

The influence of cost at production inputs on farmer income at chili pepper commodity in Sub-District Dungaliyo Gorontalo Regency

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Abstract.

The research objective is 1) To analyze the earning of farmer of chili at Dungaliyo Sub-District in Gorontalo Regency; 2) To analyze of using cost in production influenced at farmer's chili earning at Dungaliyo Sub-District Gorontalo Regency. The population is all of the chili pepper farmers in the sub-district Dungaliyo of Gorontalo Regency, wheter the sample is about 42 people. Descriptive analysis was used to analyze the earning of farmer of chili. Multiple regression model was used to analyze factors affecting income farming. The results showed that (1) revenue gained by chili pepper farmers in sub Dungaliyo Gorontalo district average Rp. 9166666.7 with value/ha Rp. 2.037,037.44 and the total cost is Rp. 4.233,961.905 with value/ha Rp. 940,880.2 net income of farmers of chili pepper Rp. 4,932,704.762 with value/ha Rp. 1,096,156,- (2) The results of multiple regression analysis showed that the cost of production facilities impact on farm income chili pepper in Sub-district Dungaliyo such as equipment rental costs and agricultural machinery (X1) the significant value <0.01 was highly significant, costs fertilizers (X2) the significant value <0.01 highly significant, Cost Drugs – drugs (X3) significant value <0.05 was significant, and the cost of seed (X4) the significant value <0.01 was highly significant in the farming chili pepper.

Keywords: Production input cost, Revenue, Chili pepper

INTRODUCTION

In Indonesia horticulture planting will take a role in agriculture development sectore. These planting as well as vegetable, fruits, chemical planta, decoration plans. These plant also become the endowment plant because it give contibution in to the nation, and some of these plants such as chili and union are contributed also in to the inflation. Therefore, with limitation number of land the goverment policy for these pants were oppsited with the other plants policy (Sudaryanto and Pasandaran, 1993 : 4).

Chili production is about 12.782 ton on 2013 in Gorontalo province, this farmer productin fulfilled the demand from North Sulawesi, South Sulawesi, East java and Borneo with the average price is about Rp 10.000 until Rp 40.000/Kg. The land area of this chili is about 2.296 Ha and the average production is about 10-15 ton per-ha. The Production is higher than the other local chili is about 10-12 ton per-Ha. This causes of such : (1) unpredictable of price fluctuation; (2) limitation number of farmer capital; (3) uncertainty of supply side Price fluctuation become one of the causes of farmer receive the low price, so that the earning from chili low and often make the farmer lost.

In Gorontalo Regency chili Comodity is one horticulture planting is planted by farmer, in this case we can see chili Production ia about 3,450 ton on 2012. And on 2013 increase 6880 ton. (Agen of statistic Gorontalo Regency 2013; 142)

Generally farmer's chili at dungaliyo sub-District in Gorontalo regency have been planting chili since of the new setements in that region, in this case the land area and climate raining supported this planting at the time, the land area is about 47 Ha, but the limitation of productions factors affect in to the production of chili Commodity.

The research objective is: 1) To analyze the earning of farmer of chili at Dungaliyo Sub-District in Gorontalo Regency; 2) To analyze of using cost in production facilities influenced at farmer's chili earning at Dungaliyo Sub-District Gorontalo Regency.

RESEARCH METHOD

The location of this research in Momala and Ambara Villages at Dungaliyo Sub-District in Gorontalo Regency. The population is all of the chili pepper farmers in the sub-district Dungaliyo of Gorontalo Regency, wheter the sample is about 42 people. Survey method is directed interviewing the farmer's chili as respondents.

Descriptive analysis was used to analyze the earning of farmer of chili. Multiple regression model was used to analyze factors affecting income farming.

The multiple regression model is given as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Where:

Y = income farming (Rp)

X1 = rent tools and machine (Rp)

X2 = fertilizer (Rp)

X3 = drugs cost (Rp)

X4 = seed cost (Rp)

RESULT AND DISCUSSION

Chili farming description

Chili is a plant that is often cultivated by farmers in the district Dungaliyo Gorontalo regency. The success of farming in cayenne is determined in the determination of the location and strategic land. This land is very influential on any crop, land for tanamana cayenne should be fertile is rich materials - organic materials. or the structure loose and have water infiltration and air circulation and have a lot of organic matter that is very important for growth, Selecting and Managing Land is an attempt to change the land which was originally less favorable for chili into land farming profitable. Processing land for chili is to clean up or burn the grass, removing small stones, and pulling the roots of plants that were previously planted on the same land.

Cost, revenue, and income chili farming

Cost

Farming cost consist of variable costs and fixed costs. Variable cost is change in proportion to the business activity or the amount of the marginal cost of all units produced. Fixed Cost are the costs that does not depend on the level of goods or

services output that produced by the business. The total cost was the the amount of variable costs and fixed costs.

The Table 1 shows that the total of fixed costs of farming is Rp. 1.468.121. with value/ha Rp 326.250. The total variable cost is Rp 3.077.619 with value/ha Rp 683.916. So, the total cost is Rp 4.545.740 with value/ha Rp. 1.010.165

Table 1. Cost in Chili Farming at Dungaliyo Sub District Gorontalo District, 2015

No	Cost	Value (Rp)	Value/ha (Rp)
1	Fixed Cost	1.468.121	326.250
2	Variable Cost	3.077.619	683.916
Total		4.545.740	1.010.165

Source: Primer Data Proceed 2015.

Revenue

The revenue is all income received from economic activities without deducting the total production expenditure. Based on the Table 2, Revenue gained by chili pepper farmers in sub Dungaliyo Gorontalo district average Rp. 9166666.7 with value/ha Rp. 2.037,037.44.

Table 2. Revenue in chili farming at Dungaliyo Sub District Gorontalo District, 2015

No	Description (Each)	Value (Rp)	Value/ha(Rp)
1	Production (Kg)	3.666.666,7	8.148,148
2	Price (Rp)	25.000	5.555,5
Revenue (Rp)		9.166.666,7	2.037.037,44

Source: Primer Data Proceed 2015.

Income

Income is the total revenue after deducting the total cost of production. Based on the Table 1 and 2, the farming income is Rp. 4.620.926 with value/ha Rp 1.026.872 (see Table 3)

Table 3. Income in chili farming at Dungaliyo Sub District Gorontalo District, 2015

No	Description (Each)	Value (Rp)	Value/ha(Rp)
1	Revenue (Rp)	9.166.666,70	2.037.037,44
2	Cost (Rp)	4.545.740,47	1.010.165,00
Income (Rp)		4.620.926,2	1.026.872

Multiple Regression Analysis

Parameter estimation and partial test in multiple regression model for farm income chili are demonstrated in Table 4.

Table 4. The result of the influence cost use facility production in chili farming at Dungaliyo Sub District Gorontalo District, 2015.

Description	F _{count}	Sig	Regression coefficient	
	191.051	.000	(b)	
constant	t _{count}	Sig	- 169591	
	- 497	.622		
X1	Rent Cost and Machine	3.482	.001	15.907
X2	Fertilizer Cost	26.491	.000	32.599
X3	Drugs Cost	1.967	.046	9.140
X4	Seed Cost	23.709	.000	26.275
Coefficient determination (R ²) = .963				

Regression model for the importation equation above is:

$$Y = -169591.50 + 15.907x_1 + 32.599x_2 + 9.140x_3 + 26.275x_4 + e$$

The result of estimation shows that variable cost from the rent of tools machine, seeds, drugs cost, and cost seed are have a significant influence simultaneously and partially on on farm income chili. All variable have positive coefficients. It means that any increase to cost will increase farm income chili in Dungaliyo District Gorontalo Regency.

CONCLUSIONS

Chili farming income in Sub Dungaliyo Gorontalo sub district are Rp 4,620,926.2 or value/ha Rp. 1,026,872 with the reception of Rp. 9166666.7 or value/ha Rp. 2,037,037.44 and the total cost of Rp. 4,545,740.47 or value / ha Rp. 1.010.165.-

Production facilities in the form of fees and equipment rent farm machinery, costs fertilizers, drugs of Drug cost, and the cost of the seed influence simultaneously and partially on farm income chili in Dungaliyo District Gorontalo regency

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