, requiring discipline from each farmer to protect the reputation of the group in the market. Being a small group, it is capable of quick response to buyer feedback and requirements.

Clustering is the strategy for farmers to become valued suppliers in the higher value and growth markets, particularly the fast food industry through their processors,

and the supermarkets through their consolidators. In the cluster, farmers can discuss the market and the value addition in the supply chain, and can decide together on the markets to be served. This empowers farmers and enables them to become dynamic players in the market, share collective know-how (particularly best practices in the farm), resources, technologies, and market contacts, otherwise inaccessible or too expensive to them as individual farmers.

Indeed, the benefits of clustering include: (a) higher economies of scale and ability to handle large product volumes at lower transaction costs, (b) access to good markets, (c) business deals with service providers, (d) effective linkage with government and private resource organizations.

#### 5.2.2.2 A new business model

Normincorp was established in December 2003. Its formation signified a new development in marketing set-up for small farmers. While established as a stock corporation, it functions more like a cooperative and has a social enterprise character. It was established and operated with keen business sense but also with full empathy for the small farmers.

One innovation is that Normincorp is not a trading company. Rather, it is a market facilitator, linking the farmer through the cluster, direct to the buyer. The farmer is given the buyer's price, and s/he is therefore accountable for the product retaining ownership of the product up to the institutional market's end. This encourages the farmer to supply the best quality since the price is given to him/her and all sales are remitted directly to him/her after deducting the market facilitation fee based on accepted vegetables. Conversely, all rejects are individually charged to the concerned farmer. Labelling of products per farm or farmer provides this traceability. Market facilitation fee is charged by Normincorp based on the value of the product and the kind of vegetables. The table below shows the rates.

**Table 5.3: Normincorp facilitation fees**

Value/Kg (Php)	Squash/ Ginger	Cabbages (flat, round, wongbok)	Other Vegetables & fruits	Table Tomato
<b>Up to 2.00</b>	0.20	0.20	0.20	
<b>2.05 to 5.00</b>	0.25	0.20	0.20	
<b>5.05 to 10.00</b>	0.50	0.50	0.75	
<b>10.05 to 20.00</b>		0.75	1.00	
<b>20.05 to 50.00</b>			2.00	
<b>&gt;50.05</b>			3.00	
<b>Up to 300/crate</b>				5.00
<b>&gt;300/crate</b>				10.00

Note: same rates apply for storage fees charged by NorminVeggies at the NVCC

As market facilitator, Normincorp monitors that production is programmed by the clusters with lead farmers according to marketing plans, that quality farm and post harvest management can be done by each farmer in the cluster, and that coordination can be provided for the sequence of activities that include order taking, outshipment logistics, billing/charging, collection and remittance to the farmers. For these services, Normincorp earns a market facilitation fee based on the value of the sale and uses the income to cover the marketing management overhead.

Breakeven operating levels require a significant volume of vegetables channelled through the corporation. To operate in the Visayas market requires an overhead of P50, 000 or a sale of P500, 000 per month. This doubles when Manila operation is required. Normincorp devised a Cluster Map that specifies which farmers will produce which crop and at what volumes. This is matched with a Planting/Delivery Calendar (also called a Crop Ruler).

The process of developing the tools like the Cluster Map and the Harvest/Delivery Calendar came through trial and error, to respond to the management needs for efficiency and effectivity. While the market was being developed, the farmers were experiencing the 'learning curve' in farm supply management. The incorporators of Normincorp contributed funds on top of the facilitation fees paid for the vegetables handled, to ensure viability of the marketing clusters. At certain times when there were drastic changes in volume (due to weather problems or to dynamics of market competition), the incorporators gave out additional fund contributions.

Without this readiness on the part of the incorporators to support the business establishment needs, Normincorp would have folded during its first year. It helps that the incorporators are farmers who share a common vision to promote solidarity among small scale farmers to make a difference in the industry. They are also financially independent farmers whose farms can be classified as SME Farms. At this stage, with the operation of NVCC handling considerable vegetable volumes, Normincorp is financially sustainable from the market facilitation fees earned. NorminVeggies, being the owner of NVCC and provider of storage space with its allied services, also earn from storage fees equivalent in value to Normincorp's market facilitation fee. This way, both organizations have financial sustainability mechanisms.

#### *5.2.2.3 Supply chain management*

NorminVeggies attempted to build a positive brand image by assuring the market of reliability in quality and regularity of supply, as well as reasonable pricing. Quality management was worked backed on the farm itself. For example, when the market asked that carrot should be deep orange with small inner core, the carrot cluster looked into the seed varieties to be used. When a particular size became a requirement, the cluster checked planting distances and cultural management. No carrot came out for the

Visayas supermarket distributor that was not washed and air-dried as this was the quality specification agreed upon. To guide the quality management on field and in post harvest handling, the cluster came up with a Quality Assurance Plan that guided each farmer.

For the market, i.e., the buyers of supermarkets or consolidators for the Visayas, Normincorp related quality to reliability of supply from the farmers through the cluster. They tried to build up the image of NorminVeggies as a valued supplier with whom buyers would find the least problems with their buying transactions. This contrasts the prevailing market image of small farmers as unreliable. Normincorp's president is also NorminVeggies vice president for marketing, and this facilitated the integration between these two organizations.

The marketing clusters were prepared to do extra things that included flexibility in packing requirement, lead time for them to be informed of changes in price or shortage in supply. This is particularly important for consolidators of supermarkets or the fast food outlets, where non-delivery of products or the delivery of low quality products can be costly.

Delivery reliability implied that inter-related activities such as production scheduling, post harvest requirements, logistics (transport, seaport and airport operations), farmer and buyer communication, invoicing, payment collection and sale remittances to farmers were attended to. Normincorp set up an office in Cagayan de Oro as its contact point, and hired a full time marketing coordinator, a logistics in-charge (that handled the outshipment activities), a full time cashier and a part-time accountant. In Manila, a marketing representative (paid on commission basis based on accepted vegetables) was hired to attend to the distribution needs in a distant place.

Whenever a shipment is prepared for the Visayas by boat on the regular schedules of Tuesday and Saturday, all the cluster farmers involved in the diversified product supply harvest simultaneously and bring their vegetables to an agreed consolidation area near the port at the latest 5:30 pm, as the boat leaves at 7:00 p.m. For the small farmers, the truck of the independent farmer nearest them handles the transport to the consolidation point. This was before NVCC was set up by NorminVeggies. Most of the products prior to shipment are gathered by NVCC. Exceptions are the products loaded in the container vans that are consolidated direct at the container yards near the port.

There is no time to check the quality of vegetables. It is presumed that the cluster farmer, guided by a quality assurance plan, will comply with the agreed quality standards. In case the buyer has complaints, it is however easy to segregate the product and supplier since all boxes carry a farm/farmer label and each farmer fills up a Packing List that is recorded and kept at the Normincorp office.

When NVCC opened for spot market trading, the traders from the neighbouring provinces in Mindanao, particularly those servicing the supermarkets and the fast food outlets, started to procure the high quality vegetables from the centre. From a core of five Normincorp buyers who have been steady buyers from Visayas, new buyers came to NVCC and the number of weekly buyers increased to ten in just a span of about three months operation. New buyers expressing interest to procure at the consolidation centre for outshipment areas.

#### *5.2.2.4 Networking and linkages*

Each farmer continues to operate his/her own small farmholdings through NormanVeggies but enjoys market access and competence enhancing linkages with (a) business, (b) government, and (c) private resource organizations. Good relations are maintained with the service providers for outshipment and packaging, with government agencies like the Department of Agriculture (DA) and the Department of Trade and Industry (DTI), and with their main private resource organization partner, GEM/USAID.

There is synergy in activities because of collaborative effort. The co-sponsorship of the government and private support in the training, technology and product/market development has provided an important breakthrough for the association. For example, NorminVeggies is able to pursue cold chain development efforts with the interest free, five year loan of DA to the association for the acquisition of a reefer truck and two chillers. During the simulation for cold storage shipment, the GEM support allowed the farmers to travel and directly observe results of refrigeration and also to be in consultation with the buyers. While the bulk of resources came from the farmers, these types of assistance fill the gaps that enable the farmers to keep abreast of market demands and have staying power in the market.

#### *5.2.2.5 Development interventions*

Normin wanted small farmers to become part of the marketing cluster. Several attempts were made by individual small farmers to join but it always ended with non-delivery and poor reliability and sustainability. The hurdles small farmers face in marketing their produce is too complex for just the other independent farmers to assist. The support of development agencies is needed to address the vulnerabilities of small farmers and open the door of opportunity for them to become part of the clustering effort.

The opportunity to work with small farmers as a group came when Kaanib Foundation, Inc. (a member of NorminVeggies) together with Lutheran World Relief Services requested Normincorp to evaluate their vegetable production assistance to an organized group of vegetable farmers and asked for recommendation about how to make the project get off the ground.

KFI and LWR allowed Normincorp to redesign the development interventions, not just in marketing but in production assistance. A new group of 10 individual farmers who had the experience in vegetable farming was formed. Farmers who were not deeply indebted to the locality's trader/financiers were selected, and who were open to working in a group along the concept of clustering. It was important that each farmer in the group understood delivery reliability by agreeing to take turns in planting weekly so that a stable volume could be produced weekly from them. This became the base of the farmer's clustering.

These 10 farmers increased to 25 by the last quarter of 2005, and into 30 farmers in March 2006, with staggered production of cabbage and carrots. It then reduced to its current number of 20. This supply goes into the Visayas markets as part of the multiproduct cluster marketing. In effect, this group of farmers called the Kitanglad Small Farmers Cluster Kaanib made a production fund available that creatively financed the farmers in a way similar to the financier/traders.

The fund was not known as project fund but it was a financing from Kaanib coursed through Green Haven Farm and Normincorp. This way, it was immediately perceived as a business transaction, and not aid. The credit support covered the material inputs, one sack of rice after planting, a budget for harvest and post harvest handling. Together with this credit fund, support is the assistance that a vegetable technician could be hired to guide them and that an administrative person could help set the recording and marketing systems in place.

There was no talk of interest payments for the loan. Adopting the 50:50 sharing of net proceeds scheme followed by the local traders/financiers, the farmers had to give 30 per cent of the net sale proceeds (i.e. after deducting the farm inputs and other costs borrowed) as cost of money. This 30 per cent is deposited in the local cooperative (Kauyagan Savers Cooperative) which together with the grant fund from LWR for production credit will constitute in the future a loan fund to be managed by the local coop. In January, the farmers agreed to make it a 35 per cent deduction from the net sale proceeds, with the five per cent as fund source for their cluster. The direct Kaanib intervention is the irrigation support for which they pay a rental fee per cropping for the use of the facility.

It was quite a challenge assisting the small farmers even if KFI/LWR fund support was available, for the limitation is not only in credit availability but in infrastructure weaknesses and in their attitudes. Poor farm to market roads isolated their production areas and made it expensive to transport their inputs and products. There were countless times when the farmers' cabbages and carrots could not be delivered in their required quality and packaging standards as farmers did not have the ready access to water just to wash the carrots.

Harvest operations were at times hampered by rains, and the products could not be brought out from the fields that did not have all-weather road access. Every failure of product delivery or a delivery of poor quality, exerted pressure on the rest of the Visayas cluster farmers since marketing is through the group, and the failure of a farmer is viewed as a failure of the whole group. Expectedly, this brought about tensions and doubts among the independent farmers as to the capability of small farmers to be in the cluster.

Lately, however, KFI/LWR has extended support so that a consolidation area with a packing facility can be put up at the location central to the farmers. This way, farmers can harvest a day in advance and bring the products to this consolidation area where they can implement the required quality management procedures. Hopefully, this needed support system will ease some of the tensions of bringing together the better-resourced independent farmers with the small farmers.

The other challenge is to do with changing small farmers' values and attitudes. Used to the trader/financier for the 'one-time, big-time' plantings where their capital risk is very high, it takes time for them to understand that the secret to viability is planting in small areas with high quality production, and coming up with a crop-mix of at least three vegetables. Convincing them of the 'economic module' size of 500 square metres per vegetable for four types of vegetables was difficult. It took the success of a few of them to finally convince the rest that given their limitations, manageable areas with high technical care and adequate inputs ultimately yield higher returns.

Time was also needed to change their discipline in terms of compliance to quality standards. Used to heavy application of agrochemical inputs under financing from the local traders, a small farmer tended to apply the inputs on hand because this way s/he would feel 'secure' that his/her crop would not be damaged, and s/he can pay his/her loan to the financier.

A technician was provided as part of the development support to guide small farmers closely on integrated pest management using newer, safer inputs. Given their higher cost, it was necessary for the technician to control the access of chemical inputs so that usage could be kept to the minimum and chemical withdrawal periods were strictly followed. This is important because the small farmers in the cluster have to go with the cluster's definition of quality, which is not only freshness but also food safety. The technician also helps diagnose problems as they arise so that farmers do not immediately resort to spraying when it is not necessary.

Technical guidance is also very important not only in production but in post harvest. Even when the farmers are shown how harvesting and post harvest handling ought

to be done through visits in other farms, they still need to be guided very closely because at times, the problem is not the knowledge but the discipline to uphold the standards of performance and quality.

Given time, however, it is hoped that small farmers will grow to appreciate the value of this discipline. With the cost and returns analysis, farmers can see in detail how their product was unloaded, they see that sorting pays in terms of the price differentials, and that rejects or trimmings deducted from them affect their earnings considerably.

The added benefit of showing the farmers their costing is that the farmers realized that for many years that the trader/financier just wrote the figure of their net income (or loss) on a small piece of paper. They did not really know how their farming performed. This time, they can be critical about their farm practices in terms of how they translate to cost that reduce or increase their earnings.

After a year, management of the credit fund is now fully under Kaanib with Normincorp just handling the marketing activities. Kaanib has provided an irrigation support this year, which farmers pay through rentals per cropping for the use of the facility so that there is no break of production during the summer months.

In the 3<sup>rd</sup> quarter of 2006, Kaanib ventured to expand vegetable production support to include another 20 farmers in two other barangays. This support is in partnership with another development resource organization, the Catholic Relief Services. Learning from its experiences in the LWR assisted project, given the tremendous constraints of small vegetable farmers, Kaanib with CRS extended assistance utilized a development framework that immediately built partnerships with the local government. It also invested in participatory processes to prepare the farmers before actual market engagement and build up.

Observations point out that it is easier to work with the CRS assisted farmers who did not have much interaction with traders with its negative and dependent relationship, and accordingly, were more forward thinking. At present, the CRS assisted vegetable farmers total to 38 (i.e. 12 in sweet pea and 22 in squash production). They have recently consolidated products for the Manila supermarket consolidator under a year round marketing arrangement with the buyer, following weekly pricing procedures, but within a negotiated fixed bottom/ceiling price range.

A different financing scheme was tried out. CRS put in a small production capital fund in the local coop (Kauyagan Savers Coop), which is a time deposit and a leverage fund for the coop to match it with an equal credit fund. This leverage is further increased with the coming in of financing from the Land Bank of the

Philippines through the local coop to match both the CRS and the coop financing. In effect the CRS fund is multiplied four times.

In all, Kaanib extends assistance to 60 farmers grouped into six clusters based in six barangays in the municipality of Impasugong. In all the challenges of extending development assistance to the small farmers in both the LWR and CRS assisted projects, it was critical that the incorporators of Normincorp gave all out support to the farmers. Many innovative practices were tried to maintain the continuous supply of cabbage, carrots, sweet pea and squash by small farmers.

This at times meant that Normincorp would purchase at the Agora wholesale market when there was a supply gap from the small farmers in a particular week, instead of allowing an independent farmer to take over the production of these products earlier allocated for small farmers' participation. Since procuring from the wet market proved disadvantageous because of the poorer quality at the wet market, Green Haven with other independent farmers eventually planted these crops as back-up as the farmers were still building up regular production.

### **5.3 Participation of Normin in chain management**

#### **5.3.1 Traditional (spot) market**

Before the concept of marketing clusters, the individual farmers marketed their produce to the traditional wet market in Agora. Farmers harvest their produce even without a ready buyer and are compelled to receive the price given by the traders. Many times, their produce was sold the following day at much reduced prices. They were subject to the market distortions when buyers wait to transact the next day so the value of the product is very much reduced though it is not yet damaged.

#### **5.3.2 First pillar: specialized wholesalers**

The first marketing cluster was the lettuce cluster. They marketed to a specialized wholesaler serving the fast food industry, Blue Dairy Corporation. Aside from the fast food market, they also had contacts with wholesalers in the Visayas.

The farmers decided to market as a group to the Visayas wholesaler and the fast food industry in order to get a better price for the quality of the lettuce produced by the cluster. Blue Dairy was the main driver for the collaboration, which developed with the lettuce cluster. Blue Dairy needed the farmers to use a refrigeration system when shipping the goods in order to preserve the quality and compete with the imported lettuce from Australia.

A three ton weekly supply from NorminVeggies lettuce cluster was 40 per cent of the supply requirement of Blue Dairy, with the other 60 per cent sourced from the farmers of Benguet. The cluster grew to eight farmers, and the weekly supply of refrigerated lettuce to Blue Dairy continued for the next two years until Blue Dairy stopped lettuce supply to McDonalds. The fast food outlets had begun to source from another processor, and NorminVeggies took this to be part of the dynamics in the highly competitive market of fast food supply.

In August 2004, NorminVeggies lettuce cluster supplied another fast food, KFC, directly for the first six months, and then through its processor in the succeeding months. By March 2005, the supply to KFC's processor was stopped because the lettuce market demand in the fast food industry had changed significantly from raw to processed vegetables and that unless vegetable processing could be done by Normincorp, it would not have the market strength that comes with being able to deal directly with the end-user. At this time, the corporate farms supplying the fast food markets had integrated their production with processing to take advantage of the emerging trend in the fast food industry to serve salad greens.

In addition, the lettuce requirement had shifted from the iceberg type grown in the open field to the romaine and leafy lettuces that needed greenhouses or rain shelters for production. The technology of rainshelter gives high harvest recovery at lower cost, and yields a highly differentiated product in terms of product safety as less agrochemical inputs are used. In the second quarter of 2005, Normincorp withdrew from the fast food market to study their options. The fast food market in Manila ordered only from July to December and treated the NorminVeggies supply as an off season supplier to the Benguet supply.

By the last quarter of 2005, Normincorp had the potential to re-enter the market. Several lettuce farmers had invested in indigenous greenhouses and started to grow the romaine type of lettuce. At this time, NorminVeggies became a beneficiary of support from the Food and Agriculture Organization (FAO) for technology development with the demonstration project on three units of indigenous rainshelters. A feasibility study was carried out on vegetable processing to look into the economic viability of the farmers competing with the big corporate groups already servicing the high end market for processed salad greens. The risk was found to be very high considering that fast food outlets change processors and suppliers depending on competitive price offers, among other considerations.

Normincorp has opted to go back to supply the institutional market through the processors. At present, it has a commitment during the rainy season to ship a container van (content of three tons) of refrigerated lettuce mix comprised of iceberg lettuce, leaf lettuce and romaine for a processor servicing the fast food requirements. Other products are being planned for supply to the processor for the requirements of

the fast food industry and caterers. These are for camote, cabbage, broccoli and cauliflower. Another processor has also negotiated with Normincorp for the annual contract of supply of sweet pepper.

### **5.3.3 Second pillar: preferred suppliers**

This is now the most common system of purchasing in the supermarkets in the Philippines where preferred suppliers service all the needs of the supermarkets. One or two preferred suppliers service one supermarket chain or specific branches of the chain. Having built a track record of quality and delivery reliability, other buyers in Manila contacted NorminVeggies as early as 2003 not just for lettuce, but also for other vegetables. This was the beginning of their expansion. New growers joined NorminVeggies and the marketing clusters for broccoli and strawberry were formed.

NorminVeggies farmers developed excellent produce of lettuce, broccoli and strawberry which are difficult to procure at high quality in Manila. It was the marketing strategy to build a name for quality Bukidnon supply in the institutional markets using them, to change the image of small growers as unreliable suppliers through the clustering strategy, and to assure markets that typhoon-free Mindanao is in the unique position to address their needs when they have to import these products at a high cost during the typhoon months of July to November in Luzon. This strategy worked as Normincorp products developed a brand image in the market, and were identified as coming from 'Normin' in contrast to those of Benguet.

With lettuce, broccoli and strawberry, Normincorp was able to open to other types of buyers in July 2004. These buyers are: supermarket distributors and hotel/restaurant distributors. When necessary, commercial cold storage space was rented to hold at least a ton of lettuce as inventory for ready supply. Broccoli and strawberry ice-packed in Styrofoam boxes (the way Australian suppliers are packed coming into the country) was air freighted to Manila three times weekly at a consolidated volume of one ton weekly. When the Department of Agriculture (DA) allowed NorminVeggies to use a refrigerated van in its Metromart facility (at Boni Avenue) as storage facility, NorminVeggies ventured to directly supply the high-end restaurants in Ortigas and Makati. They rented refrigerated truck for this purpose.

The new markets taught Normincorp the marketing dynamics of seasonality for vegetables. While the fast food market arrangement is year round, they found out that those of the Manila based supermarkets, hotels and restaurants that are priced weekly or monthly are economical to serve during the rainy, 'typhoon' months of July to November when the freight costs to move these products from Bukidnon to Manila could be adequately covered. As a result, they supply Manila only for these months. While Normincorp supply only half of the year, volumes were doubled and included other vegetables, like cooking tomatoes, sweet pea, and squash.

In 2004-2005, Normincorp supplied the off-season market (July to November) for the Manila supermarket distributors. These are the typhoon months in Luzon when the Mindanao supply is more stable. It soon became uneconomical to maintain a storage facility and a permanent management set-up in Manila just for a six month supply per year. A marketing coordinator was hired to facilitate the service needs for this seasonal supply. This marketing coordinator became a business partner offering representation for Normincorp in Manila and is now paid on commission basis.

At present, Normincorp maintains a supply relationship with a preferred supplier of a leading supermarket chain in Manila. This preferred supplier handles 200 items and supplies to 18 Manila stores of this supermarket chain. Normincorp moves the squash and sweet pea products of the CRS assisted small farmers into this market together with other items from the independent farmers. Price is negotiated weekly but to provide a safety net for small farmers, agreement is to a set price within a bottom/ceiling price range.

The preferred supplier pays the farmers weekly but its credit term with the supermarket chain is 30 days, at times extending up to 45 days. Normincorp also supplies to a vegetable consolidator in Manila with supply for the caterers and canteens of big companies. Also, Normincorp supplies directly a supermarket in Cebu (Visayas) under direct outright purchase arrangement (i.e. not anymore going through a consolidator).

### **5.3.4 Forward integration**

NorminCorp then decided to build up its Visayas markets (Iloilo, Bohol and Cebu) and in Mindanao that are year-round. As part of the response for the challenge of bulk consolidation with expanded markets in Visayas as well as neighbouring Mindanao provinces, NorminVeggies has entered into partnership with DA and GEM-USAID to be able to put up NVCC in Agora in early 2006. NVCC started operation in May 2006 with NorminVeggies handling storage/warehousing services and Normincorp managing the marketing.

Through the NVCC, NorminVeggies was able to establish its track record as a supplier to Cebu, Bohol and Iloilo supermarket and fast food market distributors, as well as the Mindanao buyers in other provinces. The growers have maintained consistency of supply and quality. Each cluster has a target volume to deliver every week. The farmers bring their produce to NVCC (before direct to the port) where produce is consolidated and shipped, except for those shipped in container vans that are brought direct to the container yards near the port.

The buyers in the Visayas determine the proportion of acceptable goods and pay the corresponding amount to Normincorp. Normincorp gets a percentage market

facilitation fee from the face value of the sale, deducts NorminVeggies storage fee, and the balance is remitted to the grower. Within a month Normincorp has used its bargaining power to negotiate better arrangements. Some buyers have started to agree to send their consolidators who pay immediate cash to Normincorp when the vegetables are withdrawn from NVCC.

This eliminated the problem of trimmings in transit, and the waiting time for the payments. These made the farmers very happy with NVCC services. This has created a big impact on the operations of NorminVeggies. The stall is leased by NorminVeggies and therefore all storage fees go to NorminVeggies. Normincorp moved from the office of Green Haven Farm to the office at NVCC at the Agora market. The marketing of the vegetables is the responsibility of Normincorp, which receives the marketing facilitation fee.

Outshipments to Visayas and the neighbouring Mindanao provinces are regularly done every week. The consolidators of these markets pay for the shipping costs and transact in cash. Normincorp with its reputation for quality and reliability has become their preferred supplier. The advantages offered by Normincorp makes it convenient for the consolidators to move fast in a very narrow window of time in a transaction day to be on time for shipping or for the trucks to move out at a designated time.

Many farmers, whether members of NorminVeggies or not, who are not part of any cluster and bring their produce without any pre arrangements, are also being serviced by Normincorp. Their produce will be supplied to the markets who want to purchase from the spot market. At the consolidation centre, farmers are also able to get exposure to how the market buys. Normincorp then gets them acquainted with the quality desired by the market. These farmers gradually realize that they can achieve better prices if they have better quality and are part of a cluster. Since the NVCC was opened, more farmers have joined the marketing clusters.

In terms of market opportunities, Normincorp currently supplies a network of 15 regular buyers comprised of fast food suppliers, supermarket consolidators, hotel and restaurant suppliers, as well as wholesalers and retailers. Normincorp is considered as their preferred supplier.

After a year of operation, Normincorp is taking an aggressive market push by targeting to consolidate a weekly volume of 75 tons of assorted vegetables coming from its established 13 marketing clusters and assorted lead growers for special products (such as herbs, cherry tomato, zucchini, Japanese cucumbers, etc). This scaling up will give NVCC, the only farmer owned consolidation centre/outlet among 100 vegetable outlets in Agora wholesale market the competitive edge. This is drawing from the experience of the lettuce cluster that consistently supplied a ton

daily at NVCC, and thus was able to capture 60 per cent of the traded lettuces at Agora wholesale market. This hold on the market enabled Normincorp to be a price setter in Agora market (with iceberg lettuce priced at high level of P40 to P50 per kg all throughout NVCC's operation for one year).

As a strategic move for scale and influence in the market, the experience of lettuce production and sales will be tried out for 12 other vegetables available daily at NVCC and to be supplied from the programming production of 12 marketing clusters starting in July 2007.

**Table 5.4: Marketing Clusters' weekly production programme (July to December 2007)**

Cluster	Number of Members	Weekly Volume (tons)	Small Farmers' Weekly Share of Total Vol (tons)
Iceberg Lettuce	8	8.0	
Cabbage	10	20.0	2.0
Chinese Pechay	10	10.0	
Bell Pepper	5	1.0	
Broccoli	5	0.5	
Sweet Pea	8	0.7	0.2
Kentucky Beans	11	2.5	0.5
Bitter Gourd	7	3.0	0.5
Sweet Pepper	8	3.0	
Cucumber	5	2.0	
Eggplant	7	2.5	0.5
Squash	8	20.0	8.0
Total		73.2	11.7

Note: Small farmers are those assisted by Kaanib; Kaanib represents the farmers in the clusters and is counted as a member. Altogether, farmers contributing above volume add up to 74.

To adapt to realities of having to deal with more product variety and volumes, as well as to become highly organized at this time when NVCC links to many buyers and has to harmonize flow of products between farmers and buyers, NorminVeggies with Normincorp has invested in computer technology. This strategic move is being supported by NorminVeggies' partners, namely: GEM-USAID and the Department of Agriculture.

Also, service fees have been reduced to make it cheaper for the farmers, given NVCC's bigger scale of business. It is now worked out as a percentage of product sales to make it a simpler system.

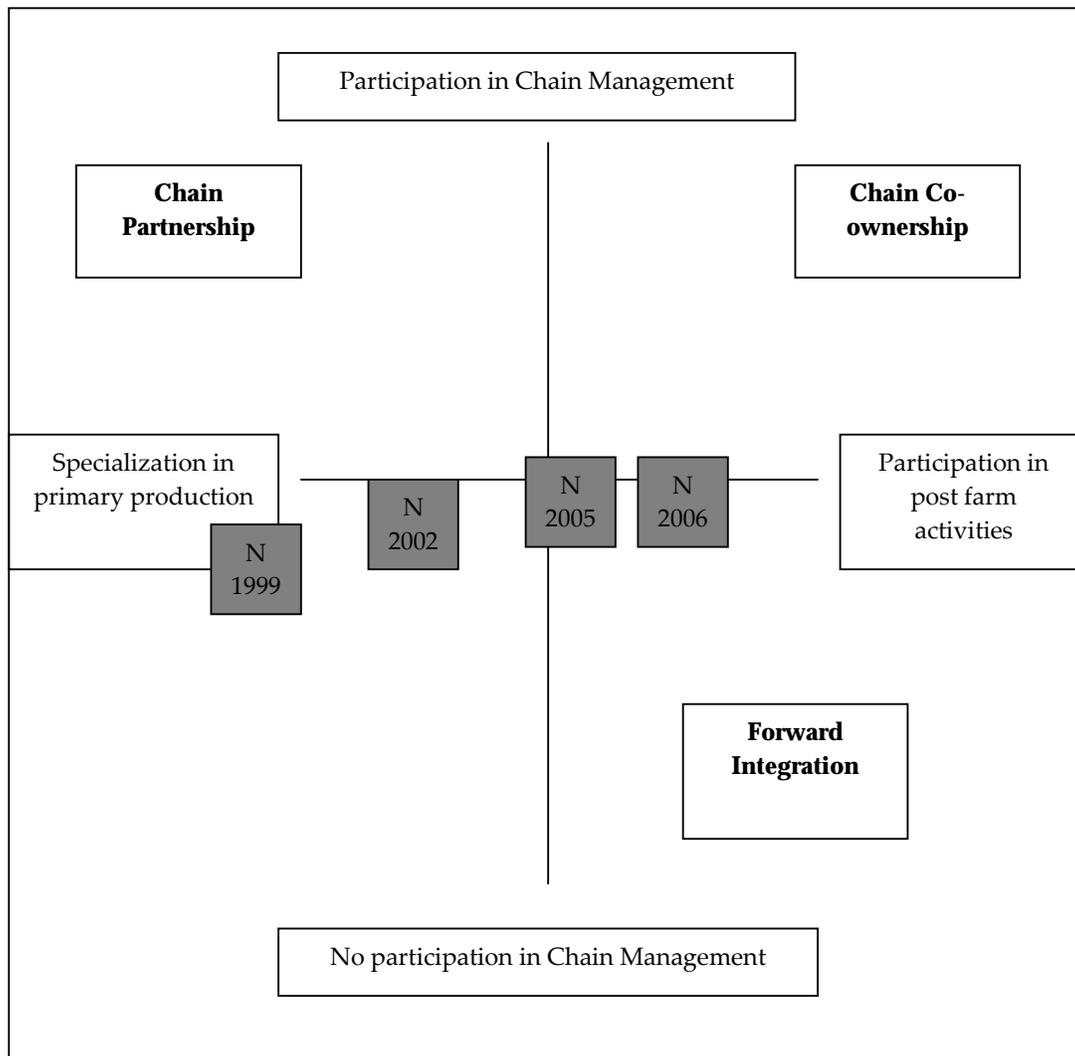
**Table 5.5: Adjusted Normincorp market facilitation fees (2007)**

Value/Kg (Php)	Various Vegetables (as percent of sales)	Table Tomato (Php/per crate)
<b>Up to 10.00</b>	5%	
<b>10.01 to 20.00</b>	4%	
<b>20.01 to 50.00</b>	3%	
<b>&gt;50.00</b>	2%	
<b>Up to 300/crate</b>		2.50
<b>&gt;300/crate</b>		5.00

Note: same rates apply for storage fees charged by NorminVeggies at the NVCC

The evolution of Normincorp (N) supply chain and its participation in chain management is mapped in Figure 5.2.

**Figure 5.2: Participation of Normin in chain management**



## **6 Keys to inclusion: lessons learned**

The ability of NorminVeggies to remain competitive in these dynamic markets is due the strategies or elements of their organizational innovation discussed in 5.2.2. However, these strategies are successfully implemented due to a number of factors. These are discussed below followed by an evaluation of the benefits and costs involved in section 6.2.

### **6.1 Critical success factors of inclusion**

#### **6.1.1 Benefits or incentives of organizing**

NorminVeggies operates as an association, which aims to benefit its members. One of the critical success factors of NorminVeggies is that it is able to tap into a support system that gives members access to resources available only to groups and not to individual farmers like training, technical upgrading and market assistance. Benefits include the following:

- Production protocols are available to members so that they do not have to resort to trial and error; farms are open to each other for sharing of experiences.
- Assistance from NGOs and development agencies (e.g. FAO of the UN gave them marketing training and techno demo on rain shelters).
- Assistance from Growth Equity in Mindanao (GEM) aimed at institutional strengthening. GEM also provides 80 per cent of the funds for administrative staff, and support for events like Vegetable Congress.
- Assistance from the Dept of Agriculture on technology and production related training, access to a cold chain, a refrigerated truck and other new technologies.
- Assistance from Kaanib foundation and its resource organizations (LWR and CRS) for small farmers who need special attention because they have special needs.
- Farmers have a voice in the policies being formulated that affects the vegetable industry.

Moreover, any market developed belongs to NorminVeggies' marketing clusters. The transparency in the transactions of all sales facilitated through Normincorp was due to the use of a facilitation fee system for payment of services. All the sale returns to the farmers, less the facilitation fee to Normincorp and the storage fee to

NorminVeggies. The transparency in transaction has reinforced trust among the members of the NorminVeggies clusters

### **6.1.2 Shared core values**

Another critical success factor for NorminVeggies is that the organization members share a core value to provide small farmers of the association with an opportunity to improve in terms of production technology, quality awareness, packaging and other competencies needed to access markets.

The members who are more financially independent are acutely aware that much of the assistance they tap as an association is because of the small farmers. Therefore, small farmers of the association are assigned products that they are given priority to grow with the independent farmers just backing up their supply. These are products which are labour intensive, low risk and have lower costs of production like sweet peas, cabbage and carrots, squash, bitter gourd and eggplant. The more financially independent farmers, on the other hand, provide the back-up system for the small farmers in case there is a crop failure.

Aside from providing production back-up for small farms, the independent farmers were also available to the smaller farmers for observation and sharing of knowledge. They can learn the latest in agricultural inputs, like organic fertilizers and vermiculture (i.e. composting with the use of earthworms) and other production techniques.

The core value of sharing is being emphasized among all the producers including the small farmers. It is understood that when a farmer is taken into a cluster, s/he is under strong obligation to work with the group including to protect its name as a producer and a marketer. This emphasis is to tie up support from NorminVeggies clusters to the individual farmer with his/her obligation to help others in the group. This core value is given high importance. Failure to meet this expectation from a cluster member can be a reason for a grower to be removed from the cluster. This unity to the group is severely tested when growers are tempted to polevault to other buyers for short term benefits of pricing.

### **6.1.3 Learning organization**

A third critical success factor of NorminVeggies and Normincorp is that they are learning organizations, flexible and adaptive to the changes in the industry. They are able to respond because the communication among the members of the board is open and transparent. When the lettuce cluster and the other products started to pick up in volume, the board decided that a corporation will have to be formed to unload the 'volunteer' facilitator from the board. They decided that a corporate

structure is best and that this corporation must be run like a professional organization because decisions needed to be made swiftly. Thus they formed Normincorp.

Marketing activities of the association, including market information, market development, shipping, negotiation and other market related activities are coursed through Normincorp. Normincorp actively seeks high value markets and constantly analyzes the changes in the market and this is openly provided to NorminVeggies members who want to take advantage of marketing services by Normincorp and also agree to the clustering practice. Normincorp contributes 10 per cent of its gross revenue from market facilitation fee to NorminVeggies to support the servicing organization and to add up to NorminVeggies storage fee income.

#### **6.1.4 Leadership and managerial competence**

A fourth critical success factor is the composition of the core group of the association. They are composed of people who have either been involved in the vegetable industry for a long time, have been business executives of other industries, are graduates of agriculture and its related fields, or have the passion for the industry and the small farmers. The group as individuals are responsive to the markets and believe that any market developed belongs to all the members of NorminVeggies clusters.

It cannot be denied that the strategies employed by the group such as marketing clusters, forming a marketing group (Normincorp), forward integration, quality and supply chain management, and developing farmers to take on the discipline required in business, have been realized because of the presence of people who have managerial, entrepreneurial and leadership skills as well as a genuine desire to help very small farmers.

## **6.2 Benefits and costs of inclusion**

### **6.2.1 Increased net benefits for all cluster players**

The key benefit of farmers who are members of marketing clusters and sell to Normincorp is increased profit. This increase in profit is due to more stable markets (i.e. vegetable supermarket consolidators or distributors), higher value for quality vegetables, and a premium for reliability in supply. For these reasons, Normincorp can get a price premium of 10 per cent to 20 per cent compared to that offered in the spot wet market dominated by traders in the traditional supply chain.

For example, buyers want to source their carrots from Normincorp because of quality and reliability. This means less cost for the buyers and higher recovery. 'Value for money' can be the main selling point.

Given all the work put into quality management and delivery reliability, Normincorp can discuss with the supermarket supplier a good pricing that is enough to compensate for the effort. The price for carrots, even if pegged weekly, is always above the Agora wet market price. If the price of carrots at the wet market is P30 per kg, Normin quotes at P38, to factor in the high recovery rate for the supermarket supplier.

When s/he receives the carrots that are washed, air-dried, sorted, neatly packed in boxes, s/he saves on handling labour since the vegetables are ready for chiller display. When s/he compares this to the wet market carrots that are unwashed, unsorted and in sacks, a P8 per kg additional price is still less than the costs associated sorting, washing and preparing carrots for display, as well as the high reject level for the procured vegetables (estimated at 8 kg for every 60 kg sack).

For quality supply, the farmer's additional cost is P3.50 (with this breakdown: P1.50 for washing, sorting and the cost of using box instead of the sack for packaging, P1 for NorminVeggies storage fee, and P1 for Normincorp marketing facilitation fee). S/he still enjoys an additional income of P4.50. This is also the case also for lettuce. From Normincorp that has a daily supply of lettuce, the price is ten per cent higher compared to that in the wet market.

Higher income is also coming from the sorting of the vegetables. Carrot in the spot market is usually sold 'all-in' wherein the price is averaged from the big to the small sizes. All-in carrots can mean a price difference of P18 per kg when the big sized carrots command a price of P30. In most cases, the farmers resort to all-in trading because carrots in the wet market has six sizes (large, big, medium, standard, small, super-small) with a price range of P30 to P3 for the large to the super-small size. The traders are arbitrary in their own sorting.

Normincorp being the only one in the wet market handling high quality carrots was able to impose just three size categories (big-medium, standard and small) with a price of P38, P30, and P22 respectively. Super-small carrots are no longer sold to the high value market and are instead unloaded to the wet market retailers that slice vegetables as off-size carrots.

Increased sales, and accordingly income, is not only through better quality, sorting and price, but also through an increase in sales through better assortment. The mix of independent farmers who have financial resources and small farmers with limited financial resources becomes a source of competitive edge. Independent farmers produce

capital intensive vegetables such as salad vegetables while small farmers produce those that are not capital intensive such as cabbage, carrots and sweet peas. A wide assortment combined with stable volume and quality achieved through market clustering is important in supplying to supermarkets and restaurants (or their consolidators) which require assortment.

The Visayas vegetable supermarket consolidator or distributor takes in from Normincorp an assortment of 20 products from a single shipment. From the independent farmers are supplied the following: iceberg lettuce, romaine lettuce, salad tomato, cherry tomato, bell pepper, strawberry, cucumber, sweet corn, young corn, herbs, etc. This set is combined from that of the small farmers, namely: carrots, cabbage, sweet pea, sweet pepper, squash, table tomato, eggplant and other tropical vegetables. This range of products gives Normincorp the bargaining power in terms of pricing and sales volume. Handling the transaction with a set of products provide leverage that all products have to be taken in from both the independent and small farmers. This means that Normincorp will supply high value, difficult to get strawberry if the ordinary squash is also taken in.

Moreover, there are savings on costs. Since production of those farmers involved in the marketing clusters is 'programmed' storage fees are minimized. In other words, they are sold even before harvesting. As a group and as members of NorminVeggies clusters, they access resources that would help reduce their cost such as assistance on production, marketing, institutional strengthening and benefits derived from advocacy such as increased access to resources. They also save on logistics cost because of volume or economies of scale.

Normancorp, before the set up of the NVCC, used to handle about 30 to 40 tons per month of assorted vegetables mainly to the Visayas market. When marketing was coursed through NVCC, the volume increased to 50 tons during the first month (May 2006), then 60 tons/month in the following two months. It peaked at 100 tons in August 2006 then reduced to 60 tons for the remaining months in 2006. It reduced further to 30 tons from January to March 2007 based on expectations that vegetable supply would reduce in the first quarter as experienced in the previous years with the marketing done through the Agora wholesale traders.

What was not foreseen was that with a network of buyers already established by Normincorp in NVCC, this supply requirement would not follow the pattern of reduction in the first quarter. NorminVeggies responded by adjusting production. In May 2007, this volume increased to 50 tons per month. And production is underway for the July 2007 harvest to increase volume dramatically to 200 tons per month.

During the rainy season of July to December, about 20 per cent of consolidated vegetables is for outshipment to the Luzon markets, 30 per cent for the Visayas markets, 40 per cent

for the neighbouring eight Mindanao provinces, and the remaining ten per cent for the local spot market.

The benefit of cash payment right after withdrawal from NVCC meant more stable income for the farmers. There is no more trimming to factor in after the vegetable distributors obtain the vegetables because the ones left at the stall are also purchased by the local retailers who slice the vegetables for the consumer market.

The increase in price, the sorting, and the leverage of Normincorp in the negotiation both for higher price and lower transaction cost, together with the savings in better management of trimmings/rejects with the NVCC facility is altogether estimated to translate to an increase to profit to the individual farmers ranging from 25 per cent to 35 per cent. This has encouraged more growers to join NorminVeggies. Since the opening of NVCC in May 2006, ten new members joined the association.

The key to these benefits is the organizational innovation, which led to inclusion and increased participation of the group in these dynamic markets. The cost involved in organizing appears high for people who invest their time, efforts and money in meetings and developing and implementing strategic decisions. But by organizing, they are able to gain more benefits to lower their cost of organizing thereby providing incentives to sustain the initiatives. They hire staff to run the organization to minimize their efforts and continue the work of improving quality to get better prices, access resources to reduce cost and ultimately increase profits.

Since the opening of NVCC and the better deals with the markets, Normincorp's income from facilitation fees increased by 30 per cent. Normincorp's revenue can cover all operating costs with net incomes at the level of 20 per cent of the total facilitation fees generated. The volume levels at the first three months of NVCC marketing operation is the reference for attaining the breakeven point in the operation.

**Table 6.1: Normincorp income statement in pesos (1 US \$: 53 pesos) (From NVCC marketing operations), May to July 2006**

Item	May	June	July	Total
<b>Income</b>				
Market Facilitation Fees	25,610	30,072	36,614	92,296
<b>Expenses</b>				
Salaries & Wages	12,500	16,000	18,500	47,000
Employee Benefits	1,066	1,066	1,066	3,198
Employees' Meals	1,145	1,335	2,455	4,935
Communication	248	448	477	1,172
Travel & Transportation	516	520	682	1,718
Light & Water	469	351	561	1,381
Accounting Services	1,000	1,000	1,000	3,000
Office Supplies	1,492	2,223	1,735	5,449
Miscellaneous	100	100		200
<b>Total Expenses</b>	18,535	23,042	26,475	68,053
<b>Net Income Before Tax</b>	7,075	7,030	10,138	24,243
Less : Normincorp Contribution to NorminVeggies (Mktg Premium)	2,559	2,988	3,618	9,166
<b>Net Income</b>	4,515	4,042	6,520	15,078

NorminVeggies also earned income from storage fees that enables it to cover 20 per cent of its operating cost. This is a very encouraging development because there is a sustainability mechanism to reduce dependence on external sources such as support of GEM-USAID for institutional strengthening and management of the servicing association. Hopefully, more incomes will be generated also for NorminVeggies through its storage fees with the higher volumes coming in (Table 6.2).

### 6.2.2 Benefits and costs by type of farmers

Since the independent farmers and the small farmers have different assigned crops, the costs and benefits would be proportionate for both types. Independent and small farmers move together in the cluster towards the market, and costs and benefits are shared accordingly based on products, price and costs actually incurred.

For example, when Normincorp sells bell pepper to an outshipment buyer (i.e. Visayas or Manila), they have a price premium above the local market of about P10 per kg for both independent and small farmers. The costs would be the same on the market end: packaging and airfreight and handling per kg. What would differ slightly is the cost of moving the product out of the farm to the consolidation centre. Independent farmers who have their own truck and have more efficient operations would have a lower transport cost than a small farmer who has to resort to paying per box (on a jeepney). This would hold true for certain production costs (as in the

case of the small farmers having to buy chicken manure, compared to independent growers using their own manure from their poultry farms).

However, the cost for small farmers is higher when one factors in the capability building work such as training, technology demonstrations, technical assistance in the form of a fulltime technician/organizer to initiate clustering procedures within the market.

To show the benefits and costs of inclusion in the case of small farmer, the case of Henry Hidagan is highlighted below. It should be noted, however, that independent growers belonging to the lettuce cluster when they were supplying to the vegetable processor in Manila for the fast food market in 2004 earned higher amounts compared to selling through the Visayas cluster for a supermarket consolidator or through the NVCC. But financial requirements are high and risk is greater. Figure 6.1 shows the returns and costs involved in supplying to this type of market. Details are presented in Appendix 9.4.

Recent discussions in the Normincorp reveal that highly increasing vegetable volume in the consolidation centre warrants lowering the market facilitation fee to half starting in September (see Table 5.4).

### Box 6.1: Better Chance for a Small Farmer in a Cluster

Henry Hidgan is a small farmer producing carrots for the cluster for the consolidators supplying in the Visayas market (supermarkets). He plants in a 1,000 square meter area in Impagsugong, Bukidnon in the Northern part of Mindanao in the Philippines. He is assisted by Kaanib Foundation Inc (KFI) in production as well as in post-harvest aspects to meet cluster requirements. He is also provided with financial assistance and a production budget and a financial package for a module of 1,000 square metres production area is prepared by KFI (See Appendix 9.2).

Actual production and financial performance for the first batch or cycle is compared to budget as shown below. Note that 30% of the net processed is deducted by KFI to be set aside for the project to sustain its assistance to small farmers.

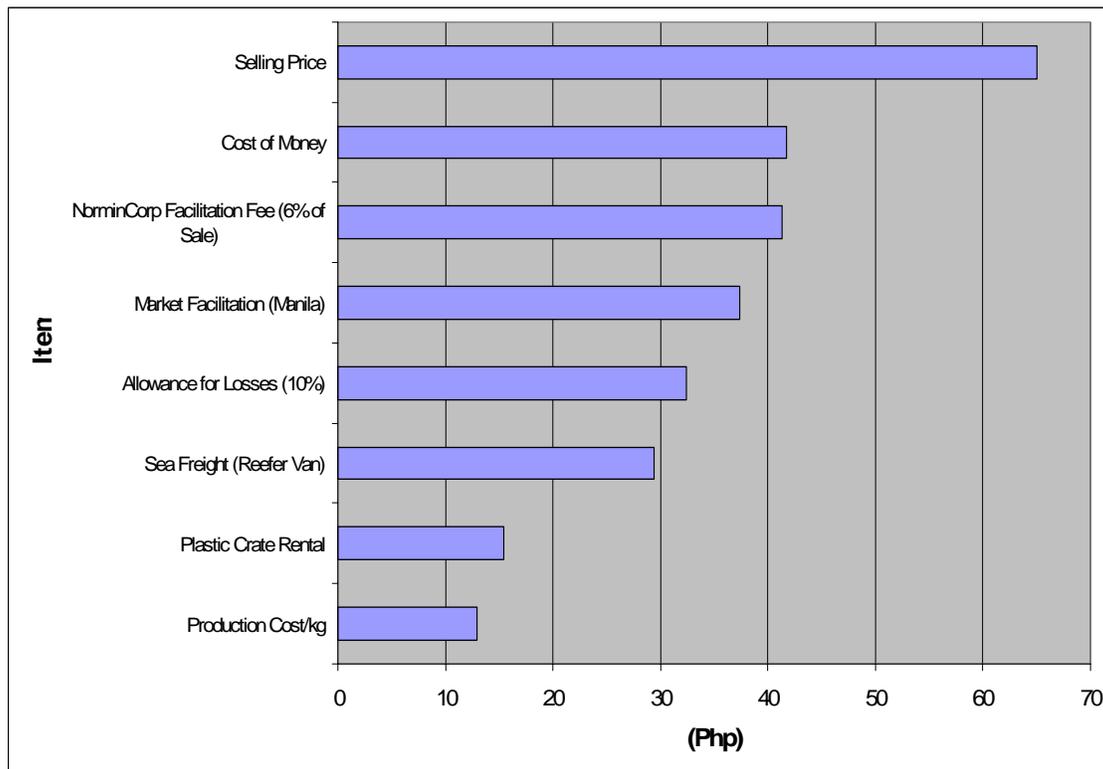
COST AND RETURNS (1000 sq. meter production area for carrot)	Budget	Actual
Expected Production (kg)	2,500	1,396
Expected Price/kg	P12/kg	Various
Gross Sales	30,000	24,828
Less: Marketing Fee (10%)	3,000	2,483
Net Sales	27,000	22,345
Less: Production Cost	10,109	13,740
Net Returns	19,891	11,088
AMOUNT FINANCED	9,349	12,240
ALLOCATIONS		
Net Cash (Sales Less Amount Financed)	17,651	10,105
70% Share to Farmer	12,356	7,073
30% Share to Project	7,060	3,031

He is encouraged to plant only 1000 sq. m. per batch. After the first batch, he can plant another relay of either carrots or cabbage. The production budget is only a guide. Kaanib's project staff will assess the situation depending on the need of the farmer, making adjustments as necessary. The hurdle to tackle is that the areas of small farmers are not yet that conditioned for vegetable farming.

Though organic fertilizer (manure) is applied it takes time to build up the organic matter content fertility of the soil. It is possible that the first crop is a loss or just a little income, but the next relay plantings will be progressive, except of course if the damage is because of the climate. In the above case, actual production and financial performance is below budget. This is where the clustering is very valuable. Without the cluster's market that is outshipment to the Visayas, his yield won't be able to cover the costs.

In this case, price received by the Mr.Hidgan is 27% or P8/kg higher than at the wet market. While Mr. Hidgan incurs additional cost of P 3.5/kg cost for washing, packing and sorting and his yield is low, he is better off because his market is better as part of a cluster that supply to a consolidator sourcing for supermarkets in Central Philippines (Visayas).

**Figure 6.1: Value chain for iceberg lettuce from Bukidnon, Northern Mindanao, Philippines**



For ease of computations using computer software in the consolidation centre, Normincorp plans to do away with the charging of facilitation fees based on the type of vegetable and the value by bracket. Instead, it will utilize straight percentage: three per cent of sales for bodega fee (NorminVeggies) and three per cent of sales for market facilitation (Normincorp); or altogether six per cent. Compared to the current system, this is a reduction of fees from about ten per cent to six per cent, or four per cent less. With the discussion with KFI, Normincorp shall factor in the development costs by still charging the four per cent. That is ten per cent facilitation is retained but with savings of four per cent will be set aside as the sustainability mechanism for the NGO (KFI) support to them.

With this type of arrangement, the cost of accessing the markets is spread out and not borne by one type of grower because the 20 per cent net income of Normincorp is what is used for expenses to open and develop new markets. This is the investment for all the growers in the cluster so that each grower does not have to shell out individually an amount to open the markets. This in reality is a counterpart because the Department of Agriculture and GEM also invest in market development.

However, the difference in the costs and benefits would be significant if one compares the farmers who are included in the cluster and those who are just selling

locally because they do not have access to a better market. For example: sweet pea in the local market in Impasug-ong in Bukidnon, where the small farmers in the cluster are located or proximate, is selling at P80/kg only when Normincorp was already selling at P120/kg. Even if packaging, transport, bodega fee and marketing fee are deducted, the net price would still be much higher than the Impasugong price.

**Table 6.2: NVCC income statement in pesos (1 US \$: 53 pesos), May to July 2006**

<b>Item</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Total</b>
<b>Income</b>				
Storage Fee Income	25,786	30,248	36,418	92,453
Packaging Income	316	981	1,577	2,873
Marketing Premium	2,559	2,988	3,618	9,166
<b>Total Income</b>	<b>28,661</b>	<b>34,217</b>	<b>41,613</b>	<b>104,491</b>
<b>Expenses</b>				
Salaries	12,075	11,075	11,250	34,400
Benefits (Employer's Contribution)	569	569	569	1,707
Daily Wages (Hired Labour)	1,800	3,050	3,780	8,630
Rent	10,000	10,000	10,000	30,000
Transport Expense	378	122	36	536
Light & Water	1,633	1,033	1,333	4,000
Office Supplies & Miscellaneous	2,392	59	134	2,585
Miscellaneous	127	63	366	556
Pre-Operating Expense	2,266	2,266	2,266	6,799
<b>Total Expenses</b>	<b>31,239</b>	<b>28,237</b>	<b>29,734</b>	<b>89,211</b>
<b>Net Income</b>	<b>-2,578</b>	<b>5,980</b>	<b>11,879</b>	<b>15,280</b>

Marketing premium is Normincorp's contribution to NorminVeggies. Based on agreement, NorminVeggies is 20 per cent owner of Normincorp. To simplify analysis, ten per cent of Normincorp's facilitation fee at the NVCC is NorminVeggies' share. This is recorded as marketing premium. Salaries are for the consolidation in-charge and a night guard. Daily wages are the hired labour NVCC maintains in unloading vegetables from the vehicle to the consolidation centre to augment the labour provided by the farmers and for general maintenance. Based on policy, the unloading cost is the expense of the farmers. Rent covers the rent for the land.

The building valued at P475, 000 was constructed by the DA as support from the government for the vegetable industry development through NorminVeggies. The agreement is free use (usufructuary agreement). Even if members contributed, pre-operating costs are computed which will be amortized in a period of five years so initial capital generated is intact.

A summary of benefits and costs of the NVCC is presented in Appendix 3. It should also be noted that as NVCC continues to earn more income after a year of operation (See Appendix 5).

### 6.2.3 Sustainability of benefits for small-scale farmers

A key question to ask in assisting small scale producers is whether the cost of development assistance can be recovered. That is, whether the cost of assisting these small scale producers can be covered by the benefits or increased in their income due to development assistance. It is recognized that small scale producers need assistance in terms of access to credit and market facilitation through cluster development. But can this sustain the benefits generated?

To answer this question, a survey of 43 vegetable farmers who received technical assistance in cluster development was conducted in October 2007. Vegetables covered include squash, cabbage and carrots (See Table 6.3). About 79 per cent of the total farmers interviewed were males and the balance is females.

**Table 6.3: Farmers surveyed by crop, October 2007.**

Vegetables	Number of Farmers	% to total
Squash	14	33
Cabbage	8	19
Carrots	21	49
Total	43	100

Results show that there are various factors that affect profitability of clusters. These include productivity or yield level, price, production and post-production expenses. Of the three crops, only squash registered a negative profit (Table 6.4). However, if one does not consider family labour or the amount of time, the owner or family members spent in producing the crops, all three vegetables yielded positive net income (Table 6.6).

Squash production was affected by too much rain and most farmers produced way below the expected yield. Moreover, costs for squash are relatively compared to other crops particularly shipping and transportation costs (Table 6.4). When the cost of assisting these farmers is included, squash apparently yielded negative profits (Table 6.5). However, when family labour is accounted for or paid for, squash farmers earned positive profit (Table 6.7).

**Table 6.4: Percentage of profit to sales per cluster**

Commodity	Cabbage Cluster		Carrots		Squash	
	Amount	% to Sales	Amount	% to Sales	Amount	% to Sales
Yield	1,542.50		969.52		3,232.86	
Price	9.50		19.33		4.82	
Sales	14,538.75	100.00	16,415.71	100.00	15,143.57	100.00
Production Cost	11,461.25	78.83	10,110.00	61.59	10,160.00	67.09
Shipping Fee			1,507.69	9.18	3,328.18	21.98
Facilitation Fee	646.00	4.44	820.79	5.00	1,035.39	6.84
Transpo (Imp-CDO)	1,143.75	7.87	709.52	4.32	1,508.67	9.96
Miscellaneous	183.00	1.26	113.52	0.69	779.55	5.15
Profit	1,508.50	10.38	3,728.55	22.71	(683.82)	(4.52)

**Table 6.5: Percentage of profit to sales per cluster net of assistance cost**

Commodity	Cabbage		Carrots		Squash	
	Amount	% to Sales	Amount	% to Sales	Amount	% to Sales
Yield	1,542.50		969.52		3,232.86	
Price	9.50		19.33		4.82	
Sales	14,538.75	100.00	16,415.71	100.00	15,143.57	100.00
Production Cost	11,461.25	78.83	10,110.00	61.59	10,160.00	67.09
Shipping			1,507.69	9.18		
Facilitation Fee	646.00	4.44	820.79	5.00	3,328.18	21.98
Transpo	1,143.75	7.87	709.52	4.32	1,035.39	6.84
Miscellaneous	183.00	1.26	113.52	0.69	779.54	5.15
Cost of Assistance	500.00	3.44	500.00	3.05	500.00	3.30
Profit	1,008.50	6.94	3,228.55	19.67	(1,183.82)	(7.82)

It is interesting to note, however, that despite the cost of assistance, squash farmers earned positive profit when they supplied to supermarkets (Metro Gaisano). Table 6.8 shows profitability per type of market outlet. Squash was sold to three different market outlets. Two were wholesale markets in Agora (Suping) in Cagayan de Oro City located in the island of Mindanao, which is the nearest outlet to the farmers. The other one was in Cebu (Ondong) located in Visayas in the central part of the Philippines. The third outlet was the supermarkets (Metro Gaisano) located in Cebu.

Of the three outlets, squash farmers earned positive profit only by selling to the supermarkets (Metro Gaisano). For carrots, farmers sold to two types of markets. One outlet was a wholesale market (Agora) and the other one was a consolidator for institutional markets, including supermarkets in Cebu. While carrot farmers earned positive profits for both outlets, they earned better profits by selling to consolidators.

Cabbage farmers on the other hand sold to two buyers: a wholesaler and a mixed of buyers both located in Agora wholesale markets. In both outlets, farmers gained positive profits.

**Table 6.6: Percentage of profit to shares per cluster using ‘cash cost’ (production cost less family labour)**

Commodity	Cabbage		Carrots		Squash	
	Amount	% to Sales	Amount	% to Sales	Amount	% to Sales
Yield	1,542.50		969.52		3,232.86	
Price	9.50		19.33		4.82	
Sales	14,538.75	100.00	16,415.71	100.00	15,143.57	100.00
Cash cost	9,451.25	65.01	7,850.00	47.82	7,600.00	50.19
Shipping Fee			1,507.69	9.18	3,328.18	21.98
Facilitation Fee	646.00	4.44	820.79	5.00	1,035.39	6.84
Transpo (Imp-CDO)	1,143.75	7.87	709.52	4.32	1,508.67	9.96
Miscellaneous	183.00	1.26	113.52	0.69	779.55	5.15
Profit	3,518.50	24.20	5,988.55	36.48	1,876.18	12.39

**Table 6.7: Percentage of profit to sales per cluster using cash cost net of assistance cost**

Commodity	Cabbage		Carrots		Squash	
	Amount	% to Sales	Amount	% to Sales	Amount	% to Sales
Yield	1,542.50		969.52		3,232.86	
Price	9.50		19.33		4.82	
Sales	14,538.75	100.00	16,415.71	100.00	15,143.57	100.00
Cash cost	9,451.25	65.01	7,850.00	47.82	7,600.00	50.19
Shipping Fee			1,507.69	9.18	3,328.18	21.98
Facilitation Fee	646.00	4.44	820.79	5.00	1,035.39	6.84
Transpo (Imp-CDO)	1,143.75	7.87	709.52	4.32	1,508.67	9.96
Miscellaneous	183.00	1.26	113.52	0.69	779.55	5.15
Assistance cost	500.00	3.44	500.00	3.05	500.00	3.30
Profit	3,018.50	20.76	5,488.55	33.43	1,376.18	9.09

Based on the above results, the following conclusions can be derived. Firstly, the cost of assisting the farmers can be recovered. Secondly, the profitability and hence the ability of farmers to pay for any development assistance depends on a number of factors. Productivity or yield is an important factor especially when small scale farmers do not have rain shelter or greenhouse to control temperature or avoid negative effects of weather (e.g. too much rain). Finally, the type of market also affects capacity of farmers to recover development assistance. It was observed in the two cases covered (squash and carrots) that farmers selling to high value markets such as supermarkets have higher chance of earning more profits.

**Table 6.8: Percentage of profit to sales per market by cluster (net of assistance cost)**

	Squash Cluster						Cabbage Cluster				Carrots Cluster			
	Agora Suping	% to Sales	Cebu Metro Gaisano	% to Sales	Cebu Ondong	% to Sales	Agora Different buyers	% to Sales	Agora Wholesaler	% to Sales	Agora	% to Sales	Cebu Conso-lidators	% to Sales
Yield	2,883.33		2,733.33		3,551.25		1,562.86		1,400.00		1,392.86		757.86	
Price	3.00		9.50		3.75		9.29		11.00		11.14		23.43	
Sales	8,650.00	100.00	25,966.67	100.00	13,520.00	100.00	14,415.71	100.00	15,400.00	100.00	15,401.43	100.00	16,922.86	100.00
Production Cost	10,160.00	117.46	10,160.00	39.13	10,160.00	75.15	11,461.43	79.51	11,460.00	74.42	10,110.00	65.64	10,110	59.74
Shipping Fee			2,733.33	10.53	3,551.25	26.27							1,400.00	8.27
Facilitation Fee	432.50	5.00	2,596.67	10.00	676.00	5.00	584.00	4.05	770.00	5.00	770.07	5.00	846.14	5.00
Transpo (Imp-CDO)	1,153.33	13.33	1,093.33	4.21	1,420.50	10.51	1,164.29	8.08	1,000.00	6.49	992.86	6.45	50.00	0.30
Miscellaneous	690.00	7.98	18.00	0.07	823.50	6.09	186.29	1.29	160.00	1.04	158.86	1.03	90.86	0.54
Assistance cost	500.00	5.78	500.00	1.93	500.00	3.70	500.00	3.47	500.00	3.25	500.00	3.25	500.00	2.95
Profit	(4,285.83)	(49.55)	8391.33	32.32	(3,611.25)	(26.71)	935.86	10.82	1510	9.81	2,869.64	18.63	3408	20.14

## **7 Conclusions and recommendations**

The organizational innovation of NorminVeggies has several elements: product consolidation through the clustering strategy, a new business model through Normincorp, supply chain and marketing management, networking and linkage and development intervention for greater inclusion of small farmers.

The clustering strategy enables small farmers to be active players in the supply chain, meet the basic demands for volume and quality consistency in supply, and join the dynamic markets like the fast food chains, processors and supermarkets.

It takes time to develop a functioning cluster. It starts with a random group of farmers producing as individuals. Through time, those who can work in the cluster (particularly in the sharing of best practices, commitment to quality and delivery reliability, willingness to pay the costs of management) will become evident. Those who cannot will leave as willingly as they came in. When growers can understand and experience the benefits of cooperation, only then can there be cohesion in the cluster.

The cluster is not an ordinary grouping. Rather, it is one that has marketing goals and management systems. A business organization taking bold steps as a social enterprise is needed to realize the goals that benefit a wide base of growers that including small farmers. A core group of enterprising and agribusiness oriented farmers is necessary to provide the internal muscle to the organization and pull the small farmers along.

Small farmers have the productive potential because of their number and spread. However, infrastructure gaps, low productivity, attitudinal problems, and other constraints, mean that they need development interventions from private development resource organizations and government to address their limitations. There is also a slow maturation period required as small farmers gradually are trained, learn new values and skills, and are primed for business-like operations. However, there is some evidence as shown in this study that the cost of development interventions can be recovered, given the right approach such as cluster development in assisting small scale farmers.

The key to successful marketing is effective management rather than the level of sophistication of the marketing system. This implies that what counts is organizational management (or how farmers can work together) and operational efficiency (a high level of coordination in a sequence of activities that move products cheaply from the farmers to the buyers).

Staying power in marketing is a result of how fast farmers can keep up with continuous changes in an evolving supply chain. Competition from vertically integrated suppliers such as corporate groups can exclude small farmers from the market. There is a need to constantly invest in technology development, market research, communication, and good financial management.

Competence enhancing investments can be within the reach of small farmers through linkage with government that can provide supportive programmes and policies, with the business sector, and with private resource organizations.

For this to work, there are critical factors that must be in place. The benefits or incentives of organizing are clear. Members should share a core value of helping each other to galvanize the efforts toward strengthening the organization. While incentives exist to organize and access resources, the organization will not be strengthened further if core values are not shared. Considering the volatility and the dynamism in modern chains, it is important that the organization should be a learning organization, adaptive to the changes in the market to remain competitive.

Another key factor that reinforces the ability of the learning organization to respond to the changes in the market is the presence of managerial and leadership competence. The quality of people making strategic decisions is essential. NorminVeggies and Normincorp are blessed with people who have business experience and genuine desire to help the small farmers. If these elements and factors are in place, the degree of inclusion can be improved, replicated and sustained.

## 8 References

Berdegue, J. A. and Peppelenbos, L (2005). 'A method for the analysis of innovative practice in connecting smallholder producers with dynamic supply chains.' Resource paper for component 2, Regoverning Markets Programme.

Concepcion, S.B. (2005). 'Vegetable purchase and consumption patterns in Mindanao', a paper presented during the Mindanao Vegetable Industry Stakeholders Collabouration: A Stronger Linkage to Markets, August 18-19, 2005, Davao City.

Digal, L.N. and Concepcion, S. B. (2004). Regoverning markets: Securing small producer participation in restructured national and regional agrifood systems: the case of the Philippines.

Douthwaite, Boru, and Jacqueline Ashby. (2005). Innovation histories: A method for learning from experience. ILAC Brief 5.

Masajo-Manalili, N. (2000). The quality assurance challenge: Can village marketing and cooperatives respond?, edited by G.I. Johnson, Le Van To, Nguyen Duy Duc and M.C. Webb, ACIAR Proceedings 100.

Milagrosa, A.P. and Ir. J. Viane. (2002). Marketing of Vegetables in the Cordillera Region: A Transaction Cost analysis. BSU Research Journal 35 & 36. June & October.

Food and Agriculture Organization of the United Nations

<http://faostat.fao.org/>

Phillipines' Bureau of Agricultural Statistics

<http://www.bas.gov.ph>

Planet Retail

<http://www.planetretail.net>

# 9 Appendix

## Appendix 9.1: Kaanib Foundation, Inc. (KFI)

### History of Kaanib Foundation, Inc.

KAANIB Foundation, Inc. (KFI) has its beginnings in a project called the Modified Cooperative Farm. Pioneered in 1980 by two Graduates of the College of Agriculture of Xavier University, Cagayan de Oro City, the project hoped to assist small subsistence farmers in Impasugong, Bukidnon Province improve their farm income through assistance in appropriate farm practices and production assistance for the main cash crop.



From a core of 5 farmer cooperators, the Kaanib Farmer Cooperative (KFC) was formed and became the main channel through which the small farmers were able to organized themselves and function independently to answer the needs of their members. By 1988, KFC grew to have 100 farmer members from various agencies.

In 1985, KAAANIB helped pioneer the Year of Service Program of Xavier University by handling an experimental batch graduates. With a small grant from the Menomile Central Committee, a batch of 4 graduates spent a year of training and formation at the KAAANIB farm project at Sta. Ana, Impasugong. The program went on for three years producing a total of 12 graduates. The learning's from this trial program provided the basis for the present YOS program based in Xavier University.

In 1990, KFI started working with Agrarian Reform Beneficiaries through a partnership NGOs, Government and Peoples Organization (Pos) in the TRIPARRD Program (Tripartite Partnership for Agrarian Reform and Rural Development). Presently KFI services 307 Agrarian Reform Beneficiaries from five estates in the Municipalities of Sumitao and Impasugong, Bukidnon.



In 1991, KFI formally started its Sustainable Agrarian Program with the assistance of WORLD ACCORD through PDAP for a program of Diversified Upland Farm Establishment involving 50 farmers in Barangay Carawayan and Capitan Basyong in Impasugong.

Additional grants in 1993 has allowed KFI to extend the program to 100 farmers in three barangays in Sumitao

In November 1993, KFI with Xavier Science Foundation, Inc. (XSF) won the bidding for Social Preparation Work of the Community Resource Management Program for the Upper Pulangi Watershed in Impasugong, Bukidnon. The contract was for two years for Social Preparation of the Communities involved in the seven year project. KFI implemented the project for 15 months before it was turned over to the Provincial Government.

In 1994, a MISEREOR grant has allowed KFI to go into promotion of traditional rice varieties (MASIPAG) in the two Provinces of Bukidnon and Agusan del Sur. It marks the first time that KFI expands its areas of operation beyond the Province of Bukidnon.

### Vision

KAANIB envisions a just society characterized by empowered and sustainable communities.

### Mission

To work with the marginalized sectors, improve & uplift their living conditions by working in partnership with different stakeholders in the community.



### Programs

- **Democratic Institutionalization Empowerment and Good Governance (DIEGO)**
- **Mainstreaming Young Professionals & Rural Leaders in Communities (MYRIAN)**
- **Agribusiness Support Services Program (ASSP)**

*Envisions to work for the Sustainability of the Foundation*



◦ **PHF**—To establish, procure, operated and manage economically feasible farm machineries, equipment and facilities



◦ **MARKETING**—To establish and manage viable integrated marketing system

◦ **FARM**—To conduct large scale testing, validation and documentation of Farm Technologies



### TRAINING CENTER-

To operate and manage

a viable enterprise unit

### Projects:

**MAIDADANG**—Mainstreaming Institutionalization Development of AGMIHICU Ancestral Domain Program

**KABIGULAN**—Kalabugso-Hagna Barangay Institutions Bigulan Development Program

Supported by: DAR IFAD—NMCREMP

Project Site: Brgy. Kalabugso-Hagna, Impasugong, Bukidnon



## Appendix 9.2: Production Budget & Financing Package, CARROT, (1000 m<sup>2</sup>)

Cost Item	Unit	No. of Units	Cost/Unit	Amount	Farmer Sources	Financed
Land Preparation						
Clearing/mowing	md	2.0	80.00	160.00		
Plowing	mad	0.5	160.00	80.00		
Harrowing	mad	0.5	160.00	80.00		
Levelling	md	1.0	80.00	80.00		
Ridging	md	1.5	80.00	120.00		
Fertilizer Application (2x)	md	1.0	80.00	80.00		
Mixing/cultivating	md	1.0	80.00	80.00		
Planting	md	1.5	80.00	120.00		
Spraying	md	6.0	80.00	480.00		
Weed Control (5x)	md	2.5	80.00	200.00		
Irrigation (12x)	md	6.0	80.00	480.00		
Thinning (1st)	md	2.5	80.00	200.00		
Hilling up	md	5.0	80.00	400.00		
Thinning (final)	md	1.5	80.00	120.00		
Harvesting & Packing	md	3.5	80.00	280.00		
Sub-Total				2,960.00	760.00	2,200.00
Farm Inputs:						
Seeds	can	1.00	400.00	400.00		400.00
Fertilizers						
Chicken Dung	sack	15.00	60.00	900.00		900.00
14-14-14	bag	2.00	790.00	1,580.00		1,580.00
16-20-0	bag	1.00	780.00	780.00		780.00
Lime	bag	5.00	22.00	110.00		110.00
Insecticides						
Bida	ml	100.00	0.65	65.00		65.00
Karate	ml	160.00	1.10	176.00		176.00
Padan	Gram	160.00	1.10	176.00		176.00
Penant	ml	60.00	0.58	34.50		34.50
Lorsban	ml	60.00	0.46	27.60		27.60
Lannate	Gram	160.00	1.38	220.80		220.80
Fungicides						
Manzate	Gram	740.00	0.30	218.30		218.30
Daconil	Gram	180.00	0.92	165.60		165.60
Rover	Gram	300.00	0.60	180.00		180.00
Afolon	Gram	180.00	3.00	540.00		540.00
Sub-Total				5,573.80	-	5,573.80
Other Costs						
Boxes & Packing Materials	box	21.0	35.00	735.00		735.00
Transport	per box	21.0	40.00	840.00		840.00
Sub-Total				1,575.00	-	1,575.00
<b>Total Cost</b>				<b>10,108.80</b>	<b>760.00</b>	<b>9,348.80</b>

COST AND RETURNS	Low	Average
Expected Production (kg)	1,500	2,500
Expected Price/kg	P12/kg	P12/kg
Gross Sales	18,000	30,000
Less: Marketing Fee (10%)	1,800	3,000
Net Sales	16,200	27,000
Less: Production Cost	10,109	10,109
Net Returns	7,891	19,891
AMOUNT FINANCED	9,349	9,349
ALLOCATIONS		
Net Cash (Sales Less Amount Financed)	6,851	17,651
70% Share to Farmer	4,796	12,356
30% Share to Financier	2,740	7,060

Note: Prices can swing from a low of P10 to a high of P50 per kg.

## Appendix 9.3: BENEFITS VS. COST for Normin Veggies Consolidation Centre

### Benefit

1. More access to market (even if under spot market conditions based on supply/demand). The implication is that with a programmed market there is minimal losses on the side of the grower. Without a consolidation centre where buyers can be contacted, and there is ready point of sale, it is an unstable market for the growers. With NVCC, 80per cent of the harvest for the day already has a market. Instead of a loss from non-sale that go as high as 30per cent, losses from non-sale can be down to 10per cent.

Consolidated Sales:	w/o NVCC	
	Total Sales at NVCC	Non-sale 30% losses
May	496,441.75	148932.53
June	638,358.20	191507.46
July	777,187.15	233156.15
August 1-23	856,075.10	256822.53

### 2. Higher price

With leverage from a big volume, there is a higher price estimated at about 10% for most of the products:

Example:	Per kilo price (Aug 25)	
	Other Stalls	NVCC
Wombok *	6.00	7.00
Cabbage	10.00	10.00
Lettuce*	35.00	40.00
Atsal*	25.00	30.00
Bell Pepper*	80.00	90.00
Broccoli*	30.00	35.00
Carrot	10.00	10.00

Products with \* are those that are sold in volume, regularly, and have high quality.

### Benefit to NorminVeggies

	May	Jun	Jul	Total
Revenues	28,661	34,217	41,613	104,491
Net Income	(2,578)	5,980	11,879	15,280

### Benefit to Normincorp

	May	Jun	Jul	Total
Revenues	25,610	30,072	36,614	92,296
Net Income	4,515	4,042	6,520	15,078

### Cost for the Growers

NVCC Bodega Fee	Normincorp Mkf Facilitation Fee	10% losses	Total
28,661.23	25,609.97	49644.175	103,915.38
34,216.95	30,072.09	63835.82	128,124.86
41,612.96	36,613.84	77718.715	155,945.52

### Capital cost to Put up NVCC

Pre-operating expenses:	135,975.
Equipment from GEM	
Weighing Scale	12,000
Computer/Accessory	30,000
DA - Building	475,000

Pre-operating expenses are amortized to be taken from revenues.

DA building is used by NorminVeggies for free

	May	Jun	Jul	Total
Expenses	31,239	28,237	29,734	89,2117
Expenses	21,094	26,030	30,093	89,211.27



### Appendix 9.4: Cost and returns, iceberg lettuce

Crop Plan & Budget  
Lettuce - Iceberg

Crop: Lettuce				Crop Plan		1 Batch	1 cycle
Eco. Module Size Per Batch				No. of Modules		5	40
No. of Hills	1000			No. of Hills		5000	40000
Area (sq. meters)	200			Area (sq. m)		1000	8000
Production Cycle (weeks)	8			Target Yield		1000	8000
Cost Item	Unit	Per Batch			Production Cycle		
		Qty	Unit Cost	Amount	Qty	Unit Cost	Amount
<b>Labour Cost</b>							
a. Land & Bed Preparation							
1. Plowing	Mad	0.5	150.00	75.00	4.0	150.00	600.00
2. Harrowing	Mad	0.25	150.00	37.50	2.0	150.00	300.00
3. Bed Preparation	Mad	0.5	150.00	75.00	4.0	150.00	600.00
4. Manure Spreading	Md	2	100.00	200.00	16.0	100.00	1,600.00
5. Irrigation Installation	Md	0.5	100.00	50.00	4.0	100.00	400.00
b. Nursery Estab & Maintenance	Md	0.5	100.00	50.00	4.0	100.00	400.00
c. Planting	Md	8	100.00	800.00	64.0	100.00	6,400.00
d. Fertilizing							
1. Basal	Md	0.5	100.00	50.00	4.0	100.00	400.00
2. Sidedress	Md	2	100.00	200.00	16.0	100.00	1,600.00
e. Spraying	Md	2	100.00	200.00	16.0	100.00	1,600.00
f. Weeding	Md	6	100.00	600.00	48.0	100.00	4,800.00
g. Irrigating	Md	4	100.00	400.00	32.0	100.00	3,200.00
h. Harvesting & Packing	Md	10	100.00	1,000.00	80.0	100.00	8,000.00
<i>Sub-Total</i>				<i>3,737.50</i>			<i>29,900.00</i>
<b>Materials</b>							
a. Seeds	Gram	7	7.00	49.00	56.0	7.00	392.00
b. Fertilizers				-	0.0	-	-
1. Basal Fertilizers							
Chicken Manure	Sacks	30	50.00	1,500.00	240.0	50.00	12,000.00
14-14-14	Bag	1	780.00	780.00	8.0	780.00	6,240.00
2. Sidedress Fertilizers							
14-14-14	Bag	2	780.00	1,560.00	16.0	780.00	12,480.00
0-0-60	Bag	1	750.00	750.00	8.0	750.00	6,000.00
3. Foliar Fertilizer	Kilo	0.75	150.00	112.50	6.0	150.00	900.00
c. Insecticides							
1. Bida	Liter	0.12	650.00	78.00	1.0	650.00	624.00
2. Decis	Liter	0.06	1,350.00	81.00	0.5	1350	648.00
d. Fungicides							
1. Pilarich	Liter	0.3	595.00	178.50	2.4	595.00	1,428.00
2. Mancozeb	Kg	0.24	160.00	38.40	1.9	160.00	307.20
e. Others							
Spreader/Sticker - Apsa	Liter	0.2	550.00	110.00	1.6	550.00	880.00
<i>Sub-Total</i>				<i>5,188.40</i>	<i>0.0</i>	<i>-</i>	<i>41,507.20</i>

<b>Other Costs</b>							
Packing	Kg	1000	1.50	1,500.00	8000.0	1.50	12,000.00
Transport	Kg	1000	1.50	1,500.00	8000.0	1.50	12,000.00
Miscellaneous				1,000.00			8,000.00
<i>Sub-Total</i>				4,000.00	0.0	-	32,000.00
<b>Grand Total</b>				12,925.90			103,407.20

Cost/Kg

At 1250 kg net yield	10.34	dry months
At 1000 kg	12.93	dry months
At 750	17.23	wet season
At 500	25.85	wet season

**Wet Market**

Selling Price at Wet Market

Ranges from P15 to P25 per kg during dry season

Ranges from P25 to P40 per kg during wet season

20-32.5

**Institutional market - Blue Dairy Corp**

Selling Price year-round at P65/kg

Additional Costs

Production Cost/kg	12.93
Plastic Crate Rental	2.5
Sea Freight	14
Allowance for Losses (10%)	2.94
Market Facilitation (Manila)	5
NorminCorp Facilitation Fee (6% of Sale)	3.9
Cost of Money	0.41
Total Cost per Kilogram	41.69
<b>Net Income per Kilogram</b>	<b>23.31</b>

## Appendix 9.5: Financial performance

NorminVeggies Consolidation Centre  
May 2006 to April 2007

	1st Q May-Jul 2006	2nd Q Aug-Oct 2006	3rd Q Nov '06-Jan '07	4th Q Feb-Apr 2007	Total
Revenues	132,016.99	161,997.74	119,924.84	96,678.52	510,618.09
Operating Expenses					
Salaries & Benefits	38,437.00	39,796.90	40,834.70	42,355.10	161,423.70
Rent	30,000.00	30,000.00	30,000.00	30,000.00	120,000.00
Office Supplies	1,360.00	489.00	2,683.30	580.80	5,113.10
Repairs & Maintenance	3,581.86	1,071.50	899.93	1,815.80	7,369.09
Utilities (Light & Water)	2,266.31	2,502.90	4,811.45	2,196.60	11,777.26
Miscellaneous	817.90	363.00	663.67	2,878.49	4,723.06
Promotions	8,000.00				8,000.00
Pre-operating Expenses	7,984.98	7,984.98	7,984.98	7,984.98	31,939.92
Total Operating Expenses	92,448.05	82,208.28	87,878.03	87,811.77	350,346.13
Net Income	39,568.94	79,789.46	32,046.81	8,866.75	160,271.96

Notes:

1. Production is heavy during the May to November months (the typhoon months in Luzon). This is halved in the next two quarters. This reduction need not be however because Normin has a pool of buyers in Visayas and Mindanao. We followed the trading pattern of Agora which we should not have. So the production is reduced for the dry months only by about 20per cent to 25per cent in starting in 2008.

2. Salary is only for one consolidation centre in-charge plus daily labour for cleaning, etc as needed. Labour for vegetable unloading and loading is shouldered by the growers; labour for packing shouldered by the buyers (except for outshipment when packing labour is shouldered by the growers).

## Regoverning Markets

Regoverning Markets is a multi-partner collaborative research programme analysing the growing concentration in the processing and retail sectors of national and regional agrifood systems and its impacts on rural livelihoods and communities in middle- and low-income countries. The aim of the programme is to provide strategic advice and guidance to the public sector, agrifood chain actors, civil society organizations and development agencies on approaches that can anticipate and manage the impacts of the dynamic changes in local and regional markets. The programme is funded by the UK Department for International Development (DFID), the International Development Research Centre (IDRC), ICCO, Cordaid, the Canadian International Development Agency (CIDA), and the US Agency for International Development (USAID).

## Innovative Practice

Innovative Practice is a series of case studies from the Regoverning Markets programme providing examples of specific innovation in connecting small-scale producers with dynamic markets at local or regional level. Based on significant fieldwork activities, the studies focus on four drivers of innovation: public policy principles, private business models, collective action strategies by small-scale farmers, and intervention strategies and methods of development agencies. The studies highlight policy lessons and suggest working methods to guide public and private actors.

The case studies were coordinated by:

Julio Berdegúe, RIMISP - Latin American Centre for Rural Development, Chile  
Lucian Peppelenbos, Royal Tropical Institute (KIT), Netherlands  
Estelle Biénabe, University of Pretoria, South Africa and Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), France

