



Carrot (*Daucus Carota*) Farming Analysis; Case Study in Pattapang Village, Tinggimoncong District, Gowa Regency

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Abstract

The objectives of this study are to: (1) determine the production of carrot farming; (2) identify the net revenue of carrot farming; and (3) determine variations in the price of carrots in Pattapang Village, Tinggimoncong District, Gowa Regency. The investigation was carried out in Pattapang Village, Tinggimoncong District, Gowa Regency, South Sulawesi Province, and the place was chosen with care. The number of farmers that participated in this research was five individuals. The findings revealed that the average revenue from carrot growing. Farmers in Pattapang Village earn 26,364,000 IDR per hectare through carrot growing, with expenditures spent of 1,204,940 IDR per hectare, for a total revenue of 25,046,560 IDR per hectare.

Introduction

For the development of horticultural agribusiness in Indonesia, there are a number of production centers, the majority of which have been facilitated through various programs and activities both with support from the APBN and APBD as well as support from the community itself, which includes both farmers and the private sector. Agricultural development operations and financing have been carried out in the areas of cultivation development and technological application, farmer institutional empowerment, and the improvement of financial resources in the agricultural sector (Friis-Hansen & Duveskog, 2012). A significant rise in horticultural product output and competitiveness, as well as an increase in their availability, has occurred since the program's inception (Preibisch, 2007). This expansion in horticulture output is intended to fulfill local demand for industrial raw materials as well as to enhance exports and import substitution while also meeting domestic demand for industrial raw materials (Husodo, 2004).

In diverse production centers, the majority of the growth of horticulture agribusiness has been aided by various programs and activities, such as assistance from the APBN, the community, and the farmers themselves. There has been a rise in the production of horticulture commodities as well as an increase in the availability of horticultural commodities since the program's inception. The growth in horticulture output is intended to fulfill local demand, provide industrial raw materials, enhance exports, and substitute for imported goods when possible. Since the advancement of horticulture, it is possible to predict that vegetable crops will have promising futures because the demand for these agricultural goods is quite strong. The reason for this is because vegetables have become a staple of the Indonesian diet, therefore it comes as no surprise that these agricultural goods are always readily accessible on the market.

Farmers in the carrot industry often use excessive production variables in the goal of attaining the best possible outcomes. The use of excessive production factors will raise production costs, which will in turn lower farm income if the additional costs are greater than the additional

income. This is known as the Law of Decreasing Yield Increase in agriculture, and it states that if the additional costs are greater than the additional income, then the farm income will decrease (The Law of Defining Return).

Pattapang Village, Tinggimoncong District, Gowa Regency is home to one of Indonesia's most productive carrot farms, which is particularly prevalent in South Sulawesi. Based on observations obtained in Pattapang Village, Tinggimoncong District, Gowa Regency, it can be concluded that the majority of the people who live in that area have carrot gardens in which they grow carrots for consumption. This is supported by the geographical conditions of the city, which has a total land area of 15.38 km², is located in the highlands at an elevation of 1,500 DPL, has temperatures ranging from 10°C to 26°C, and is frequently foggy during the rainy season. The city has a total land area of 15.38 km², is located in the highlands at an elevation of 1,500 DPL, and has temperatures ranging from 10°C to 26°C. The average annual rainfall is between 135 days and 160 days per year, and the average elevation above sea level is around 500 meters.

From the information provided above, it is clear that the agricultural potential in Pattapang Village, Tinggimoncong District, Gowa Regency are quite promising. This is supported by the alignment between the geographical circumstances and the parameters for healthy plant development, which allows for the maximum amount of production possible. As a result, the goal of this study is to learn about carrot farming (*Ducus Carota*) in Pattapang Village, Tinggimoncong District, Gowa Regency, as well as to learn about the financial analysis of carrots in Pattapang Village, Tinggimoncong District, Gowa Regency.

Carrot Overview

Carrots (*Daucus carota* L.) have long been recognized as a vegetable that has a high concentration of vitamin A. This is due to the fact that carrots contain a high concentration of carotene (provitamin A), which is a vitamin A-forming component. As a source of vitamin A and minerals, carrots are also effective in the treatment of illnesses and the preservation of attractiveness. In every 100 grams of material, there are 12,000 S I vitamin A molecules. There are tubers in the soil of this plant, which is a grass that maintains food reserves as a result of its root system. The stems are short and have a taproot that serves the purpose of transforming into spherical and elongated tubers. It is the reddish portion of the tuber that is ingested by humans.

There are three types of carrots based on the length of the tuber, the first of which is the short tuber carrot, which comes in two shapes: round tubers and elongated tubers with rounded ends. The second type of carrot is the long tuber carrot, which comes in two shapes: round tubers and elongated tubers with rounded ends. There are three sorts of medium-tubed carrots: those with pointed ends, those with middle ends, and those with blunt ends, as well as long-tubed carrots, which are generally blunt at the ends.

Ideally, carrots should be grown at an elevation of 1,200-1,500 meters above sea level in order to achieve their greatest growth. The ideal temperature for this plant is between 22 and 24 degrees Celsius, with plenty of humidity and sunshine. The soil needs that are suited for this plant are fertile, loose, and rich in humus, and the air and water systems are in good working order (not stagnant). It is possible for carrots to grow effectively in a pH range of 5.5-6.5, but for best results, a pH of 6.0-6.8 is recommended. Carrots thrive on sandy loam soil, which is particularly prevalent in the lowlands. This plant is also ideal for sand growing as well as hydroponics cultivation methods. Root death occurs as a result of a lack of oxygen in heavy soil, resulting in malformations, twisting, branching, and splitting. Among the benefits of this

plant is the fact that it may be grown throughout the year, during both the dry and wet seasons. However, the air temperature must still be taken into consideration because if the air temperature is too high, the tubers formed are often small (abnormal) and pale or dull in color, whereas if the air temperature is too low, the tubers formed are of small length and pale or dull in color, respectively (Mulyahati, 2005).

Farming

according to Suratiah (2006) Agriculture may be defined in two ways: in a restricted sense and in a wide one. Agriculture is defined as the practice of farming in its most restricted definition. The term "agriculture" refers to any activity that involves the manufacturing process of materials for human use that may be produced from plants or animals, as well as attempts to replenish, reproduce, and take into consideration economic aspects.

According to experts in Suratiah (2006), various definitions of farming science include farming science that studies how farmers combine and operate various production factors as the basis for farmers to choose the type and size of farming branches in order to provide maximum and consistent results. In farming, science is the study of how to run and arrange agricultural units in such a way that they maximize efficiency and provide a consistent revenue.

Subsistence farming and commercial farming are the two forms of farming that are practiced in the United States. The subsistence type is static and straightforward in nature, and it is intended to fulfill the requirements of the family; the commercial type, on the other hand, is dynamic and profit-oriented, and it is intended to suit the demands of the market. Farming in Indonesia is characterized by a small amount of land, limited capital, poor farmer income, and a low level of farmer skills and management, among other things. In addition, one of the distinguishing aspects of Indonesian farming is the selection of commodities that are geared toward fulfilling daily requirements rather than for export. Another characteristic is the utilization of contemporary manufacturing tools, which are still in short supply, as well as poor productivity and efficiency, as well as a weak price taker and bargaining stance. Agricultural development in Indonesia represents a shift from subsistence to commercial agriculture.

Previous Research Studies

In Indonesia, there has not been a great deal of research on the study of carrot growing. Previously conducted research that is relevant to this research is separated into two sections: the study of income analysis and farming, followed by a study of the carrot crop as a commodity.

Income Analysis and Farming

Multiple income analysis and farming studies have been conducted, both in the context of agribusiness corporations and in the context of rural situations. This investigation has looked at a variety of commodities, particularly those in the agriculture industry. Suroso (2006) did a study in which he examined the amount of income and the practice of maize cultivation. To determine maize farming and the income level of maize farmers in the research area, as well as analyze the relationship between the use of production factors produced, compare the efficiency of labor use on large and narrow land, and determine the optimal combination of the use of production factors were some of the objectives of this study. The findings revealed that maize growing on big tracts of land was more effective than maize farming on small tracts of land. According to the R/C ratio, farming with broad land areas has a higher value than farming with narrow land, as can be seen in the chart below: Results of the function model estimate using OLS and component analysis demonstrate that land, seeds, urea and phonska fertilizer,

manure and pesticides all have an impact on corn output. Land, seeds, urea and phonska fertilizer all have an impact on corn production, as does labor.

Using data from the study of carrot farming branches, Pepilaya (2004) attempted to determine the impact of a drop in carrot productivity on the level of carrot farming revenue, as well as to determine the impact of production variables on carrot output and productivity. Because the ratio between NPM and BKM was not equal to one, the research's findings indicated that the use of production factors for carrot farming in the study region was not ideal because the usage of NPM and BKM was not equal to one. Farm income and expenditures are not lucrative to analyze since the overall revenue exceeds the total expenditure on a per-acre basis. According to a study done by Pasaribu (2007) on carrot production in Tegal Regency, the price of carrots during the growing season of October to December 2002 was Rp. 400/kg at the farm level. As a consequence of a drop in productivity in the research region, the goal of this study was to examine the level of revenue earned by carrot farmers in the area, along with the link between production factors and the degree of efficiency achieved in the use of production factors. The findings revealed that production elements such as manpower, manure, seeds, land size, and liquid medication had not been used to their full potential. This is due to the fact that the ratio of each element does not equal one.

In the meanwhile, Rosmiati (2007) undertook an investigation on orchid planting in agricultural enterprises. The goal of this study was to examine the profit margins of the orchid business at the research site, as well as the impact of changes in input prices on the profit margins of the orchid company. As a consequence of the study, it was discovered that compote, seedlings, teens, and adults may still be beneficial to the organization. The R/C value was more than one, and the sales volume above the BEP value for compote, seedling, juveniles, and adults, with 12450 tillers, 2272 pots, 1221 pots, and 723 pots, respectively, for compote, seedling, juveniles, and adults.

Carrot Commodity Analysis

During her study on the marketing of carrots and leeks, Sari (2006) discovered that Through marketing margin analysis, farmer's share analysis, and profit ratio analysis, the researchers sought to determine the marketing system for carrots and leeks in the study region and the degree of marketing efficiency in the field. As a result of the study, it was discovered that the marketing channels for carrots and leeks in the study area were divided into five categories: channel I (Farmers – Small Middlemen – Local Retailers – Consumers), channel II (Farmers – Local Retailers – Consumers), channel III (Farmers and Local Retailers – Consumers), channel IV (Farmers and Local Retailers – Consumers). The channels are as follows: channel III (Farmers – Small Middlemen, Wholesalers, Retailers, and Consumers), channel IV (Farmers, Small Middlemen, Big Middlemen, Wholesalers, Retailers, and Consumers), and channel V (Farmers, Small Middlemen, Big Middlemen, Distributors, Wholesalers, Retailers, and Consumers). Route I is the most efficient marketing channel for this product, according to the calculations of marketing margin and farmer's share; channel II is the channel with the greatest profit and cost ratio. Meanwhile, the marketing of organic carrots is not very different from the marketing of conventional carrots.

It was discovered via research by Khairina (2004) that the marketing of organic carrots and non-organic carrots are still included in the same general carrot marketing channel, with the prevalent pricing for both commodities being the same without any distinction.

Mulyahati (2005) did a study on carrot marketing channels in the Cianjur agropolitan region, which revealed that the market structure faced by carrots and dealers in the agropolitan area

was one that was totally competitive. The market structure that collectors and suppliers must contend with is an oligopoly market. Wholesalers and retailers (supermarkets) operate in an oligopoly market, but retailers in the TU Kemang market in Bogor as well as retailers in the Bekasi market operate in a totally competitive market structure. Marketing channel II (farmers – collectors – retailers (Pasar TU Kemang Bogor) is the most efficient carrot marketing channel in terms of marketing margins, since it has the least marketing margin of Rp. 825 per kg (farmers – collectors – retailers (Pasar TU Kemang Bogor)).

An investigation into the attributes and price ranges that influence purchasing decisions for organic carrots was conducted by Pemilia (2004). The results of the study revealed that, on average, consumer attitudes toward organic carrots were better than those toward local carrots, but still inferior to those toward imported carrots. When comparing organic carrots to the other two varieties of carrots, organic carrots offer five distinct benefits, including flavor, crispness, sanitary packaging, and brand recognition. Organic carrots are deficient in five characteristics, including price, color, size, texture, and availability of organic carrots.

During his study, Ningrum (2006) looked at efforts to improve carrot production practices in the lowlands of Indonesia. As a consequence of the addition of compost at a dosage of 30 percent of the median volume and the periodic storage of plants in cold storage, the researchers discovered that plant growth and output were improved in the experiment. The modification of soil temperature also demonstrates that plants are capable of producing a good harvest. Unlike earlier studies, this study examines carrot farming in one of the carrot production hubs, which distinguishes carrots as a better commodity in comparison to other commodities. In addition, there is a seasonal component that influences variances in income levels as well as the usage of production factors in the economy.

Methods

This field practice was conducted from Friday, April 27 to Sunday, April 29 in Pattapang Village, Tinggimoncong District, Gowa Regency. The location was chosen with care because it is in an area where horticultural crops are being developed, one of which is the carrot plant, and it is home to a farmer group that cultivates the carrot plant, according to the researchers.

Primary and secondary data were collected and observed throughout this field exercise, resulting in a total of three types of data. Primary data were observed and obtained from sample farmers via interviews utilizing a questionnaire in the form of a list of questions. Secondary data were acquired from the same sample farmers. Production facilities, output facility pricing, labor, labor expenses, production, and selling prices are only a few of the data factors that are included in the data set. In this field practice, secondary data is information that supports main data that has been received from government entities.

When doing research using survey methodologies, a study is defined as one in which samples are drawn from a single population and a questionnaire is used as the primary data gathering instrument (Singarimbun & Efendi, 1995).

Because the study field was deliberately selected, the features or qualities of the participants were picked in line with the researcher's interests, rather than depending on the characteristics or traits that were previously known to the participants. This investigation was carried out at Pattapang Village, which is a major producer of carrots in Gowa Regency and is the subject of this study. The sample of farmers was chosen using the "Simple Random Sampling" approach, which is to say, utilizing simple random sampling and selection. There were a total of 5 carrot growers that participated in this research and provided samples.

Farmers who grow carrot plants were chosen as samples for this study. The sample is selected using a straightforward random sampling procedure, with five farmers chosen at random from among those who are involved in the carrot industry as a whole. The advantage of this sample approach is that the population is reasonably uniform in terms of technology and company size, which is taken into account.

The data analysis approach used in this instance is a straightforward statistic that is utilized to compute expenses, calculate revenues, and calculate profits. Labor expenses, the amount of production costs, and other costs are calculated by the firm and are included in the cost of production calculation. The amount of gross income or receipts used in the computation of revenue is the quantity of revenue. While the calculation of income is the difference between the total revenue and the total cost of farming, the calculation of income is the difference between the total revenue and the total cost of farming

Results and Discussion

Characteristics of Carrot Farming Respondents

One of the most essential variables in farming is the state of the farmers, which may be determined by identifying the sample farmers. Farmers on a farm are managers who are responsible for the planning, organization, implementation, and evaluation of a production process. The characteristics of the sample farmers in this research include their age, duration of education, number of family members, number of family members who are actively involved in farming, farming experience, and land area, among other things. Table 1 shows the identities of the sample farmers who participated in the study.

Table 1. Characteristics of Carrot farmers in Pattapang Village, Tinggimoncong Subdistrict, Gowa Regency

Description	Sum
Number of farmers (people)	5
Average farmer's education (year)	9
Average age of farmers (years)	38,2
Average number of members of farming families (people)	4
Average number of active members of farming families (people)	3
Average land area (Ha)	0,25
Land ownership status	
a. Own	5
b. Rent	-

Table 1 shows the findings of the data analysis, which shows that the average age of the sample farmers is 38.2 years, indicating that they are still in the prime of their lives. Agriculturalists in Pattapang Village are farmers who are of productive age, which means they are still open to accepting innovation, technical advancements, and information that may be used to boost carrot output. Carrot farmers have an average education of 9 years, which is the equivalent of graduating from junior high school in most cases. The fact that they just had a junior high school diploma did not deter them from increasing productivity by leveraging current technologies, despite their average education (Bakia et al., 2012). The internet can be used to find ways to control pests and the latest cultivation techniques, and farmers of productive age with an average education of junior high school graduates can take advantage of innovation, technological advancements, and knowledge gained in order to improve and increase the amount of production.

Two men and two women are included in the average number of family members of the sample farmers who crop carrots, but the average number of family members who are not involved in carrot farming is three persons. Farmers' attitudes toward new innovations are influenced by their previous experiences, since it needs guts to apply new inventions and to take risks in order to succeed in this endeavor. Farmers will also get the ability to adjust to changing economic situations and use the most effective agricultural practices as a result of their previous experience.

Land is a production component that is essential important for farming to be successful in the long run (Shiferaw et al., 2011). Land is necessary for the management of a farm; farming will be difficult if there is no land available (Heathwaite et al., 2005). The land used for carrot production is, on average, held by the farmers themselves, with an average land size of 0.25 Ha. This implies that the majority of the sample farmers only have a tiny piece of land, and as a result, they may be classified as small producers. Because of the limited scope of land ownership, land management is inefficient.

Carrots are grown by farmers in Pattapang Village because carrots thrive in the highlands and have favorable growth conditions. Where this is in agreement with the domicile of the farmers who are in the vicinity of the mountain slopes, this is the case.

Carrot Farm Business Capital

Table 2. Source of business capital of carrot farmers in Pattapang Village, Tunggimoncong District of Gowa Regency

Description	Number of farmers (people)	Percentage (%)
Capital itself	5	100%
Loan	0	0

Table 2 shows that all of the farmers who were selected as respondents began farming with their own funds, which is consistent with previous findings. This is due to the lack of a supporting subsystem in Pattapang Village, such as cooperatives, which means that farmers are unable to get loans in that location. The fact that the conditions of borrowing are sometimes convoluted has also resulted in farmers losing interest in borrowing money to expand their businesses.

Overview of Farmer's Carrot Cultivation Respondents

Specifically, the Cipanas variety of carrots is grown in the research location. In addition to carrots, leeks, potatoes, tomatoes, and cabbage are also grown by the farmers that answered the survey questions. Carrots may be cultivated in monoculture or intercropped with a variety of plants, such as leeks and cabbage, in addition to being grown in monoculture. The majority of the seeds utilized in the experiment were from the respondent's own planting. The season did not affect the timing of carrot planting in the research region. Carrots may be grown throughout the year, even during the wet and dry seasons. Only a tiny percentage of farmers who answered the survey's questions do not grow carrots during the dry season. This is due to the fact that the water intake is too far away from the arable land, necessitating the expenditure of a significant sum of money.

Carrots are grown by the responding farmers because it is a family heritage and because it is a very simple crop to produce compared to other crops. From planting through harvesting, the researchers will demonstrate how to raise carrots in the study area. Carrot growers plant carrots in rows that are varying in widths. Carrot seeds are strewn around the beds with little regard

for spacing. Then it was covered with a thin layer of soil that had been mixed with manure in various proportions.

In average, most farmers weed twice a year, although there are those that weed three times a year. Notogo is the name given to the first weeding, ngaramas is the name given to the second weeding, and mencug is the name given to the third weeding. The first weeding was done when the plant was two weeks old, which was two weeks after planting. Fertilization and management of HPT are included in the maintenance process.

When the carrots are spread out on the bed, the basic fertilizing is completed. Fertilization is repeated after the plants have been in the ground for two weeks and is done in conjunction with the first weeding. The kind and quantity of fertilizer used varied, with Urea and Ponska being the most common. When compared to the dry season, respondent farmers report that HPT control is carried out less often during the rainy season (Figure 1). Due to the fact that pests are scarce during the rainy season and the state of carrots during the rainy season is rotten, this is the case.

Supergro, curakron, and biotonic are among of the liquid medications that some farmers have utilized. Spraying occurs 1-3 times per week during the wet season, and 2-7 times per week during the dry season. It is only during the dry season that watering is done. Watering in the study area was done by at least two individuals at the same time. The frequency with which this activity is carried out varies, with 3-4 times of watering being carried out in a month being the norm. Carrots are harvested when they are 3 to 4 months old from the time they were planted. Typically, during the harvesting season, the collectors purchase carrots directly from the responder farmers. The wholesale system is the name given to this system. At the time of the research, the price of carrots in the wet season ranged between Rp. 500 and Rp. 700/kg, while the price of carrots in the dry season ranged between Rp. 1400 and Rp. 4500/kg. At the time of writing, the price of carrots in Pattapang Village is Rp. 2000/kg.

Use of Factors of Production in Carrot Farming

Production outcomes are the items that are produced as a consequence of a manufacturing process. The quality and quantity of the product produced are determined by the quality and quantity of the elements of production, as well as the technology utilized to manufacture the product in question. It is possible to see in Table 3 how the average use of production factors in carrot farming in the Pattapang village is distributed among various factors such as land area, labor (both family workers and non-family workers), manure (including urea), Za fertilizer (including Ponska fertilizer), pesticides (including glyphosate), seeds (including glyphosate), and lime agriculture.

Saprodi Cost of Farmer Carrot Farming

Table 3. Average Cost of Carrot Farming Study Program per unit Ha in Pattapang Village, Tinggimoncong District, Gowa Regency

	Description	Amount (Kg)	Price Per unit (Rp/Kg)	Total Cost (Rp)
1.	Seed	20,42	-	-
2.	Manure	7344	110	806.740
3.	Fertilizer NPK	5	2000	10.000
4.	Urea Fertilizer	176	1800	316.800
5.	Za Fertilizer	42	1700	71.400
	Sum		75.610	1.204.940

On the basis of Table 3, it can be observed that there is no expense for the manufacturing facilities utilized in the seeds, since the seeds are manufactured by the respondents themselves, specifically by separating the seeds into two parts, each portion of which must contain at least one bud (see Figure 1). There is no negative impact on the quality of potato yield due to the splitting of the seeds. Further to this, some farmers choose to save their own seeds from prior harvests. Manure is the most expensive of the production facilities that are utilized in a single growing season, with a cost of Rp. 806,740. The manure used in land preparation has a total cost of Rp. 806,740, and it is used to fertilize the soil. Following the application of manure, planting is completed a few days later. In addition, fertilization with NPK, Urea, and Za fertilizers will be undertaken out 2 months later at a cost of Rp. 398,200, with a total cost of Rp. 398,200. The carrot plants in the Patappang hamlet were never attacked by pests, but they did suffer from a fungal disease called fruit rot, which caused the carrot plants to rot.

Carrot Farm Labor Costs

Table 4. Average Labor Cost of Carrot Farming Business in Patappang Village, Tinggimoncong Subdistrict, Gowa Regency

Description	Number of HKSPs	Total Cost (Rp)
Land Processing	-	-
Planting	-	-
Fertilization	-	-
Weeding	-	-
Pesticide Spraying	-	-
Irrigation	-	-
Harvest	2,25	112.500
Total	2.25	112.500

With reference to Table 4, it can be observed that the unit of Men's Working Days (HKP) with working hours of 8 hours per day is used for the calculation of labor consumption. Work in carrot farming is limited to the harvesting phase; all other activities, such as land preparation and irrigation, are carried out solely by the farmer's household. Only 3-4 individuals are required for this task.

Production and Income of Carrot Farmers

Production is the process by which certain products and services are transformed into goods and services with a greater utility value than the original goods and services. A product is what is produced as a consequence of this procedure (Bishop & Toussaint, 1979).

Table 5. Average Income of Carrot Farmers in Patappang Village, Tinggimoncong Subdistrict, Gowa Regency

Description	Per hectare
Receipt	Rp. 26.364.000
Cost	Rp. 1,317,440
Income	Rp. 25.046.560

Based on Table 5, it can be seen that the average income from carrot farming in Patappang Village by farmers is Rp. 25,046,560 per hectare. Production in this study is the number of carrots in the form of tubers. Fresh yield produced during the growing season expressed in kilograms. Farming revenue is influenced by several factors such as the area of the farm, the

type and price of the farming commodity being cultivated. Revenue in carrot farming is calculated based on the multiplication of carrot production with the selling price of the carrot. The average price of carrots per kilogram is Rp. 2000 with a production of 13,182 kg/ha so that the income is Rp. 26,364,000 rupiah/ha.

According to Cahyati (2006) the price of carrots is very volatile, the lowest price can reach Rp. 200, 00/kg and the highest price can reach Rp. 4.5000.00/kg. This fluctuation in carrot prices is due to the seasonal nature of agricultural products (available in abundance at harvest and scarce when not harvested).

According to Sri Widodo in Suratiyah (2008), the analysis of farmers' income in family farming without taking into account the family's labor costs and family-owned capital costs often applies in developing countries. Farming income is the difference between carrot receipts and carrot farming costs in one growing season. A firm is said to be maximizing its total profit in the short run

if the difference (positive) between the total revenue (Total Revenue, TR) and the total cost (Total Cost, TC) is the largest. TR is equal to price times quantity (Salvatore, 2004)

Conclusion

Farmers in Pattapang Village earn Rp. 26,364,000 per hectare from carrot farming, with an average income of Rp. 25,046,560 per hectare earned by the sample farmers. Carrot growing generates Rp. 26,364,000 per hectare in revenue for farmers in Pattapang Village. As a result, the expenditures expended per hectare were Rp. 1,204,940, resulting in an income of Rp. 25,046,560 per hectare. Efforts must be made to continue to boost output via more intense care, the selection of better seeds, and the use of integrated pest management in order for farmers' revenue to rise. It is necessary to regulate the usage of chemical fertilizer production elements in order to ensure that its use stays efficient.

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