PRICE FORMATION MECHANISM OF CURLY RED CHILLI (*CAPSICUM ANNUM L*) AT PRODUCTION CENTER AND WAHOLESALE MARKET

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Abstract: Classic conditions that always occur in vegetable farming sector, was the presenced of two different sides of interests between the desire of farmers and consumers. Farmers wanted high production with favourable price. Consumers want commodity prices still considered normal. Normal price happens to equilibrium price means supply equals demand, high prices in the market are often assessed that offers reduced for the government to return to the equilibrium price was the import of commodities, for farmer the import was a policy that was detrimental. High prices on consumers was owned market participants, but in producer prices remain unchanged means farmers remain as recipients price (price taker), this was a classic condition of farmers until now, for it indicated that curly red chilli price increases in the market was not passed to farmers quickly and perfectly, it was important to know how the mechanism of price formation in the farmer / production center and Wholesale Market. This study includes quantitative research using series time data on the price and production of curly red chilli at Cikajang as production center, Caringin Wholesale market, Gedebage Wholesale market and Kramat Jati Wholesale Market in 2014 and growth data of curly red chilli price and production 2009-2014. The data was analyzed using EVIEW 8. Results of price transmission analys was showed that the correlation coefficient ranges up to + 1 means that the price of fourth-place curly red chilli very close relationship means that the place price increases will raise prices elsewhere. Price formation can be seen by other commodity price analysis with analysis of market integration, this analysis aims to determine which one is the dominant markets in price formation curly red chilli. The analys was showed any increase in the price of curly red chilli 1 of rupiah in production centers Cikajang will raise the price of curly red chilli at 0.77 rupiah (77% change) in PI Kramat Jati, it indicates that the dominant identity-forming PI Kramat red chilli prices.Price mechanism in production centers and wholesale markets showed any increase in the price of 1 dollars in Kramat Jati raise prices in Cikajang 0.5017 rupiah (50.17% change), and any increase in the price of 1 rupiah in Cikajang will raise prices in Kramat jati 0.7679 (change 76.79%). Followed by the price mechanism analysis model of rational expectations, the results of prediction specified product (Y specified) as the dependent variable and the current price, determined price and average product (Y average) as independent variables, shows that any increase in the average price 1 rupiah

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will reduce the specified products 1,652 quintal. This was true according to the law of supply and demand, quintals. if the product down then the price will rise. But the increase in the product was not too high at an average of 1.45

INTRODUCTION

Red chilli commodities in West Java province is one of the national leading commodity. In 2007 the productivity of chilli in Garut is above average productivity in West Java (Adang Agustian and Iwan Setiajie A, 2008). Planting area per year red chilli in vegetable production centers Garut district (3,038 ha) is the largest planting area of vegetable production centers in West Java red chilli namely Bandung, Cianjur, and Tasikmalaya, Majalengka (Department of Food Crops of West Java Province, 2013).

As well as horticultural commodities in general, the role of marketing in the commodity red peppers make an important contribution in improving the performance of farm commodities as a whole red chilli given the unique nature of horticultural commodities in general such as nonperishable, easily damaged, volumenious, production is seasonal, while consumption occurs throughout the year. Empirically field often found that producer farmers still face price fluctuations, especially at harvest time, and the seller may be able to gain access to higher prices, therefore, an increase in the production of agricultural commodities including red chilli needs to be accompanied by improvements in marketing system, so that the farmers as commodity producers is expected to obtain an adequate part of the price for an increase their farm (Adang Agustian and Iwan Setiajie A, 2008).

In general, agricultural commodity marketing system including horticulture is still a weak part of the flow of commodities. The weak marketing of agricultural commodities caused by the system still running inefficiently. An efficient marketing system should be able to meet two requirements: (1) collect agricultural products from producers to consumers at the lowest cost, (2) capable of distributing a fair division of the remuneration of the overall consumer price end to all parties involved ranging from activities production to marketing (Mubyarto, 1989).

Red chilli is one commodity that has a considerable price fluctuations. Fluctuations in the price of red chilli can be caused by the large amount of supply and the large number of demands. The higher the number, the offer price will be low, while the small number of price quotes will increase (ceteris paribus). Red chilli prices highly volatile commodity makes it difficult to predict (Alex Murhalis, 2007).

A very high price fluctuations is one of the central issues often arise in the marketing of horticultural commodities. Which leads to high price fluctuations and the acceptance of business profits obtained by farmers from the farming activity fluctuates widely. Such conditions are not conducive to the development of agri-horticulture because of the benefits become unstable when high levels of profit and stable generally a major attraction for businesses to invest and expand their business.

The appeal of commodities rice and palawija coefficient of variation is greater compared to vegetable prices, in other words vegetable prices more volatile than the price of rice and palawija. Fluctuations in commodity prices is basically caused by an imbalance between the supply and the quantity of the required quantity of consumer demand. If there is excess supply of the commodity price will go down, otherwise if there is a shortage of supply, the price will rise. In the process of formation of the price behavior of farmers and traders have an important role because they can adjust the volume of sales that are tailored to the needs of consumers. Based on this it can be said that the relatively high price fluctuations in commodity vegetables basically occur due to failure of vegetable farmers and traders in regulating the volume of supply in accordance with the needs of consumers (Bambang Irawan, 2007).

As well as horticultural commodities in general, the role of marketing in the commodity red peppers make an important contribution in improving the performance of farm commodities as a whole red chilli given the unique nature as horticultural commodities in general such as perishable, easily damaged, volumenious, production is seasonal, while consumption occurs throughout the year. Meanwhile, on the other hand the consumers wanted commodities availability close to where they are, can be obtained at all times and can be consumed in fresh form. Two different desires will be met with a good marketing system (Adang Agustian and Iwan Setiajie A, 2008). A good marketing usually done measuring the efficiency of marketing, and to assess the efficiency of marketing there are several ways to measure it, it is necessary for the observation of market mechanisms, analysis of prices of agricultural commodity prices and the alleged price at the production and price of curly red chilli in order to balance demand and penawarn order two between producers and consumers desire can be fulfilled.

Based on the description above, the formulation of the problem of the study, as follows:

1. How does the price formation of curly red chilli prices indicated due to changes in the price and production center in the wholesale market with Price Analysis of Agricultural Commodities.

2. How does the price mechanism in production centers and in the wholesale markets.

RESEARCH METHOD

This research type is applied research, including problem solving research (problem solving knowledge), multidisciplinary because the problems facing decision makers is considered diverse. This study has a high focus on knowledge perspective. This research is directed to the problem that has been established and generate improvements and recommendation or action (Don Enthridge, 1995).

Research data as a subject of study is 1) Data time series price, curly red chilli production at production centers 2) Data curly red chilli supply of Cikajang Garut, Caringin Wholesale market, Central Market and the Market Master Gedebage Kramat Jati, 3) Data Time series prices, production, supply, government policy and supporting data are derived from the Department of Food Crops of West Java, and related agencies. The data used is the time series data and supporting data derived from:

1. Dealer to find out the cost of marketing is determined snowball sampling with the initial respondents trader in the production center, the Market Information Center in each parent and the Department of Agriculture, then they are asked to provide more information in order to obtain further additional respondents.

2. Center pricing information at production centers, central market and price information in the Department of Food Crops of West Java, to determine the time series data curly red chilli price for 1 year with daily data, weekly, monthly and yearly over a period of 5 years. for data every marketing agencies conducted by tracking the marketing chain. Analysis of the research carried out in several ways 1) The establishment of centers of production and prices in the wholesale market is described as a descriptive, 2) commodity price analysis and prediction with Rational Expectations models, analyzed the program reviews 8.

RESULTS AND DISCUSSIONS

Price Formation in Curly Red Chilli

The formation of prices at production centers, especially in the production center Cikajang as production centers in theory will follow supply and demand, and the price offered farmers a minimum should not be less than the cost price. As for the cost of the lowest price and the average price as a benchmark to see the formation

of prices in the farmers (in the production centers), although farmers rarely sell their products at cost price benchmark, while it can be seen in the table below.

Table 1
Lowest price, Average price and the Price Costing of
Red Chilli Curly At Cikajang Year 2011-2014

	2011	2012	2013	2014
Lowest price (Rp)	2.750	4.942	10.600	2.625
Average price (Rp)	12.429	9.528	15.759	15.714
Price costing (Rp/Kg)	3.930	7.189	4.818	16.000

The cost of goods is the result of the division of farming costs / expenses with the amount of production, or could be called the cost of production (HPP) it is the pricing based on cost. Cost of goods shows a minimum price / principal to be sold at farmers if farmers do not want to lose, which means that the price of staple indicate the selling price limit farmers. Cost of goods must be below the lowest prices if farmers do not want to face the loss.

In 2011,2012 and 2014 the cost of curly red chilli is above the lowest price, but the average price still above the average cost price. This shows the inability of farmers a set price, meaning farmers are only prices receiver, and farming will suffer losses, if based on the calculation of benefits and costs, but farmers still plant a curly red chilli red chilli curly, because the land is owned by less than 1 hectare, average 0.5 -rata there are costs not accounted for, essentially farmers do not feel loss, origin from plantations to produce and can be sold farmers will feel lucky.

The price formation at the production center and a wholesale market can be explained as follows:

1. The price for farmers is the price provisions of the local city (local assembler), farmers are pricetakers because production volumes are sold farmers to the city ranges from 2-5 sack (1 sack containing <40 kg), while sales of erratic, 1 year if farmers planted in monoculture and curly red chilli can be harvested 15 times. For that intercropping can be harvested throughout the year with less production. On April research, there were only two farmer groups who just plant in the the field. Farmers will continue to sell its products to the city due to the sales volume slightly and the distance from the location of the farm into the market much more efficient that sell to the city with direct payment / cash, sometimes most of the farmers have a social engagement with the city, such as farmers take curly red chilli seeds of the city and taken into account at the time of harvest. Sales volume which could be

caused slight cropping systems, planting and fertilizer prices, fertilizer prices curly red chilli base increased 1 time in 2 years worth Rp 200. and decreased Rp. 200 for organic fertilizers (Petroganik).

2. The bookie price is formed because the price of curly red chilli around the production centers, namely West Java Lembang, Pangalengan, Cipanas, Ciwidey and STA Ciamis. Although the influenced prices between production centers so low, curly red chilli prices in Cikajang more dominant formed from the pricing of Kramat Jati wholesale market. Cikajang supplying 5 markets in county-level market, the market Cibitung, High Land market, market Kramat Jati, markets outside Java and supermarkets, the highest supply volume is to Kramat Jati, in this case the identity of the dominant determinant Kramat Jati market prices to production centers, with Margin between traders in a state of normal price range Rp.3.000-Rp.4.000.

3. The price formed in Kramat Jati based on outside Java suppliers and West Java suppliers. Suppliers outside Java (Central Java and Sumatra), a supplier of Central Java has the consistency of delivery of the goods, in the sense of central java suppliers always send the goods in a state of fluctuative price, due to have a high level of confidence to be able to market the result, for example, five trucks chilli sent, 4 truck paid one truck that is not paid as a guarantee of central Java products to market results to the parent Market Kramat Jati. But the supplier from west Java has no continuity in delivery of goods to the Kramat Jati wholesale market, west Java suppliers tend to sell their products to other markets by choosing a higher price at a time, this change to the supply of kramat Jati.

4. The price of curly red chilli in Kramat Jati wholesale market is formed or determined by three actors, namely Wholesale, airports and thugs. Systematics pricing consists of two conditions, namely if the price is not normal Wholesale determines the price and if the normal price Wholesale and airports play a role in determining the price. prices in Kramat Jati in 1 day occurred 5 times fluctuations. In normal circumstances is not price, in 2014 the Ministry of Agriculture made a reference price for red onion and chilli prices in Kramat Jati, for a price of pepper may not exceed the price of Rp.26.300.

5. Variations in the price of curly red chilli Kramat Jati wholesale market seen at several things: (1) curly red chilli originating from Central Java packed with brown cardboard, curly red chilli originating from West Java is packed with former white sacks with volume content of approximately 40 kg without shorting. (2) Variation in the price of curly red chilli in Kramat

Jati wholesale market, price Rp. 13.000 / kg with a volume purchase of at least 2 kg, the price of Rp 12,000 / kg volume purchases of at least 5 kg with quality chilli ± 5 cm long with straight shapes and colors evenly red, curly red chilli prices Rp. 7.000 / kg short and uneven quality. Sales are not at grade buyers themselves who choose quality, so sellers do not need to sort out the quality. The price formation is described as shown below.

Flow Chart: Price Formation in Production Center and Wholesale Market

PEMBENTUKAN HARGA DISENTRA PRODUKSI DAN PASAR INDUK
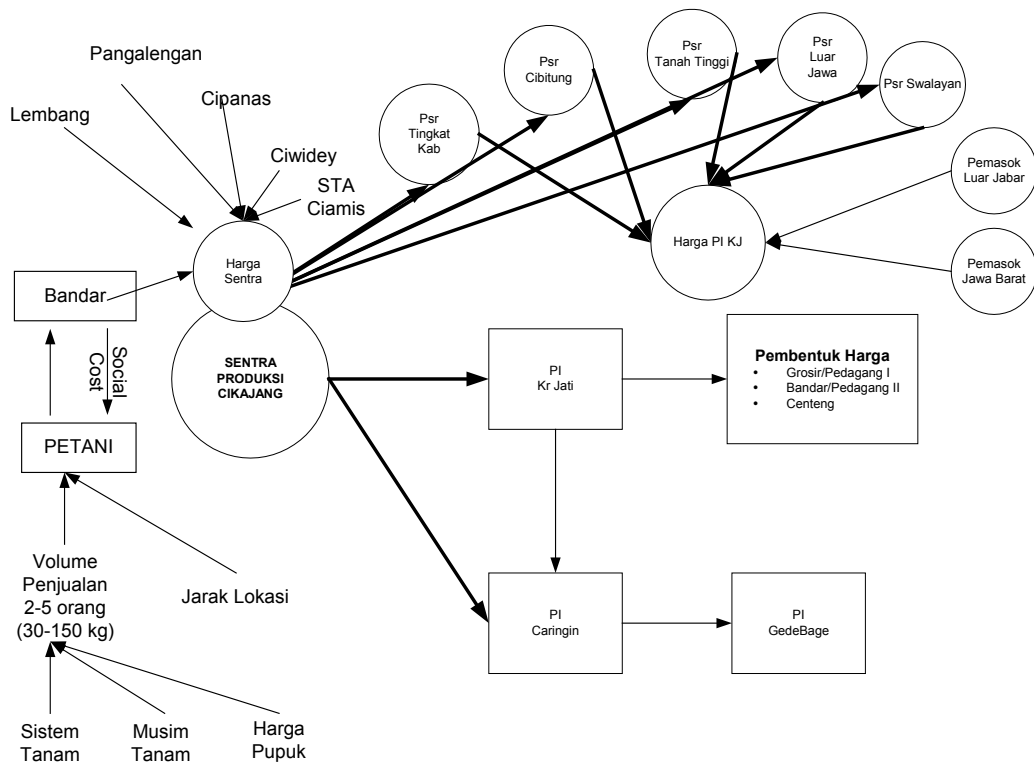
Price formation with Commodity Price Analysis

Results of price transmission analysis showed that the correlation coefficient ranges up to + 1 means that the price of fourth-place curly red chilli very close relationship means that the place price increases will raise prices elsewhere, more details on the results of the analysis matrix below.

Price correlation coefficient matrix of curly red chilli

	CIKAJANG	PI CARINGIN	PI GEDEBAGE	PI KRAMAT JATI
CIKAJANG	1.000000	0.982996	0.981259	0.989718
PI CARINGIN	0.982996	1.000000	0.997045	0.984766
PI GEDEBAGE	0.981259	0.997045	1.000000	0.983196
PI KRAMAT JATI	0.989718	0.984766	0.983196	1.000000

The highest correlation coefficient values were between PI and PI Gedebage Caringin 99% the percentage changes, price changes occurring in PI Caringin perfectly transmitted to the PI Gedebage. The highest price in the PI Gedebage it show that PI Gedebage is Department of Food Crops of West Java in production centers Information Center Cikajang now there is no supply of curly red chilli from production centers to PI Gedebage Cikajang, it shows the flow of curly red chilli commodity supply Caringin PI to PI Gedebage of PI Gedebage to surrounding Traditional Market.

Price formation can be seen by other commodity price analysis with analysis of market integration, this analysis aims to determine which one is the dominant markets in price formation curly red chilli, from the results of the analysis showed the following equation:

A = 2681.871495 + 0.7723454846*X + 0.2696970479*Y + 0.1070285489*Z

A = PI Kramat jati, X = Cikajang, Y = PI Caringin, dan Z = PI Gedebage

In the equation it is shown that any increase in the price of curly red chilli 1 of dollars in production centers Cikajang will raise the price of curly red chilli for 0.77 dollars (77% change) in PI Kramat Jati, it indicates that the dominant identity-forming PI Kramat curly red chilli prices. Curly red chilli prices in the production center Cikajang determined or influenced directly from curly red chilli prices in PI Kramat Jati, and forming a curly red chilli prices in PI Kramat identity based supply coming into the PI Kramat Jati coming from all regions such as Central Java, Sumatran. and especially the supply of curly red chilli 5 curly red chilli production centers in West Java is Lembang, Pangalengan, Cipanas, Ciwidey, STA Ciamis.

The Price Mechanism at Production Centers and Wholesale Market

Curly red chilli price mechanism can be seen how the price changes occur when the price at the production center as the dependent variable and Jati Kramat price, price and price Caringin Gedebage as independent, the analysis showed: H Cikajang = -1927.74434936 - Hgedebage + 0.501746223051 0.198077434729 Hkramatjati +

0, 53791707139 H Caringin. These results suggest that any increase in the price of 1 dollars in Gedebage lowering prices Cikajang of 0.1980 (19.8% change), any increase in the price of 1 dollars in Kramat Jati raise prices in Cikajang 0.5017 dollars (50.17% change), and any increase in the price of 1 dollars in Caringin, will raise prices in Cikajang 0.5379 (53.79% change).

Based on the documentation in the field of price changes in Cikajang, have a dominant influence on the price at production centers Cikajang as it described in the image formation of prices. For that price mechanism which will be shown here is if the price of Kramat Jati as the dependent variable and Gedebage price, price and price Cikajang Caringin as independent variables, equation results obtained: Hkramatjati = 1736.89915997 + 0.175654540823 0.767985535458 Hgedebage + H Cikajang + 0, 205684227344 Hcaringin. Results of the analysis of the program eviews 8 shown that any increase in the price of 1 dollars in Gedebage raise prices in Kramat Jati 0.1756 (17.56% change), any increase in the price of 1 dollars in Cikajang will raise prices in Kramat Jati 0.7679 (change 76, 79%), and any increase in the price of 1 dollars in Caringin will raise prices in Kramat Jati 0.2056 (20.56% change). Results of the analysis looks at the price of Kramat Jati Cikajang formed at very high prices (76.79%). The wholesale market Jati Kramat has the power to determine the price to production centers, through the information directly within 12 hours to the centers of production, farmers remain as recipients price because it does not have the power to determine prices, even farmers sell their produce below the cost price. This occurs sales volume to the city is very small farmers, has committed not to sell their products, but take the means of production, such as seeds, and social attachment, the price increase occurred in the central market although production in farmer / production center is always there, because curly red chilli 1 times a year are planted in monoculture, but farmers grow intercropped, and there is no term vacancy of products throughout the year, farmers always plant a curly red chilli in terms Nyirem (local language).

Followed by the price mechanism analysis model of rational expectations, the results of prediction specified product (Y specified) as the dependent variable and the current price, determined price and average product (Y average) as independent variables, shows that any increase in the average price 1 rupiah will reduce the specified products 1,652 quintal. This is true according to the law of supply and demand, ie if the product down then the price will rise. But the increase in the product is not too high at an average of 1.45 quintals.

CONCLUSION

1. The results of the price transmission analysis showed that the correlation coefficient ranges up to + 1 means that the price of fourth-place curly red chilli

very close relationship means that the place price increases will raise prices elsewhere. Price formation can be seen by other commodity price analysis with analysis of market integration, this analysis aims to determine which one is the dominant markets in price formation curly red chilli. The analysis showed any increase in the price of curly red chilli 1 of dollars in production centers Cikajang will raise the price of curly red chilli at 0.77 dollars (77% change) in PI Kramat Jati, it indicates that the dominant identity-forming PI Kramat Jati curly red chilli prices.

2. The price mechanism in production centers and wholesale markets show any increase in the price of 1 dollars in Kramat Jati raise prices in Cikajang 0.5017 dollars (50.17% change), and any increase in the price of 1 dollars in Cikajang will raise prices in kramat Jati 0, 7679 (76.79% change). Followed by the price mechanism analysis model of rational expectations, the results of prediction specified product (Y specified) as the dependent variable and the current price, determined price and average product (Y average) as independent variables, shows that any increase in the average price 1 rupiah will reduce the specified products 1,652 quintal. This is true according to the law of supply and demand, ie if the product down then the price will rise. But the increase in the product is not too high at an average of 1.45 quintals.

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