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on Horticulture to Support Food Security 2010 June 22-23, 2010

Bandar Lampung, INDONESIA



Editors:

Douglas Archbold Michael Reed Janet Paterson Soesiladi Esti Widodo Siti Nurdjanah Darwin H. Pangaribuan

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LEMBAR PENGESAHAN

: INTEGRATED MARKET ANALYSIS THE COMMODITY COFFEE IN THE DISTRICT TANGGAMUS, LAMPUNG PROVINCE

Penulis : I Wayan Suparta and Muhammad Husaini

Instansi : Fakultas Ekonomi, Universitas Lampung

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Menyetujui: Ketua Lembaga Penelitian Universitas Lampung

Dr. Eng. Admi Syarif IP. 196701031992031003

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Dr. I Wayan Suparta, S.E., M.Si. NIP. 196112091988031003

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Secretariat : Department of Agro-Industry Technology Faculty of Agriculture University of Lampung, Indonesia Phone/Fax : +62 721 700682 www.ishsfs.unila.ac.id e-mail : ishsfs@gmail.com

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PREFACE

Growing populations across the world, economic growth and changes in dietary patterns have caused both the production and consumption of horticultural produce, mainly fruit and vegetables, increasingly important. Horticulture, which includes the production of fruits, vegetables, flowers, spices, medicinal and aromatic plants and plantation crops, has a vital role in farm income enhancement, poverty alleviation, food security, as well as sustainable agriculture. However, this sector severely suffers from postharvest losses. Some estimates suggest that about 30–40% of fruit and vegetables are lost or abandoned after being harvested. Huge postharvest losses result in diminished returns for producers, and reduced food availability.

It is very clear that postharvest management determines food quality and safety, competitiveness in the market, and the profits earned by producers. However, the postharvest management of fruit and vegetables in most developing countries is very poor.

The major constraints include inefficient handling and transportation; poor technologies for storage, processing, and packaging; and poor infrastructure.

In order to overcome the incidence of the huge postharvest losses in the region and new challenges faced under trade liberalization and globalization, serious efforts are needed to reduce postharvest losses of horticultural produce, and to support food security.

Therefore, the University of Lampung in collaboration with the Government of Lampung Province as well as the University of Kentucky USA has organized this seminar with the objectives: 1) to discuss recent developments in postharvest handling, processing and marketing of horticultural produce, 2) to identify issues and constrains to reduce postharvest losses, 3) to define strategies and measures to reduce such losses in order to support food security, 4) to discuss marketing and food security issues, and challenges in the postharvest management of horticultural produce, issues and obstacles to improve the marketing and safety of postharvest handling and processing of horticultural produce.

It is our hope that serious consideration will be given to the recommendations of International Seminar on Horticulture to Support Food Security in shaping the future development of the production, postharvest handling, processing and marketing of horticultural produce.

June 22, 2010

Organizing Committee

International Seminar for Horticulture to Support Food Security 2010 Bandar Lampung - Indonesia

Website: http://www.ishsfs2010.unila.ac.id/ E-mail: ishsfs@gmail.com

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INTEGRATED MARKET ANALYSIS THE COMMODITY COFFEE IN THE DISTRICT TANGGAMUS, LAMPUNG PROVINCE

I Wayan Suparta and Muhammad Husaini

Lecturer Department of Economic Development Faculty of Economics, University of Lampung JI Soemantri Brojonegoro No 1, Bandar Lampung, 35145

ABSTRACT

This research was conducted in Tanggamus to find commodity coffee marketing chain. The major problem in the coffee marketing chain in Tanggamus is still weak bargaining power of farmers in selling their coffee production to the dealer. Suspected as the main cause of inefficiency is not yet integrated trading system and market. Therefore, this study tries to examine the efficiency of the coffee marketing by researching on marketing channels and market integration.

The result indicates that the commodity coffee market channels in the district Tanggamus consists of two types, namely:

- a. Tipe1 Farmers sell to Trader Village Collector, Collector Traders Village District to sell to traders, and then sell to exporters, traders district
- b. Type 2 farmers sell to traders Collector Village, Traders Village Collectors subsequently sold to exporters

None of the above marketing channels uses Timmer model approach. This shows that are not yet integrated with the perfect market. As a result the farmers are always experiencing delays in receiving price increases, and vice versa more quickly in accepting the price decline. Though statistically the price linkage between marketing institutions closely enough. From these findings suggested that the farmers formed an institution that can access market information and capable of interrupting the marketing chain in order to become efficient.

Keywords: Integration market, coffee marketing chain.

INTRODUCTION

Farming plantation crops (especially coffee plant is currently dominated by peasant agriculture with few weaknesses, namely: (1) small business scale, (2) the location of the scattered farms, (3) the level of technology and management ability is low, (4) capital is weak, (5) has not access to markets and market structures. Tanggamus District is an area that still has the potential to develop agricultural production through the efforts *of good coffee crop extensification and intensification. When viewed from the establishment of Gross Regional Domestic Product (GDP) Tanggamus, it appears that the agricultural sector still shows a large contribution compared to other sectors, namely the average of 36.38 percent annually, and the production of plantation crops (especially the coffee) is the main food crops in this area

As economic activities in general, farming activities consist of the procurement activities of production facilities, production activities, and other activities that are not less important is marketing activities. Marketing is one key to the success of agribusiness. Agribusiness products that can not be marketed in a smooth and efficient course would be very distructing and even threatening the sustainability of agribusiness. The understanding of the farmers toward the importance of market development in general is still very limited. Limited knowledge, small assets of the farmers need toundesrtand of the formation of joint marketing patterns. The farmers are of course difficult to develop products to market if they do individually.

As production activities, marketing activities with the existence of efficiency, in terms of customer satisfaction and will meningkatankan a relatively equitable distribution of income for the producers and institutions related to business administration. Therefore this study aims to analyze the marketing flow patterns (channels trade regulations) which affect the marketing efficiency, elasticity of price transmission, fixation and market integration with the downstream product market level, producers (farmers) in coffee plantations Tanggamus.

Agricultural Marketing

Trading system in agricultural commodities has a rather complex activity, especially when compared with the results of business administration for industry and other raw materials, because the

process of concentration is more important and longer distribution channels and more intermediaries. Transportation facilities and storage should be provided adequately to face the charge-charge because of the seasonal maximum, although the facilities, such facilities over a certain period will not be used at all. Also available capital must also be seasonal (a seasonal basis). Production of agricultural products must be standardized and are usually chosen (Grades) and the necessary transportation and storage facilities to prevent damage to the products before consuming.

Production of agricultural products have characteristics or properties (Winardi, 1980), namely:

(a). The number and quality can change, (b) Agricultural production takes a lot of places and can be easily damaged, and (c) The characteristics of consumption, which is mostly inelsatis request.

Marketing Efficiency

Efficiency marketing is one of measurement in marketing system. According to Raju and Open (1982) measure the efficiency of marketing a commodity there are two, namely (1) operational efficiency, as reflected by the cost and marketing margins, and (2) price efficiency as reflected by the correlation coefficient of the price, as a result of the movement of products from one market into other markets.

Margin Marketing

George and King (1971) defines marketing margin as the difference between the price at the retail level of a product with a value of payments received by farmers as producers of a number of comparable products. With this understanding of the marketing margin includes all fees and keutungan marketing agencies ranging from farmers to end consumers.. More detail can be seen in the picture below.



Figure 1. Margin Marketing

Value of margin trading system that is too high, at one perpetrator is an indication of business administration business administration for a commodity system that is less reasonable, especially if the margin distribution business administration for not implemented fairly. If the situation is so, then the system since then has not run efficiently. Thus business administration systems efficient if the total cost and volume traded for the lowest cost and most economical per unit. So the marketing margin can be mathematically formulated as follows:

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Mi = Pr - Pf = bi +
$$\pi i$$
(1)

Where:

Mi = marketing margin on the i-th market Pr = price at the consumer level

Pf = price at the producer level

bi = marketing cost in the i-th market

 πi = advantage of the marketing to the i-th

n = number of markets in all these pemsaran.

Therefore, the total marketing margin is:

Marketing costs is due to the activities of marketing institutions in carrying out marketing functions such as: transport, storage and processing. The more activities performed by the intermediary institutions to deliver commodities from producers to consumers farmers as an intermediary as a factory, marketing baiaya will be higher. While the gains occurred because of the marketing agency marketing agency in carrying out the marketing function of a number of resources, such as capital, labor and investment to facilitate the marketing process.

Integration Market

Integration market shows how far the formation of the price of a commodity at an institutional level will be influenced by the price at the next institution. Market integration can be approximated by a simple regression method (regression coefficient of the price), the elasticity of price transmission, and methods of price correlation (correlation coefficient of the price).

According to expert opinions that the market structure of agricultural output is closer to the market situation of perfect competition (perfect competition). In such market structure changes in the level of producer prices will get a response that is consistent (almost identical) with changes in the price formation of the final consumer level.

In a perfectly competitive market structure of prices received by farmers to prices paid by final consumers is the tangent linear function (Adi Santika, 1990). Therefore it can be derived supply function respectively, namely supply at farm level producers and supply the final consumer level (the factory). When the shape of each of the supply function is a simple linear, then the correlation coefficient (r) can be known about the structure of agricultural markets in a commodity business administration systems and regulations.

A mathematical relationship between prices received by farmers at a price consumers willing to paid by intermediaries can be derived from supply function and demand faced by each farmer producers and consumers intermediaries (factory) as follows:

Pf = ao + a1 Q farmers supply function

Pr = bo + b1Q intermediary consumer demand function

In this case Q = number of commodities traded. Assuming the requested amount of commodities equal to the amount offered, then the relationship is obtained:

$$Pf = \frac{a_0 \underline{o}_1}{b_1} + \frac{a_1}{b_1} \operatorname{Pr}$$
$$Pf = A_0 + A_1 + A_1 \operatorname{Pr}$$

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This is almost similar to the opinion of George and King (1971), for the regression coefficient formula $A_1 = 1$ or $a_1 = b_1$ means that (Pf - Pr) = A_0 = margin commodity business administration. This condition also means that the prices paid by final consumers and the quantity supplied does not affect the margin trading system. Thus the market situation is called a perfectly competitive market structure. If the value of the formula $A_1 < 1$ or $a_1 < b_1$, this is an indicator that the market conditions are not in a state of perfect competition. But if the value of the formula $A_{1>} 1$ or $a_{1>} b_{1}$, this also shows that fluctuations in the level of producer prices is greater if we compare with price fluctuations that occur at the consumer level.

George and King (1971) further defines the notion of price elasticity as the ratio of relative changes in consumer prices relative to changes in the level of farmers (producers). Mathematically the proposed price transmission elasticity of George and King (1971) can be written:



If P_f is considered Hp and P_r is considered He, known as Hp = A₀ + A₁ He, then the elasticity of price transmission can be written as follows:

$$E = \frac{1}{A_1} x \frac{Hp}{He}$$

Meanwhile, when connected with a sense of elasticity at the farm level producers (Hp) and the elasticity at the retailer level (He), its elasticity can be written:

$$E_{tp} = \frac{\partial Q}{\partial H_{p}} = \frac{\partial Q}{\partial H_{p}} x \frac{Hp}{Q}; \frac{\partial Q}{\partial Hp} = \frac{\partial Q}{\partial He} x \frac{\partial He}{\partial Hp}$$

$$E_{tp} = \frac{\partial Q}{\partial He} x \frac{He}{Q} \qquad \text{So that} \qquad \frac{\partial Q}{\partial He} = \frac{E_{te} x \frac{Q}{He}}{\partial He}$$
With so:
$$E_{tp} = \frac{\partial Q}{\partial He} x \frac{\partial He}{\partial Hp} x \frac{Hp}{Q} = E_{tp} \frac{\partial He}{\partial Hp} x \frac{Hp}{He}$$

or:

$$E_{tp} = E_{te} x E_t$$

According to Timmer (1987), to see the relationship between market integration at farm level with at the factory level to the price formation can be measured by the Index of Market Connection (IMC). Index of Market Connection describes the contribution rates at the farmers market and a reference to the past to the formation of prices in consumer markets (manufacturers). Can be written:

$$IMC = \frac{(1+d_{1})}{d_{3}-d_{1}}$$

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MATERIALS AND METHODS

Data Collection Method

Primary data is taken directly into a structured respondents with a list of questions that have been prepared. Secondary data collected from relevant agencies.

The Method Determination to Research Location

For the purposes of marketing margin analysis, profitability ratios, analyzing patterns of distribution channels using primary data from farmers who bermukin in the research location. As for how to determine the location of the study and determination of sample size of farmers conducted by random cluster sampling method with following steps:

- a. Determining the two districts outside the area which has the largest coffee plant.
- b. From the selected districts will be selected rural study sites some 10 percent of the villages that have a coffee plant.
- c. After determining the villages sample and then determine the sample of people (farmers).

Method of Analysis

In this study used a descriptive and empirical analysis. Analysis includes:

- (1). Funnel marketing
- (2). Marketing Margins

(3). Elasticity of Price Transmission

Y = □□ + □ 1X		2)
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X = price level, consumers / users

Y = Price level of farmers

□ 1 = regression coefficient between X and Y

Can be written Transmission Price Elasticity formula as follows:

$$\varepsilon = \frac{dx}{dy} \cdot \frac{y}{x} \quad \text{or}$$

$$\varepsilon = \frac{1}{\beta_1} \cdot \frac{y}{x} \quad \dots \quad (3)$$

Criteria for measuring the elasticity of Transmission Rates by Hasym (1994), namely:

a. $\varepsilon = 1$, hence, the marketing margin is not affected the price of consumer level, so the market has been on an efficient marketing system.

b. $\varepsilon \leq 1$, then the marketing margin influenced the price of consumer level, and the commodities markets are not perfectly competitive (yet efficient).

c. $\varepsilon \ge$ 1then: the marketing margin is affected consumer level price, the market is perfectly competitive and inefficient marketing system.

(4). Market Integration

Testing for market integration is intended to measure the contribution of final consumer prices in the formation of prices at the farmers market measured by the Index of Market Connection (IMC) that was developed based on the model of Timmer (1987) using regression Linear Regression.

 $P_{jt} - P_{jt-1} = do + di (P_{jt-1} - P_{rt-1}) + d2 (P_{rt} - P_{rt-1}) + d3 P_{rt-1} + et \dots (4)$ Description:

P _{jt} = price level of coffee farmers in time to t

 P_{t} = The price of coffee at the consumer level last user at time t

Di = coefficient regression et = Standar error et = Standard error

From the regression results above will be used to measure the IMC using the formula:

 $IMC = \frac{(1+d1)}{(d3-d1)}$ (5)

When the IMC values close to 0 means the more integrated market in the short term, meaning supply and demand conditions in the commodity coffee market effectively transmitted to the farmers market and affect the prices at farmers' markets. Measurement of long-term integration is obtained from the regression coefficient that describes the changes in the market margin final consumers who can affect the price at the farmers market.

RESULTS AND DISCUSSION

Coffee Marketing Channel Analysis

Based on the results of research on coffee production centers in the district Tanggamus about coffee production, sales patterns, there are 2 (two), marketing patterns, namely:

a. Farmers sell to traders pengmpul village, the next village middlemen sell to the merchant district, and district traders selling directly to exporters

 Farmers sell direct to the merchant district, district traders sell directly next to exporters Schematically the two patterns on coffee marketing Tanggamus can be described as

follows:

a. The first marketing channel



Preview Channel Marketing on the commodity coffee Tanggamus

Coffee marketing channels in Tanggamus largely follow the pattern first, and only a small portion which follows the pattern of the second. At first marketing channel, farmers usually came alone to the village traders to sell coffee at a specified price that has been agreed upon. In this case the transport costs are usually borne by the farmers. Likewise, village traders bring your own coffee is the result of purchases from farmers to sell on the merchant district, all transport costs also will be borne by the village traders. Similarly, when the trader sells his coffee to exporters district, all transportation costs will be borne by the merchant district.

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Coffee purchasing system by the traders, also has a different mechanism between village traders with traders districts, even with the exporter. Traders village collectors generally received aid from the merchant district capital (capital given by the merchant district). Furthermore, village traders have necessity to sell his coffee to traders who give aid district capital. To farmers, rural traders often give advance (advance payment) to the farmers when the farmers are doing the processing (milling). It is intended that these farmers do not sell coffee to traders of other villages. Such practice is one strategy the village middlemen in overcoming competition among sellers.

As with the merchant district with the exporters, there is almost no direct relationship between the two. Even this is not unusual for traders district obtained a price that is less good compared with other regional districts merchants. This happened for several reasons, such as quality of coffee does not comply with purchasing standards determined by exporters, a high water content, the integrity level of low coffee beans, and so forth. The merchants districts when meeting these conditions do not have sufficient bargaining power, so resigned to this requirement. Not even the merchants of these districts are rarely obtained a postponement of payment until a specified period. If this condition occurs, then the effect will turn on the coffee market weakens homelands. Variations on such marketing mentioned above, will have an impact on differences in marketing costs. The differences in these costs especially at the cost of transportation and storage costs at each institution through which the business administration marketing channels.

The function of middlemen and traders village districts are still badly needed in the coffee marketing chain in Tanggamus. This is because the village is a hub middlemen between farmers and traders districts, as well as the liaison between the district traders village traders to wholesalers or exporters.

Price information is usually obtained by farmers from the village middlemen, and then will spread itself to other farmers. In Tanggamus farmer groups, particularly in the areas of coffee plantations have long been established, but these institutions only take care of coffee plants and not to the efforts improve the marketing system. This means that farmers in gaining more market information relating to merchants, traders both the village and district traders. In general the coffee marketing system in Tanggamus good enough, in the sense that if there is price fluctuation in the level of exporter, will immediately responded by merchants and traders below the district level, particularly if the price downturn.

Analysis of Equality Marketing Margin

Based on the results of several centers of research in the production of coffee in Tanggamus using middlemen respondents village, district traders obtained the results as follows: Of the 13 respondents who studied proved to have a margin between the purchase and sale price of an average of 5.17% (an average of USD 601.92 per kg). This means that the rural traders in setting the margin between sales purchasing and quite realistic (not high enough). Margins are also already include various costs incurred during activity to the purchase and sale of coffee.

On the other hand, marketing margins at the district level dealers in the district Tanggamus average of USD 750.00 per kg, or 6.22%. Judging from the amount of marketing margin rates at district level traders marketing margin slightly above the village traders. However on district level dealers generally bear greater costs compared with rural traders, such as storage costs, depreciation, and various user charges by local governments. All these costs must be taken into account in determining marketing margins by the merchant district.

While marketing margins at the level of the average exporter during the year 2008 amounted to USD 1158.00 per kg or 11.08%. Judging from the amount of the above figures it appears that marketing margins at the level of larger exporters of marketing margins at the level of

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district merchants. However, this figure is still considered appropriate because of the costs incurred by exporters is relatively higher compared with the merchant district level and village traders.

Of all the marketing channels through which trade coffee seems good at the village level traders, traders, sub districts, and exporters almost evenly and have a fair amount of numbers and not too high. This means that the information market has been running relatively well, it means if there is a change in the level of export prices, will be responded directly by the district traders, and price changes in the merchant district will be responded directly by the village traders.

Elasticity of Price Transmission

To determine whether there is influence of price changes in the level of exporters to price at farm level can be known from the regression coefficient, and to know the market structure prevailing in the level of the approach used by farmers and exporters of transmission relationship between price elasticity at the farm gate price at the consumer level intermediaries can be seen in the following table:

 Table 1. The result of Regression and Correlation Analysis of Commodity Price of Price Level Coffee

 Farmers, Traders Village Collectors (PPD), District Collectors and Traders (KDP)

Description	Regression Coeffic	cient	Correlation	t-count	F-count
Farmers - PPD	0.810	•	0,969 0.969	12,365	152,902
PPD - PPK	0,989		0,992 0.992	24,824	616,231
PPK - Exporters	1,200		0,990 0.990	22,084	487,684

From the results of statistical analysis, prediction models with the market structure between farmers / traders village, obtained by calculating the F value 152.902 and t-calculated value of 12.365 which means the market structure model is significant at $\dot{\alpha} = 0.05$ level. The coefficient of regression price, amounting to 0.810 which means that the price increase of USD 1.00 at the village level traders will lead to rising prices at farm level amounting to Rp 0.810, and vice versa. This condition indicates that the market structure among farmers with rural traders are imperfectly competitive market. Correlation between the price farmers with traders village of 0.969, meaning that there are positive and very close relationship between the price at the village level traders will quickly responded by farmers.

At the village level traders with traders district statistical results showed the results of the regression coefficient estimate of 0.989. This means that the price increase in the level of USD 1.00 merchant district will cause prices to the village level traders increased Rp 0.989, and vice versa. From the statistical analysis shows that the market structure that occurred between the villages with the district traders are imperfectly competitive market. The correlation coefficient between the price traders village with 0.992 means district there is a positive and very close relationship between the price at the merchant district with the village traders. This shows that in case of price changes at district level traders will quickly responded by village traders.

Similarly, the price linkage between the merchant districts to the prices in the exporter level shows a very close relationship tight. It is demonstrated by the correlation coefficient between the market price of merchant district with exporters of 0.990, which means there are positive and very tight, which means that very little happens price changes at the level of exporters will be responded quickly by the merchant district. This is also supported by statistical analysis showed the regression coefficient of 1.200, meaning that if there is an increase in the price level of USD 1.00 exporter will cause the price level rose by Rp merchant district 1.200. Based on the structural features of the

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market, then market that occurred between the exporter is a merchant district with imperfect competition markets. It is supported by statistical test by F test with a coefficient of 487.684, states that the market structure between the merchant district with the exporter is not perfectly competitive market is very significant at the 5 percent confidence level ($\alpha = 0.05$).

To determine whether there is any effect if there is a change in relative prices in the exporter level of prices at farm level, then used the analysis of price transmission as follows:

Table 2. Price Transmission Elasticity farmers with commodity prices Coffee Exporters in Tanggamus

Saluran Pemasaran Marketing Channels	Elastisitas Elasticity	
Petani – PPD Farmers - PPD PPD - PPK PPD - KDP PPK - Eksportir PPK - Exporters	1,33 1.33 1,09 1.09 0.03 0.03	
	0,93 0.93	

From the table above shows that the elasticity of price transmission at the level of farmers and village traders amounted to 1.33. This means that if there is a change in the price traders village level by 1 percent will have an impact on prices at the farm level is greater than 1 percent ceteris paribus. At the village level traders and merchant district of price transmission elasticity of 1.09, meaning that in case of price changes in the merchant district level by 1 percent would affect the price at the village level traders greater than 1 per cent ceteris paribus. While the elasticity of price transmission sub traders and exporters of 0.93, meaning if there is a change in the level of export prices of one per cent will affect the price at the merchant district of less than 1 percent ceteris paribus. Noting the value of price transmission elasticity district traders and exporters, so if there is an increase in the level of prices will cause prices to exporters in the merchant district level rise but more slowly. Similarly, on the contrary, if there is a decrease in the level of export prices, it will decrease the price at the merchant level district faster.

Analysis Market Integration

From the results of research using time series data (time series) obtained as follows:

Table 3. Coefficient Regression Coffee Commodities Market Integration in the Year 2008 Tanggamus

Variables	Coefficient	t-count	
Konstanta Constant	- 709.24	,	
PJt -1 – Prt -1 (difference Prices farmers and exporters price)	- 0.480	- 1.962	
Prt – Prt -1 (Price changes in export markets)	0.806	27.320	
Prt -1 (at market prices exporters t - 1)	0.043	0.04	
B ²	0.000	0.01	
- 2	0.993		
R ² Adjusted	0.997		
Fcount	452.486		

From the calculation on the value of R 2 of 0.993, which means that 99 percent of the price changes at farm level is determined by the price collector trader at village, district traders and exporters, and the rest is determined by other factors. Amount of influence on price changes for each institution in the coffee marketing channels in Tanggamus of coffee price changes at farm level is indicated by the regression coefficient of each independent variable. From the test results as a whole (F test) it appears that together of all the independent variables significantly influence the dependent variable at a significance level of 1 percent. (F -hitung = 452,486). (F-count = 452.486). The test of a partial variable price changes less influential exporters to price changes at farm level.

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Integrated Market Analysis ...

This is apparently a result of a long marketing chain, so that price changes in the level of exporters will not directly affect the price changes at farm level.

Furthermore, to see the level of coffee in the district market integration used measurement Tanggamus Index of Market Connection (IMC). From the results of calculations using the above regression coefficient obtained results as follows: $d_1 = -0.480$, $d_2 = 0.806$; and $d_3 = 0$, 0432, so that = 0,99 This figure shows that the price level farmers to exporters at prices less integrated because the further away from zero. The value of $d_2 = 0.806$ indicates the long term the market is less integrated. This condition indicates that, in reality, farmers are always late in accepting the price increases more quickly and always receive a price reduction.

Results of correlation analysis between the price farmers with exporters, it is true that there is a positive relationship between the two marketing agencies, which is indicated by a coefficient r = 0.735. However, this association has not been efficient because if there is an increase in market price of coffee, then trader be the first to receive increase, while the farmer is always too late to accept the price increase. If there is lowering the price, then the farmer be the first to receive the impairment and only later in naturally by the merchants. This condition applies in both the short and long term, let alone coffee harvest has a long history (at least once a year).

CONCLUSIONS

Conclusions

- 1. In the commodity coffee market in the District there are two types channels Tanggamus marketing, namely: the type of a farmer sells to the village traders, village traders to sell to the merchant district, and district traders to sell to exporters. The second type, the farmer sells to the village traders, and village traders sell directly to exporters.
- 2. Marketing margins between village traders and wholesalers are relatively the same district with a margin rate of exporters. This shows that relative market information has been running perfectly
- 3. Coffee System in District Tanggamus marketing relatively efficient, as evidenced by the weak linkages between farmers and the price level price level exporter. It is presumed by the marketing chain is still long to go through, so many expenses that must be paid by each institution will eventually be charged to farmers as early producers.
- 4. Coffee market in Tanggamus yet perfectly integrated, this proved to farmers always experiencing delays in receiving price increases and is always quicker to accept the price reduction

Suggestions

- 1. To make the farmers earn a decent sale price, the necessary efforts to improve the marketing system is to break the marketing chain. For it is necessary to establish an institution which collects all the coffee farmers and exporters directly below the target
- 2. It is necessary to guide the coffee farmers in particular about the marketing system, so information about the market as well and quickly accepted by peasants

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