

## **BIBLIOGRAPHY**

YUBOS, NILO. P. MARCH 2006. A Documentation of Traders, Input Suppliers and Farmers' Input – Supply Relationships in Madaymen, Kibungan. Benguet State University, La Trinidad, Benguet.

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## **ABSTRACT**

This study was conducted in Madaymen, Kibungan, Benguet. The respondents consisted of 20 input suppliers and 60 farmers. The input suppliers included the farm supplies establishments in Baguio City and La Trinidad providing farm inputs to the farmers on credit basis, traders providing inputs to the farmers and in turn buy the vegetables produce by the farmers, and the farmers who own the land leased by the respondents and acts as the input suppliers and at the same time buyers of the vegetables produce by the farmers. The input suppliers and the farmers were related either as relatives or “suki”.

There were types of input – output supply relationships that existed between the input suppliers and the farmers. The first is the relationship between the farm supplies establishments and the farmers. The farmers get the inputs from these establishments on credit but the farmers are free to sell their vegetables to any trader then pay their credit plus interest to the farm input suppliers. The second relationship was that traders buy the inputs from the farm input establishments then supply it to the farmers on credit plus an interest. The farmers in turn supply their vegetables to the traders at a discounted price.

The traders deduct the debt of the farmers then give the balance to the farmers. The third relationship was the farmer suppliers buy inputs from the farm supplies establishments and sell them to the farmers on credit. The later sell the vegetables to the former and the former deducts first the credit of the farmer from the gross value of the product. What ever is left as net, this is divided between the farmer supplier and the farmer.

Farm input suppliers also met problems on the collection of what they loan out to the farmers. At times when the crops of the farmers were destroyed by natural calamities, the farm input suppliers could not collect from the farmers.



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## INTRODUCTION

### Rationale of the Study

Farming is the major occupation of most families in Madaymen, Kibungan, Benguet. They raise vegetables like potatoes, cabbage, radish and carrots in their farms for commercial purposes. With the cool climate of the place, vegetable production has become the major livelihood of the people in the place. Farmers are now expanding the area planted with vegetables in order to produce higher volume of production.

Aside from expanding the area planted with vegetables, farmers use fertilizer to increase the yield of their crops. It was traced that the use of inorganic fertilizer and pesticides in this area started when farmers went into commercial vegetable production.

Vegetable farming requires a big amount of cash for the purchase of farm inputs such as planting materials, fertilizer, pesticides and fungicides. Unavailability of cash and poor access to financial institutions/support is one of their constraints in production; thus, this is where agricultural farm input suppliers are of great help to the farmers.

The various sources of farm inputs where farmers of Madaymen obtain their farm supplies were: private firms like Sunrise Farm Supplies, and Mt. Trail Farm Supply; cooperatives operating in the municipality; trader/suppliers; and farmer suppliers. The trader suppliers are those who supply the farm inputs to the farmers and at the same time buy their produce. On the other hand, the farmer/suppliers are farmers who supply the inputs to other farmers and at the same time buy their produce and sell them to the traders. Since the trader/suppliers are also the buyers of the produce of the farmers, they have an effect or they influence the decision of the farmers on the following aspects:



what crops to plant, what variety to use, and what cropping practices and methods to follow. The decision of both the farmer and the trader-supplier depends on the agreement made between them.

This study was conducted to find out the supply relationship that exist between the trader/suppliers and the farmers in Madaymen and at the same time document their practices in the production and marketing of vegetables.

Studying the supply relationships of agricultural suppliers to farmers and traders in the vegetable industry allows us to weigh or determine the role and contribution of each sector in the growth and improvement of the vegetable industry especially in the highland areas of northern Luzon.

### Statement of the Problem

There had been studies on marketing agricultural produce in Benguet and had mentioned that farmers sell their products to particular traders because these are the sources of farm inputs and it is an agreement between the two of them.

However, in-depth study on the basis of contract or agreement had not been done or elaborated. Studying the relationship of agricultural suppliers, farmers and trader-suppliers will answer the following questions:

1. Who are the agricultural suppliers, traders/suppliers and what are their characteristics?
2. What are the agreement/terms that exist between agricultural suppliers, farmers and trader/suppliers in terms of:
  - a. acquisition/supply of farm inputs



- b. marketing and supply of farm products
  - c. share of income
3. What are the problems encountered by all parties (agricultural suppliers, farmers and trader/suppliers)?
  4. How are these problems solved?

### Objectives of the Study

The objectives of the study were as follows:

1. To identify the agricultural suppliers, traders/suppliers operating in Madaymen .
2. To find out the characteristics of these agricultural suppliers and traders/suppliers.
3. To find out the agreement/terms that exists between agricultural suppliers, farmers and traders/suppliers in terms of:
  - a. acquisition/supply of farm inputs
  - b. marketing and supply of farm products
  - c. share of income
4. To find out the problems encountered by agricultural suppliers, farmers and trader/suppliers in Madaymen.
5. To find out how these problems were solved by the concerned parties.



### Importance of the Study

Studying the relationship of agricultural suppliers, farmers and trader/suppliers in the vegetable industry is considered important because it could help both respondents to develop good services that would fit their needs and wants, as well as provide information for program/ project to agricultural agencies and maybe in the formulation of policies that would address some problems of the vegetable industry.

### Scope and Limitation of the Study

Although vegetable production is found in the whole province of Benguet and the “supply system” is also practiced by farmers in other parts of Benguet, the study will only concentrate in the barangay of Madaymen, Kibungan. It would look into the current relationships between the agricultural suppliers, the trader/suppliers and the farmers in terms of their agreement on the production and marketing of vegetables including the problems they encountered. The respondents would be the farmers of Madaymen, Kibungan and the agricultural input suppliers and traders catering to the needs of these farmers.





## REVIEW OF LITERATURE

According to Dagupen, et al. (2004), traders who had an agreement with the farmers, wherein the traders known as “suppliers”, provided for all the farm inputs needed by the farmers. The farmers sold their produce to the “suppliers” who deducted the cost of the farm inputs from the value of the product and give the balance to the farmer. Others borrowed cash from their relatives, cooperatives or banks.

Agricultural development mainly seeks to help farmers directly or indirectly. Farmers play an important part in agricultural development but unfortunately some farmers do not understand their role, PCAC (1979).

Guiwey (2002) stated that agricultural agencies are now implementing programs to help farmers gain more knowledge from innovations to improve their techniques or ways, and develop their skills in the way they practice proper land preparation and irrigation management.

Among other uses, cost and return analysis is very helpful to farmers in making decision. It can be used to determine the profitability of vegetable production, to know the type of vegetable to be planted and the level of output before purchasing some machines, Saguilot (1979).

Langadan (1977) found that most of the farmers who have been borrowing loan from banks have made some improvement on their farm as well as their homes; and that the farmers are able to increase their investment and other farm tools and equipment because of the increase in their income through the modern practice of farming which were introduced to them by the agricultural extension workers.



According to Chandra (1983), farmers needs likely to fall into the following; improving the present status of the industry in terms of crop production, and improving the soil.

### Marketing

As defined by Sim (1997) marketing is all around us. It affects man's daily life. The produce that people buy, the store where we shop, the advertising people we see and hear are all part of marketing.

The difference between selling and marketing is that selling is concerned with disposing of the product that has already been in stock, whereas marketing takes a much wider view which means planning ahead profitable future. Marketing includes selling, but selling alone is more than that. It embraces the whole concept of satisfying the needs of the consumers at a profit.

As stated by Kohls (1972), marketing is the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of ultimate consumers. The various form engaged in doing the various marketing tasks are interested in the profitability of the their particular business operation.

Pant (1984) also claimed that the traditional concept of agricultural marketing of buying and selling farm product is no longer valid today. He said that marketing is now more than this, it is a behavioral discipline and as much deals not only with buying and selling goods but also with people and the flow of communication, though profit is the



key element. In this sense, marketing is a multiplier, in the process of economic development. But in the planning process what is neglected is the role of the agricultural market and its urgency for its improvement. It is not treated as a directly productive sector though its role is vital to stimulate agricultural growth.

Miranda (1986) stated that since merchants and businessmen purchase goods primarily for sale, proper care, skills and good relationship should be exercised, the marketing services are performed by the middlemen from the time the product leaves the farm until they are finally purchased by consumers.



## **METHODOLOGY**

### Locale and Time of the Study

This study was conducted in Madaymen, Kibungan and included agricultural suppliers and traders who maybe coming from other places but is catering to the needs of the farmers in Madaymen. The study was conducted from December 2005 to January 2006.

### Respondents of the Study

The respondents of the study were 60 farmers of Madaymen who has connections to agricultural suppliers and a total of 20 agricultural suppliers and trader/suppliers providing the inputs to the farmers and at the same time buying their produce.

### Data Collection

A survey questionnaire was prepared and was used as a guide by the researcher in interviewing the respondents.

### Data Gathered

The data gathered included the following: a) profile of the farmers, agricultural input suppliers and trader-suppliers; b) agreements that exist between the farmer and the input suppliers regarding the choice of crop and variety, cropping schedule/season and pattern, mode of delivery and payment of both farm inputs and product, marketing and



share of income; c) problems encountered in the implementation of the agreement; and d) solutions to the problems as perceived by the respondents.

### Data Analysis

The data collected were consolidated and analyzed using frequency, percentage, and mean.



## RESULTS AND DISCUSSION

### Profile of the Respondents

In this study, there were two types of respondents, traders and farmers. Table 1 presents the respondents' profile according to their gender, educational attainment, civil status and the number of years in farming, for the farmers and in the trading business for the traders.

Gender. Table 1 shows that most (55%) of the trader respondents were male and 45% were female. Among the farmer respondents, 70% were male and the rest (30%) were female. This finding implies that majority of the traders and farmers in Madaymen are male.

Educational attainment. The table shows that nine (45%) of the trader respondents reached college level, 35% had finished college and 20% had graduated in high school. As seen in the table the largest proportion of the farmer respondents 30% graduated from elementary, nine (15%) were high school level, 13.3% were high school graduates, six has no formal education, and 8.3% of the respondents finished vocational courses. According to the respondents, education was not given importance in the area especially if they end up as farmers.

This finding implies that all the traders had formal education compared to the farmers where majority had below college level education. This is because some of the farmer respondents believed that going to school is a least priority if they would end up just the same being a farmer.



Civil Status. Majority of the trader respondents (95%) were married and one (5%) was a widow. Therefore it implied that trading is considered as livelihood and employment of the farm families in Madaymen. All these respondents were farm input suppliers, at the same time buying the produce of the farmers and either transport them to the trading post in La Trinidad or Baguio market.

Among the farmers, majority (70%) were married and 30% were single. This finding implies that farming is not only for married people who have families to feed but also for single individual who wants to earn an income.

Number or years in Business/Farming. The table also presents the number of years the traders and farmers were in business/farming. Seven or 35% of the traders were 11-15 years in the business, 30% were 6-10 years, 15% were 1-5 years, another 15% were in the business for 20 years and 5% were 20-30 years in business. Among the farmer respondents, most (26.7%) of them had been farming for 6-10 years, eleven each had been farming for 1-5 years and also 11-15 for years, eight (13.3%) had been farming for 26-30 years, seven (11.7%) engaged in farming for 16-20 years, four (6.7%) for 21-25 years and three (5%) had been farming for 31-40 years.

The finding shows that almost all the traders had been in the trading business for less than twenty years . The same is true for the farmers except for some who had been farming for more than twenty years.



Table 1. Profile of the respondents

| PARTICULAR                           | TRADER    |            | FARMER    |            |
|--------------------------------------|-----------|------------|-----------|------------|
|                                      | Frequency | Percentage | Frequency | Percentage |
| <b>A. Gender</b>                     |           |            |           |            |
| Male                                 | 11        | 55         | 42        | 70         |
| Female                               | 9         | 45         | 18        | 30         |
| <b>TOTAL</b>                         | <b>20</b> | <b>100</b> | <b>60</b> | <b>100</b> |
| <b>B. Educational Attainment</b>     |           |            |           |            |
| No formal education                  | 0         | 0          | 6         | 10         |
| Elementary graduate                  |           |            | 18        | 30         |
| High school level                    | 0         | 0          | 9         | 15         |
| High school graduate                 | 4         | 20         | 8         | 13.3       |
| College level                        | 9         | 45         | 8         | 13.3       |
| College graduate                     | 7         | 35         | 6         | 10         |
| Vocational                           | 0         | 0          | 5         | 8.3        |
| <b>TOTAL</b>                         | <b>20</b> | <b>100</b> | <b>60</b> | <b>100</b> |
| <b>C. Civil Status</b>               |           |            |           |            |
| Single                               | 0         | 0          | 18        | 30         |
| Married                              | 19        | 95         | 42        | 70         |
| Widow                                | 1         | 5          | 0         | 0          |
| <b>TOTAL</b>                         | <b>20</b> | <b>100</b> | <b>60</b> | <b>100</b> |
| <b>D. Years in business/ farming</b> |           |            |           |            |
| 1-5                                  | 3         | 15         | 11        | 18.3       |
| 6-10                                 | 6         | 30         | 16        | 26.7       |
| 11-15                                | 7         | 35         | 11        | 18.3       |
| 16-20                                | 3         | 15         | 7         | 11.7       |
| 21-25                                | 0         | 0          | 4         | 6.7        |
| 26-30                                | 1         | 5          | 8         | 13.3       |
| 31-40                                | 0         | 0          | 3         | 5          |
| <b>TOTAL</b>                         | <b>20</b> | <b>100</b> | <b>60</b> | <b>100</b> |





### Types of Traders Providing Farm Inputs

Trader respondents were classified into three. These were farm input suppliers, trader suppliers and farmer suppliers. Farm input suppliers are business establishments, based in La Trinidad, who sell agricultural inputs to the traders. They also provide farm supplies to the farmers on credit which they could pay after harvest and sell their products. The trader suppliers who buy farm inputs from the farm input suppliers and supply them to the farmers on credit basis. They also loan cash to the farmers and buy the farmers' produce. On the other hand, farmer suppliers were themselves farmers who get inputs from farm input suppliers and sell them to their co-farmers on credit.

Nine (15%) of the trader respondents were trader suppliers, six (30%) were farm input suppliers and five (25%) were farmer suppliers.

Table 2. Distribution of trader respondents as to type of business

| PARTICULAR          | FREQUENCY | PERCENTAGE |
|---------------------|-----------|------------|
| Farm input supplier | 6         | 30         |
| Trader supplier     | 9         | 45         |
| Farmer supplier     | 5         | 25         |
| TOTAL               | 20        | 100        |

### Trader-Farmer Relationships

Table 3 shows that majority (65%) of the trader respondents supply input to farmers who are their relatives and 35% supply farm input to their "suki" farmers. This



finding implies that majority of the traders operating in Madaymen are from that place and the farmers they are supplying with inputs are their relatives. On the other hand there are also farmers who develop a special relationship, “suki” which is usually based on trust between the two parties. Each party feels that he is making the best bargain. Based on this kind of relationship, the trader just provide the inputs to the farmer with a trust that after harvest the farmer will pay the trader.

Table 3. Relation of traders with the farmers

| PARTICULAR | FREQUENCY | PERCENTAGE |
|------------|-----------|------------|
| Relative   | 13        | 65         |
| Suki       | 7         | 35         |
| TOTAL      | 20        | 100        |

#### Selling Practices of Traders

It can be gleaned from Table 4 that fifty percent of the trader respondents sold farm inputs through credit, wherein the farmer would pay the selling price plus an interest depending on the agree percentage upon selling his crops. The other 50% of the respondents supplied farm inputs to farmers and in return the farmer will also sell/supply his vegetable to the trader. This is the supply system.



Table 4. Selling practices of traders

| PARTICULAR    | FREQUENCY | PERCENTAGE |
|---------------|-----------|------------|
| Credit        | 10        | 50         |
| Supply System | 10        | 50         |
| TOTAL         | 20        | 100        |

#### Pricing Practices of Traders

Table 5 shows how the traders price their inputs. Though the farmers get the supply in credit, some traders (45%) still base their price on the prevailing market rate. (55%) use the market price plus additional percentage.

Table 5. Pricing practices of traders

| PARTICULAR                           | FREQUENCY | PERCENTAGE |
|--------------------------------------|-----------|------------|
| Base of market price                 | 9         | 45         |
| Market price plus additional mark-up | 11        | 55         |
| TOTAL                                | 20        | 100        |

#### Payment Collection Practices of Traders

Table 6 shows that 55% of the traders most especially farm input suppliers collect the payment after the farmer sold their product, 30% collect payment during harvest time,



Most of them were farmer suppliers. Fifteen percent of the trader respondents collect the payment every 3-4 months.

Table 6. Time of collecting the payment of inputs supplied to the farmers by the traders

| PARTICULARS                 | FREQUENCY | PERCENTAGE |
|-----------------------------|-----------|------------|
| During harvest              | 6         | 30         |
| After selling their produce | 11        | 55         |
| After 3-4 months            | 3         | 15         |
| TOTAL                       | 20        | 100        |

#### Farm Production Area of Farmers

Table 7 shows the area/size of farm being planted by the respondents, most of the farmer respondents (45%) operated a half hectare area. Twenty six or 43.3% cultivate one hectare and seven or 11.7% operates on two hectares of land.

Table 7. Farmers' farm production area

| PARTICULARS          | FREQUENCY | PERCENTAGE |
|----------------------|-----------|------------|
| Half Ha (5,000 sq m) | 27        | 45         |
| One Ha (10,000 sq m) | 26        | 43.3       |
| Two Ha (20,000 sq m) | 7         | 11.7       |
| TOTAL                | 60        | 100        |



### Distance of Farm From Farmer's Residence

Table 8 shows the distance from the farm to the residence/house. Twenty six (43.3%) of the respondents had a walking distance area of farm to residence at 20-30m, fifteen (25%) of the respondents 50-100m far, eight (13.3%) were 500 m far, another 13.3% of the respondents almost 1 km. and the 5% are 2 km away from their residences. For the farmers whose area is from 1 km to 2 kilometers away from their home use vehicle in going to their farm especially in transporting produce.

Table 8. Distance of farm from the residence of the farmers

| PARTICULARS                | FREQUENCY | PERCENTAGE |
|----------------------------|-----------|------------|
| 20-30 m (walking distance) | 26        | 43.3       |
| 50-100 m                   | 15        | 25         |
| 500 m                      | 8         | 13.3       |
| 1 km                       | 8         | 13.3       |
| 2 km                       | 3         | 5          |
| TOTAL                      | 60        | 100        |

### Source of Irrigation and Topography

For the source of irrigation, Table 9 shows that 54 (90%) of the respondents were depending on the rain, 4 (6.7%) were getting from the spring and 2 (3.3%) of the respondents get irrigation from the river.



As for the topography of the farm most of the respondents 71.7% were operating terraces and 28.3% of the respondents were planting on a flat or plain area.

As it was observed in the study, the respondents expanded their land by terracing mountain shapes/slopes. Due to irrigation problems, their farm products were affected. This implies that there is a great need for the agricultural supplier and the government to support the farmers by providing water tanks for irrigation.

Table 9. Source of irrigation and topography

| PARTICULAR    | FREQUENCY | PERCENTAGE |
|---------------|-----------|------------|
| A. Irrigation |           |            |
| Rain          | 54        | 90         |
| Spring        | 4         | 6.7        |
| River         | 2         | 3.3        |
| TOTAL         | 60        | 100        |
| B. Topography |           |            |
| Terraces      | 43        | 71.7       |
| Flat area     | 17        | 28.3       |
| TOTAL         | 60        | 100        |

#### Sources of Farm Inputs of the Farmers

Table 10 presents the sources of farm inputs, and the reasons of the farmers for getting from such source. From the table, 20 or (40%) of the farmers were getting their



input at the farm input establishments, 36.7% were getting from the farmer suppliers and 14 (23.3%) were getting from the trader suppliers.

With regards to the reasons of the respondents for choosing the source of their inputs, 36.7% said that the supplier delivers the inputs to the area, 20% said that the price of input is low, another 20% stated that their suppliers allow credit, 13.3% simply replied that they were their relatives and 10% of the respondents replied that inputs were complete and always available. Being a relative is also one of the reasons of traders in supplying inputs to farmers.

Table 10. Source of farm inputs and reasons of farmers for choosing the sources

| PARTICULARS                              | FREQUENCY | PERCENTAGE |
|--|-----------|------------|
| <b>A. Sources</b>                        |           |            |
| Trader supplier                          | 14        | 23.3       |
| Farm input establishments                | 24        | 40         |
| Farmer supplier                          | 22        | 36.7       |
| <b>TOTAL</b>                             | <b>60</b> | <b>100</b> |
| <b>B. Reason</b>                         |           |            |
| Allow credit to farmer                   | 12        | 20         |
| Low price                                | 12        | 20         |
| Inputs are complete and always available | 6         | 10         |
| Delivers the input                       | 22        | 36.7       |
| Relative                                 | 8         | 13.3       |
| <b>TOTAL</b>                             | <b>60</b> | <b>100</b> |



### Mode of Buying Inputs

Table 11 presents that majority (64%) of the farmer- respondents buy their inputs on credit basis from their suppliers. This means that they have to pay an interest on the full value of the farm input they get from their suppliers. Some farmers (36%) mentioned that they pay partial when they buy and pay in full after selling their produce.

Table 11 . Mode of buying farm inputs by the farmers

| PARTICULARS                 | FREQUENCY | PERCENTAGE |
|-----------------------------|-----------|------------|
| Credit with partial payment | 22        | 36         |
| Credit                      | 38        | 64         |
| TOTAL                       | 60        | 100        |

### Input – Output Supply Arrangement Between Input Suppliers and Farmers

As earlier found, the farmers have three sources of farm inputs. There was an agreement between the farmers and the input suppliers. This first agreement entered into by 30 farmers (Table 12) was the payment of interest on the credit where 23 of them paid 30% interest and seven respondents paid 25% interest. The second agreement entered into by 24 farmers was the net income sharing arrangement. Nine of them had a 50 – 50 sharing arrangement, 11 respondents had 40-60 sharing arrangement and 4 respondents had a 30-70 sharing arrangement. Six respondents mentioned that they just pay their credit on installment basis. Sharing of net sales depends on several factors such as the contribution of each party on the production expenses.





Based on the findings of this research, before both respondents (farmers and traders) move on to their operation they must first have a clear agreement especially on payments on farm inputs and division of net income.

The input supply and output supply flow is presented in the diagram below. Figure 1 presents the flow of input from the farm supplies establishments directly to the farmers. This shows that farmers buy inputs directly from the farm input establishments in Baguio and La Trinidad on credit. As for their products, they sell them to local traders at the trading post and in turn the local traders sell them to traders coming from Metro Manila and other places in the lowland.

Figure 2 presents the input flow from the farm supplies establishments to the trader suppliers then to the farmers. Under this flow, the trader suppliers buy the inputs on cash basis from the farm supplies establishments then sell them to the farmers on credit basis. On the other hand, the farmers sell their products to the trader suppliers at a discounted price. The trader suppliers in turn sell the vegetables to the traders from Metro Manila and other areas. As to the payment of the farmer's products, the trader deducts the credit of the farmer plus interest then give the balance to the farmer. For those who entered into the sharing agreement, from the vegetable sales the trader deducts the cost of the farm inputs used by the farmer then they divide the net income. The value of the farmer's labor is not even included in the cost to be deducted from the gross sales.

Figure 3 presents the flow of inputs from the farm supplies establishments to the farmer suppliers then to the farmers. The farmer suppliers are the land owners whom the farmers are leasing. The farmer suppliers buy the inputs on cash basis then sell them to the farmers on credit. In this case, the farmers suppliers do not only provide the farm



inputs to the farmer but also provide other credit (cash or basic necessities) to the farmer's family. The farmer then has to sell his vegetables to the farmer supplier and the farmer supplier sell the vegetables to the local traders. From the local traders it goes to the traders from the lowland. The farmer suppliers deduct the credit of the farmer then give the balance to the farmer.

Table 12. Supply system arrangement between the farmers and the input suppliers

| PARTICULARS                  | FREQUENCY | PERCENTAGE |
|------------------------------|-----------|------------|
| a. Value of input + interest | 30        | 50         |
| Price of farm input + 30%    | 23        | 77         |
| Price of farm input + 25%    | 7         | 23         |
| Total                        | 30        | 100        |
| b. net income sharing        | 24        | 40         |
| 50/50 share of net sale      | 9         | 37         |
| 40/60 share of net sale      | 11        | 46         |
| 30/70 share of net sale      | 4         | 17         |
| Total                        | 24        | 100        |
| c. Installment basis         | 6         | 10         |
| TOTAL                        | 60        | 100        |



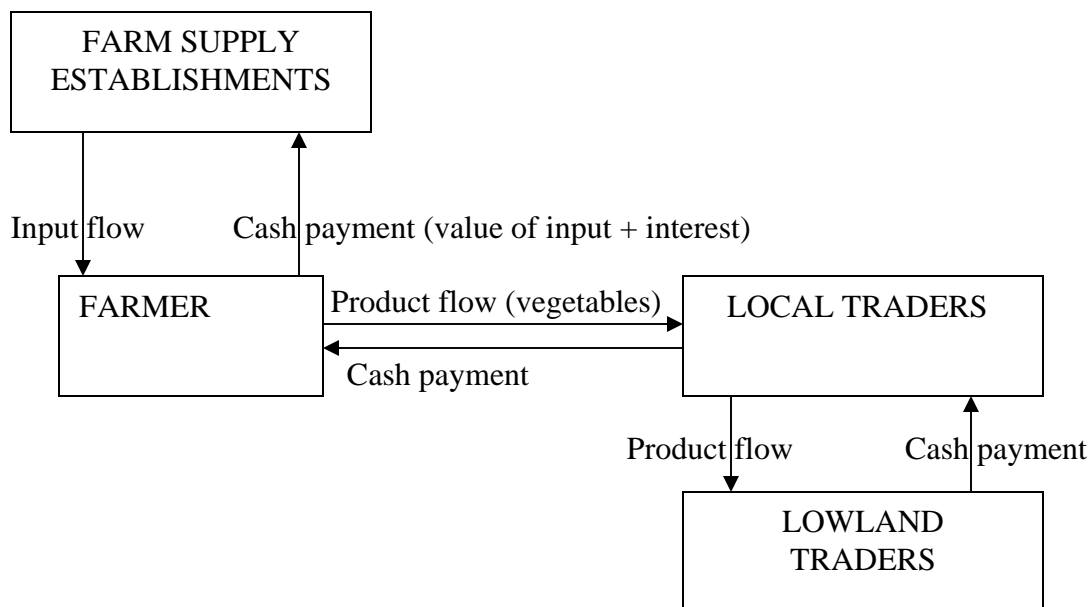


Figure 1. Input flow between farm supplies establishment to the farmer

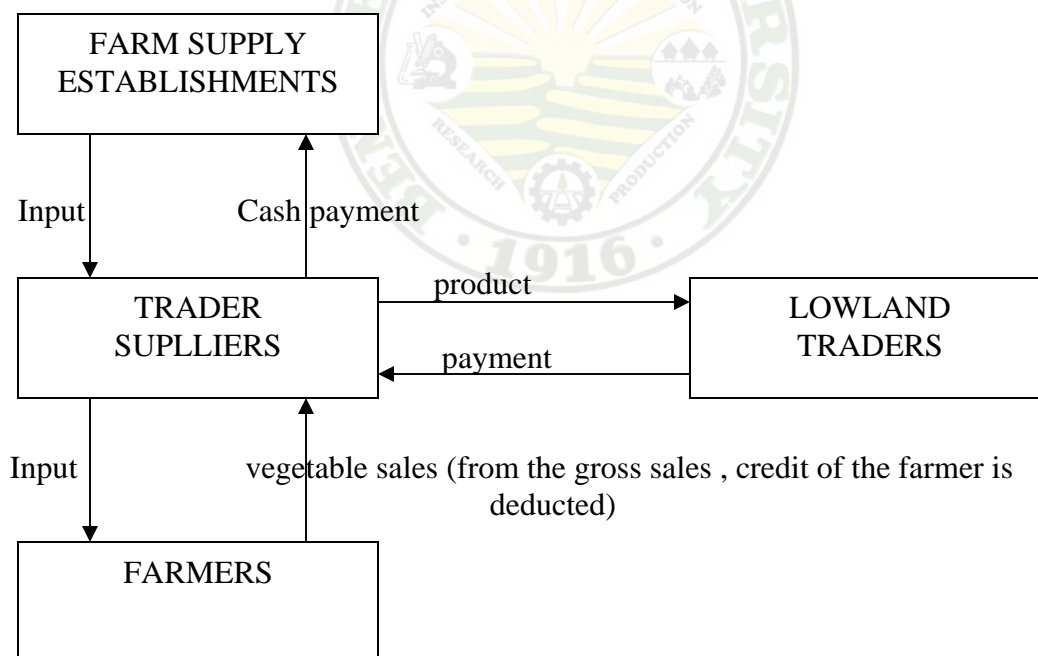


Figure 2. Input flow between farm supply establishments to the trader supplier and to the farmers



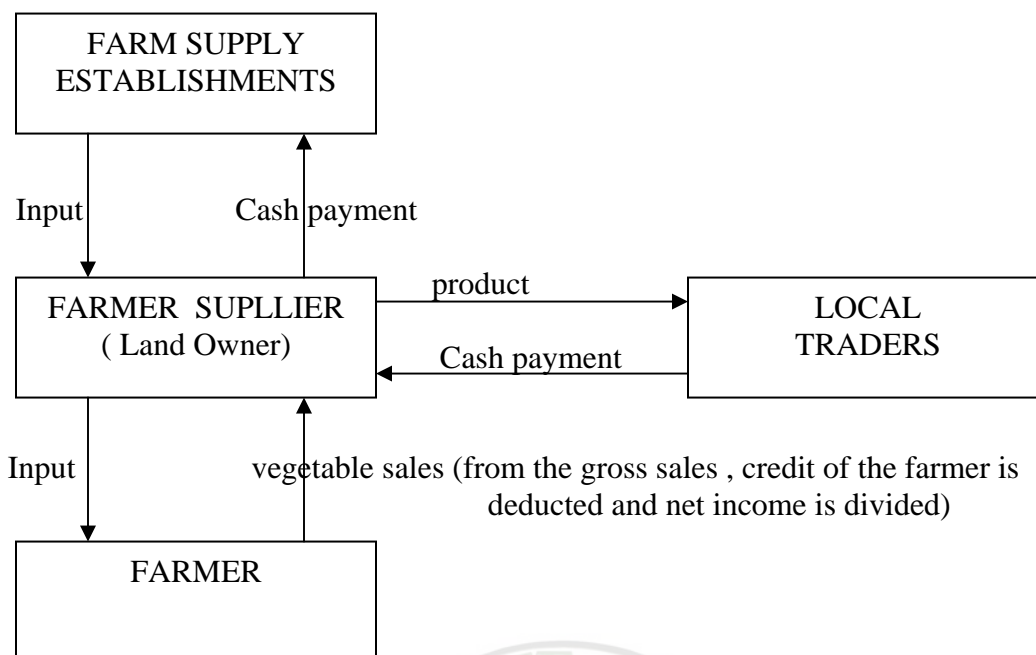


Figure 3. Input flow between farm supply establishment to the farmer supplier and to the farmers

#### Choice of Crop to be Planted

Table 13 shows that majority (73.3%) of the farmers make the decision regarding the crop to be produced, 15% of the respondents allow the farmer suppliers to choose the crop to be planted and 11.7% of the respondents follow the suggestion of the trader suppliers.

As it was found in the study farmers will be the first to decide on what to produce before the supplier because the farmers were more familiar on the crops that are best suited on their farm.



Table 13. Distribution of respondents as to who choose the crop to be planted

| PARTICULARS     | FREQUENCY | PERCENTAGE |
|-----------------|-----------|------------|
| Myself/ farmer  | 44        | 73.3       |
| Trader supplier | 7         | 11.3       |
| Farmer supplier | 3         | 15         |
| TOTAL           | 60        | 100        |

#### Number of Croppings Per Year

Table 14 shows how many cropping season do the farmer respondents have in one year. The table shows that 88.3% of the respondents plant twice a year and 11.7% plant in three croppings.

Results indicate that majority of the respondents plant two times in one year. The respondents said that irrigation and seasonality of the crops were the barriers why they cannot produce three times in a year.

Table 14. Distribution of Respondents as to number of cropping in one year

| No. OF CROPPING | FREQUENCY | PERCENTAGE |
|-----------------|-----------|------------|
| Two cropping    | 53        | 88.3       |
| Three cropping  | 7         | 11.7       |
| TOTAL           | 60        | 100        |



Table 15 presents who makes decision in cropping system/ method. Forty three or 71.7% of the respondents make decision in cropping method, 25% of the respondents allow the farmer supplier to make decision and 3.3% of the respondents follow the decision of the trader supplier.

Table 15. Distribution of respondents as to who decide the cropping system/method

| PARTICULARS     | FREQUENCY | PERCENTAGE |
|-----------------|-----------|------------|
| Farmer himself  | 43        | 71.7       |
| Farmer supplier | 15        | 25         |
| Trader supplier | 2         | 3.3        |
| TOTAL           | 60        | 100        |

#### Contribution of Suppliers to Production and Marketing Expenses

Table 16 presents if supplier contributes expenses in harvesting, majority of the respondents 68.3% mentioned that supplier do not contribute to the expenses in harvesting, nineteen or 31.7% of the respondents mentioned that supplier contributes expenses on harvesting. Findings show that most of the respondents were the ones responsible for harvesting.

The table also shows that majority (53%) of the respondents mentioned that trader supplier do not contribute to the marketing expenses, 11.7% of the respondents said that trader suppliers contribute expenses in marketing.



Most of the trader suppliers who contribute marketing expenses are also the buyer of their produce. These trader suppliers have vegetable stalls at the La Trinidad, Trading Post.

Table 16. Contribution of suppliers to harvesting and marketing expenses

| PARTICULARS            | FREQUENCY | PERCENTAGE |
|------------------------|-----------|------------|
| A. Harvesting expenses |           |            |
| Yes                    | 19        | 31.7       |
| No                     | 41        | 68.3       |
| TOTAL                  | 60        | 100        |
| B. Marketing expenses  |           |            |
| Yes                    | 7         | 11.7       |
| No                     | 53        | 88.3       |
| TOTAL                  | 60        | 100        |

#### Market Outlet of Farmers' Produce and Mode of Payment

Table 17 presents the buyers of the produce of the respondents. Thirty nine or 65% of the respondents sold their product to any trader, 21.7% of the respondents sold to the trader supplier, 10% of the respondents said they will be the one to sell it in the market and 3.3% of the respondents allow farmer suppliers to buy their produce.

The findings show that respondents sold their produce based on the current price and pre-arranged price.



Table 18 shows the mode of payment of buyers. Majority (85%) of the respondents get the payments when their produce immediately upon delivery of the produce. Fifteen percent of the respondents were paid on consignment basis.

Table 17. Buyers of farmers' produce and mode of payment

| PARTICULARS                      | FREQUENCY | PERCENTAGE |
|----------------------------------|-----------|------------|
| <b>A. Buyer</b>                  |           |            |
| Trader supplier                  | 13        | 21.7       |
| Any trader                       | 39        | 65         |
| Farmer supplier                  | 2         | 3.3        |
| Farmer who sell it on the market | 6         | 10         |
| <b>TOTAL</b>                     | <b>60</b> | <b>100</b> |
| <b>B. Mode of payment</b>        |           |            |
| Pay cash when they purchase      | 51        | 85         |
| Consignment basis                | 9         | 15         |
| <b>TOTAL</b>                     | <b>60</b> | <b>100</b> |

### Basis for Pricing

Table 18 shows the basis for pricing their products. Most (51.7%) of the respondents price their products based on current price and 48.3% of the respondents based it on the pre-arranged price.

The respondents preferred to base their product on the current price because prices of vegetables in the market fluctuates.





Table 18. Basis for pricing their products

| PARTICULARS                     | FREQUENCY | PERCENTAGE |
|---------------------------------|-----------|------------|
| Current price                   | 31        | 51.7       |
| Based on the pre-arranged price | 29        | 48.3       |
| TOTAL                           | 60        | 100        |

#### Problems Encountered by the Traders and Farmers

Problems encountered by farmers. Based on frequency counts the most common problem identified by farmers were high interest of farm input and high deduction of sales due to high interest of farm inputs. Other problems mentioned were; delayed delivery of inputs by the traders (13.3%), suppliers cannot provide all the inputs for maintenance (10%), high transportation cost of both inputs and products (10%) and delayed payments of products (10%). Delayed payments were due to the high price given by the traders to their buyers, thus, they pay- post dated checks. There were farmer respondents (18.3%) who did not mention any problem (Table 21).

Problems encountered by traders. The major problem encountered by 60% of the traders was difficulty in collecting payments. Bankruptcy is another problem as mentioned by 35% of the trader respondents and lack of capital (5%) in order to provide all the farm needs of farmers (Table 19).



Table 21. Problems encountered by traders and farmers

| PROBLEMS   | TRADERS   | FARMERS    |
|--|-----------|------------|
|  | F         | %          |
| a. Traders   |           |            |
| 1. Difficult to collect credit                         | 12        | 60         |
| 2. Bankruptcy of farmers                               | 7         | 35         |
| 3. Lack of capital                                     | 1         | 5          |
| <b>TOTAL</b>   | <b>20</b> | <b>100</b> |
| b. Farmers   |           |            |
| 4. Suppliers cannot provide all inputs for maintenance | 6         | 10         |
| 5. High interest of farm inputs                        | 13        | 21.7       |
| 6. High transportation cost                            | 6         | 10         |
| 7. Delayed delivery of farm inputs                     | 8         | 13.3       |
| 8. High deduction on sales due to high interest        | 10        | 16.7       |
| 9. Delayed payments of products                        | 6         | 10         |
| 10. No answer  | 11        | 18.3       |
| <b>TOTAL</b>   | <b>60</b> | <b>100</b> |



## **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### Summary

This study was conducted to document the supply system agreement of traders input suppliers and farmers of Madaymen, Kibungan, Benguet. A total of 20 traders and 60 farmers of Madaymen were taken as respondents of the study. A survey questionnaire was used to collect the needed data. The data were tabulated and analyzed using frequency tables and percentage.

Most of the respondents were male. All trader respondents were actively supplying farm inputs to farmers. Majority of both the trader respondents and farmer respondents were married. There was a higher percentage of traders that reached college level than the percentage of farmers that reached the same level. A higher percentage of the farmer respondents were elementary graduate. This is because according to them, education is not given importance by people in their place specially if they would become farmers.

As to the type of trading business the traders engaged in, majority were trader suppliers. They sell farm inputs to the farmers and at the same time engaged in buying the produce of the farmers. They also loan out cash to farmers for their family needs and collect the payments when the farmers sell their produce. Majority of these traders supply farm inputs to farmers. They prefer to supply farmers who are their relatives. They sell the inputs to the farmers either on credit basis or on a supply system basis.

When it is on credit basis, the farmer has to pay an interest based on the total value of the farm input or cash borrowed. The trader collects the payment after the farmer



sells his produce. On the supply system arrangement, a net income sharing arrangement is made between the farmer and the trader. The various arrangements used by the parties were 50/50, 40/60, and 30/70 depending on how much was shared by the trader on the expenses.

Regarding the production activities of the farmers, they follow the two cropping pattern because of irrigation problem. The farmers were the ones deciding on the cropping system/method. However, as the crops to be planted there were some farmers that depended on the decision of the trader/supplier. In most cases the suppliers do not contribute to harvesting and marketing expenses. Only those that buy the crop of the farmers contribute to the expenses. Majority of the farmers sold their produce to any trader or buyer who pays them immediately upon delivery of the product. Most of the farmers based their price on the current market price.

Collection of receivables from the farmers was a problem of the majority of traders. This usually happens when the farmer could not get a fair price for his produce and when the farmers' crops were destroyed by natural calamities. Another problem met by the traders was the inability to supply the needs of farmers due to limited capital.

The farmers also encountered problems in paying their debts from their suppliers. One of which is the high interest charged by the suppliers will leave very little cash for their family use and for buying inputs for the next cropping. This practice tends to tie the farmers with the suppliers because they do not have ready cash to buy their inputs thus, they keep on depending on the suppliers for credit. Another equally pressing problem of farmers who were into supply system was the outright deduction of all input cost plus interest from the value of the produce. This leaves very little net income which is still to



be shared between the farmer and the supplier. Other problems encountered were; delayed delivery of farm inputs by the supplier, the supplier cannot provide all the inputs for maintenance of the crops, high transportation cost of both inputs and products and delayed payments of crops sold .

### Conclusions

Based on the results of the study, the following conclusions were drawn:

1. Majority of the traders and farmers were male and married. The traders relatively had higher level of formal education than the farmers.
2. Most of the traders in the study area were input suppliers and were relatives of the farmers they are supplying with input or credit.
3. Most farmers in the study area get credit, either cash or farm input, from farm input suppliers.
4. Most of the farmers sell their produce to any trader based on the current price.
5. Traders encountered problem regarding the collection of loans (cash loan and farm input) from the farmers specially when the farm business incurs losses. There were instances also when the traders cannot meet the demands of the farmers due to limited capital. This becomes also a problem to the farmers because the input application is delayed which affects their crop yield.
6. Farmers who entered into the supply system agreement are tied up to the traders because they pay high interest on the loan. The high cost of the farm inputs plus the high interest of the loan leaves a very small cash income to the farmers. This situation forces the farmer to go back to the supplier and ask for another or even more credit. The same is



true for those who enter into the sharing arrangement. The trader deducts the value of the inputs and still share with the net income. What would be left to the farmer may not even be enough to pay for the cost of his labor used in the production activity.

### Recommendation

Based from the problems encountered, the following recommendations were made:

1. Farmers should look for a better alternative source of credit where the interest rate is fair. It is also recommended that banks should not be very strict in giving loans to the farmers, specially Land Bank. Farmers cooperatives in the place should also be assisted by the CDA and other concerned organizations so that they could provided the credit needs of the farmers.
2. The local government should provide irrigation facilities inorder to increase the production of crops in the area.
3. The supply system is helping the farmers to be productive but the traders who are supplying the inputs of the farmers should charge a fair interest rate on their credit. Besides, they should deliver the necessary inputs on time so that the farmers could apply them on time.



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## APPENDIX

### Appendix A. Survey Questionnaire for Farmers

#### I. General Information

1. Name (optional) \_\_\_\_\_ Gender: (F) \_\_\_ (M)\_\_\_

2. Highest educational attainment

\_\_\_ No forma education                      \_\_\_ elementary graduate

\_\_\_ High school level                      \_\_\_ high school graduate

\_\_\_ College level                      \_\_\_ college graduate

\_\_\_ vocational graduate

3. Civil status     \_\_\_ single                      \_\_\_ married

4. Number years in farming \_\_\_\_\_

#### II. Farm Production

1. Area planted/size of farm (Pls. Specify) \_\_\_\_\_

2. Distance from the residence (Pls. Specify) \_\_\_\_\_

3. Tenure  
\_\_\_ Owner     \_\_\_ Leaseholder     \_\_\_ others (specify) \_\_\_\_\_

4. Source of irrigation

\_\_\_ rain     \_\_\_ spring     \_\_\_ river

5. Topography

\_\_\_ plain                      \_\_\_ terraces

6. Sources of farm inputs

\_\_\_ Trader-suppliers     \_\_\_ farmer-suppliers                      \_\_\_ farm input dealers

\_\_\_ cooperative                      \_\_\_ others (Pls. Specify) \_\_\_\_\_





## 6. Reasons for choosing the source of input supplies

 allow credit to farmers low price inputs are complete and are always available delivers the input others (specify) \_\_\_\_\_

## 7. How do you pay the inputs?

 cash     credit8. If Credit, do you have an arrangement with your supplier?     yes     no9. I yes, please describe the arrangement. \_\_\_\_\_  
\_\_\_\_\_

## 10. Who choose the crops and variety to be planted?

 myself     agricultural supplier     trader-supplier others (Pls. Specify) \_\_\_\_\_

## 8. What are the crops you produced

First Cropping

Second Cropping

 cabbage cabbage potato potato carrots carrots others(specify) others (specify)

\_\_\_\_\_

\_\_\_\_\_

## 9. How many cropping do you have in one year?

 one two three

10. Who makes the decision in cropping system/method?

\_\_\_ myself \_\_\_ trader-supplier \_\_\_ farmer-supplier \_\_\_ others(specify) \_\_\_\_\_

11. Do your suppliers contribute in the expenses on harvesting? \_\_\_yes \_\_\_ no

12. If yes, how do you divide the expenses? Please describe \_\_\_\_\_

\_\_\_\_\_

13. Do you also divide the marketing expenses? \_\_\_yes \_\_\_no

14. How do you divide it? \_\_\_\_\_

15. Who buy your produce?

\_\_\_ trader-supplier \_\_\_ farmer-supplier

\_\_\_ any trader \_\_\_ I sell it in the market

16. If the trader-supplier or farmer supplier, how are paid?

\_\_\_ immediate cash when they buy \_\_\_ consignment basis \_\_\_ credit basis

17. If on consignment, how many days before you are paid ? (please describe your arrangement) \_\_\_\_\_

18. If on credit, please describe the your arrangement \_\_\_\_\_

\_\_\_\_\_

19. What is the basis for pricing your produce? \_\_\_ current price \_\_\_ base on a pre-arranged price.

20. What are the problems you encountered with your suppliers? \_\_\_\_\_

\_\_\_\_\_

21. How did you solve such problem? \_\_\_\_\_

\_\_\_\_\_



## Appendix B. Survey Questionnaire for Traders

## III. General Information

1. Name (optional) \_\_\_\_\_ Gender: (F) \_\_\_ (M)\_\_\_

2. Highest educational attainment

\_\_\_ No forma education                      \_\_\_ elementary graduate  
 \_\_\_ High school level                      \_\_\_ high school graduate  
 \_\_\_ College level                      \_\_\_ college graduate  
 \_\_\_ vocational graduate

3. Civil status    \_\_\_ single                      \_\_\_ married

4. Type of business

\_\_\_ farm input supplier    \_\_\_ trader supplier    \_\_\_ farmer supplier

4. Number years in the business \_\_\_\_\_

5. Who are you supplying?

\_\_\_ Farmers    \_\_\_ trader-suppliers    \_\_\_ farmer-suppliers

6. What is your relation to your client

\_\_\_ relative    \_\_\_ "suki"    \_\_\_ Others(specify)\_\_\_\_\_

7. How do you sell your input to your client?

\_\_\_ cash    \_\_\_ credit    \_\_\_ supply system

8. If on credit, how are paid?

\_\_\_ anytime if they have money  
 \_\_\_ when they sell their produce

9. If supply system, please describe your arrangement with your client \_\_\_\_\_



10. How do you price you input?

\_\_\_ base of market price    \_\_\_ market price + additional percentage (please describe how you actually do it) \_\_\_\_\_

11. How do you collect the payment? Please describe \_\_\_\_\_

\_\_\_\_\_

11. What problems have you encountered with your clients? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. How did you solve it? \_\_\_\_\_

\_\_\_\_\_

