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THE COFFEE VALUE CHAIN: A COMPARATIVE ANALYSIS OF TWO COFFEE CHAINS IN LAMPUNG PROVINCE

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Abstract

This study examines and compares two green coffee marketing chain in Lampung Province are individually and collectively. Basically, the question being asked is whether the collective marketing chain can offer marketing actors and farmers a value-added better? All respondents are members of a group of farmers, and concentrated on a small scale producers in coffee producing areas of West Lampung regency. Information was gathered through interviews with farmers, local traders, managers of the group, and representatives of companies/exporters. The results showed that in the case of the coffee marketing chain, many actors are involved, namely traders, wholesalers, group, combined group, coffee processing enterprises and exporters which raises a lot of the cost of handling during the marketing process. Two marketing chain (individual and collective) were analyzed with analysis of the value chain. Although the marketing chain collectively provide prices and better value added for producers and actors involved, but because of the quality requirements of the company/exporters causing farmers besides sell to the group also sold individually to collectors. In fact, because of high investment in equipment, technology and standard requirements that must be made by small-scale producers, payments are delayed for three days and the factor of emotional closeness and attachment to the loan capital brings farmers selling coffee beans in bulk form to collectors.
***Keywords**: marketing chain, value chain, individual channels, collective channels, coffee beans*

Introduction

Indonesia is the fourth-largest coffee producer world after Brazil, Vietnam and Colombia, and from the total production of coffee beans, about 67% of coffee beans exported and the remaining (33%) to meet domestic demand. Indonesian exports are dominated by coffee beans of Lampung province with a contribution to the national coffee export volume in 2013 reached more than 70% (AEKI, 2014), and West Lampung is the largest contributor to the Lampung province with a contribution to production in 2014 reached 43.54% (Disbun Lampung Barat, 2015). Realization and

contribution of the export volume of coffee beans from Lampung to national export volume of coffee beans for six years can be seen in Table 1 and Figure 1.

Table 1. Actual and Contributions Volume Export Coffee Beans Lampung province Years 2010-2015

No.	Years	Realization Lampung Export Volume (Tons)	Realization of Volume Exports National (Ton)	Contribution (%)
1.	2010	253.739,974	432.780,000	58,63
2.	2011	196.526,876	346.091,000	56,78
3.	2012	292.467,270	447.064,000	65,42
4.	2013	372.596,653	532.157,000	70,02
5.	2014	223.835,600	382.775,000	58,48
6.	2015	291.517,146	500.675,000	58,22

Source: Direktorat Ekspor Tanaman Perkebunan Kementrian Perdagangan, 2016 (data processing)

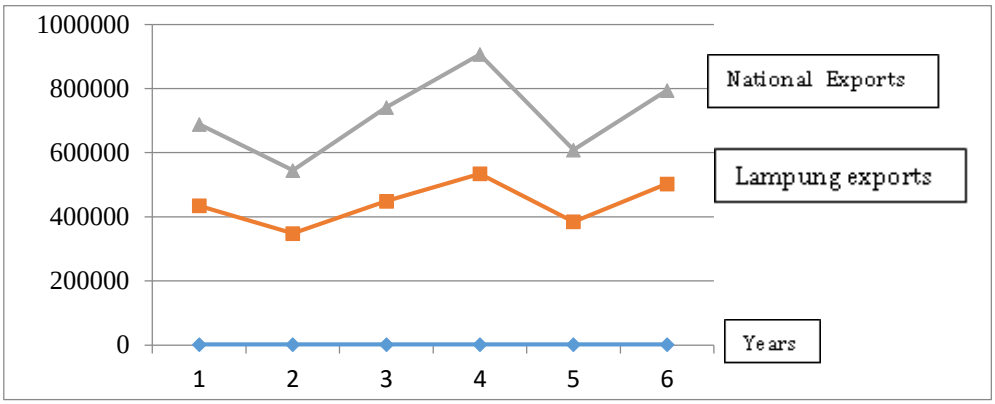

Figure 1. Actual Export Volume of Lampung Coffee Beans and the National Year 2010-2015

Table 1 and Figure 1 shows that over the last six years the average export volume of Lampung coffee beans reached 271,780.586 tonnes and contributed an average of 61.26% of the national export of coffee beans, with a positive growth of 6.3 percent per year. Although the export of coffee beans tending positive growth but not enough to be able to lift the welfare of farmers, because most farmers in Lampung Province dominated by small farmers with land ownership is relatively limited between 0.5-2 ha; the average productivity of less than 1 tonne / ha / year; and most of the production has a relatively low quality (grade 5 and 6) that is sold in the form of random with a relatively low price (Fitriani, Agus and Noer, 2008). As revealed by Santoso (1987 in Arifin, 2012) that the main problems existing in the coffee plantations, the first results of the relatively low productivity and quality of production are less qualified to be exported.

Increasing the value-added coffee beans through the handling of production that ensure the quality and quality control are synergistic and sustainable to improve market access is needed. In this case the farmer does not have the ability to do it individually. Therefore, it needs organization for farmers to cooperate with exporters and coffee processing company through a partnership. The partnership between the farmers and the company can not directly be done but requires collective action through farmer organizations to bridge in negotiations on price, quality, and the other (Best *et. al*., 2005; Chirwa *et. al*., 2005). The strategic partnership between farmers' organizations and companies are expected to improve the quality, competitiveness and marketing coverage for farmers.

The partnership between the farmers of coffee beans with a company that has existed in Lampung Province, particularly in the West Lampung initiated in 1990 through the cooperative.

Cooperation is done with a series of training programs are good ways of farming with the aim of improving the quality and productivity of coffee and coffee bean processing by introducing the best techniques in post-harvest. Cooperation in marketing to the fair trade, the ideal conditions are not simply be created from the concept of free trade, but these need to be non-economic form of step institutional reform at the domestic level and the most important is the empowerment of economic institutions of farmers (Zakaria, 2009). A mutually beneficial partnership and create mutual benefits between companies and farmers through the group can realize the continuity in the supply of coffee beans for the company and can provide better prices for farmers.

Based on the identification that has been described, the problem formulated in this study is: How does the marketing value chain of coffee beans (individual and collective) in Lampung and whether collective marketing chain can offer producers and actors price and value-added marketing better?

Methods:

The value chain analysis was conducted to determine the performance of marketing of coffee beans both individually and collectively, with indicators covering the cost of production inputs, labor, procurement, and storage. Margin calculation as well as the value added that results from revenue minus the cost of inputs as a financial indicator that shows the amount of rewards welfare for labor and management to generate value added of coffee beans. Value added is the result of revenue minus costs of intermediate level as a financial indicator of the amount of reward the welfare of labor and management in generating value added off coffee beans. Profit is net income (revenue minus total costs) from the work done every actor in the coffee bean marketing system.

Revenues or sales value (price x volume) obtained a value chain is part of the value added of the actors in the marketing chain of coffee beans, revenue and operational services produced by the perpetrator who is not a core part of the value chain (Perdana and Purwanto, 2008). Components of total value generated from value chain is:

(Value added) = (Total of Revenue) – (The value of goods Intermediate level)

The principle of calculation can be applied to any part of the value chain as seemingly in Figure 2, which shows how the value added is distributed between each section in the chain and between the actors in the chain as well as external actors. Summation blue box indicates that the value added is equal to the value added is spent. Revenues or profits can only increase the share of value added, a large division of the added value does not automatically declare a great income. However, when viewed in a macro, value added is a more important parameter than the income of the chain actors. The added value and benefits gained by using the value chain analysis of the value added and benefits for one season equivalent of one kilogram of coffee beans.

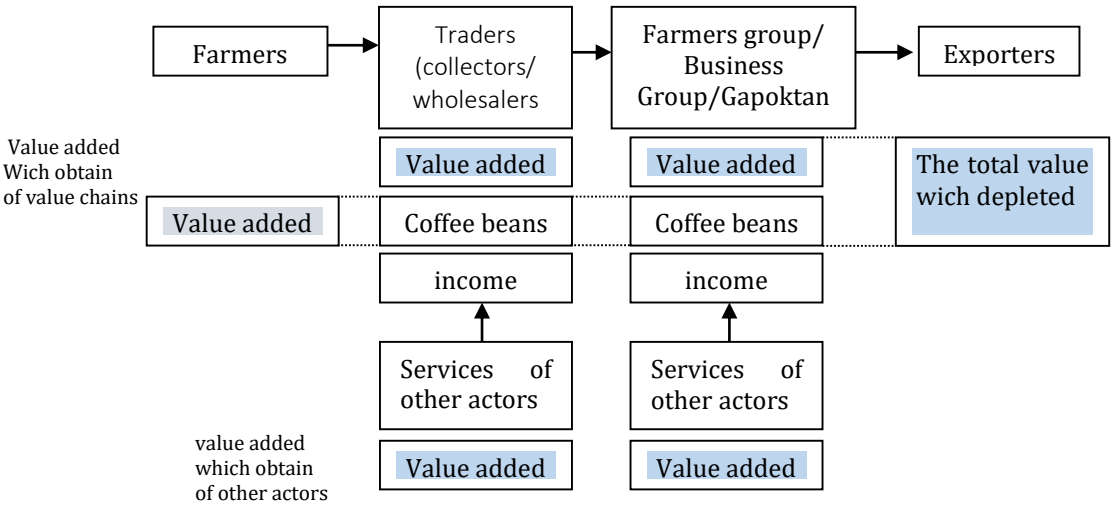

Figure 2. The concept of Value Added Distribution in the Value Chain
(Source: adopted from Noor, 2011)

Results and Discussion:

Marketing Channels of Coffee Beans in Lampung Province

Based on the mapping conducted in the study area identified several actors in the marketing chain of coffee beans consisting of farmers, collectors, wholesalers, farmers' groups/cooperatives, Business Group (KUB), Gapoktan, and exporters. In simple terms, the relationship between actors is illustrated in Figure 3. The linkage between actors are connected through the flow of products, the flow of money and flow of information. The flow of products in the form of a network of coffee beans that begins in the form of production inputs at the farm level, wet coffee, and then a coffee beans flowing from upstream to downstream sub-sector.

The flow of money is a transaction that occurs between actors, from exporters as consumers of coffee beans, Gapoktan/KUB, farmer groups/cooperatives, wholesalers, collectors, and farmers. The flow of products and money can work well if the flow of information between actors are good. The information flow is abstract (intangible) as a basis for a decision on the size of the material flow and the flow of money that exist in the network. Marketing channels coffee beans that can be identified from this study consisted of:

1. Farmers (F) – Collectors (C) – Exsporters (E)
2. Farmers (F) – Collectors (C) – Wholesalers (W) – Exsporters (E)
3. Farmers (F) – Wholesalers (W) – Exsporters (E)
4. Farmers (F) – Collectors (C) – Business Group (BG) – Exsporters (E)
5. Farmers (F) – Farmers Group (FG) – Business Group (BG) – Exsporters (E)
6. Farmers (F) – Farmers Group (FG) – Exsporters (E)
7. Farmers (F) – Business Group (BG) – Exsporters (E)
8. Farmers (F) – Farmers Group (FG) – Gapoktan (G) – Exsporters (E)

There are two marketing systems run by coffee producers in Lampung is to conduct direct sales of bulk coffee to collectors/local middlemen/intermediaries/ wholesalers (channels 1, 2, and 3). Sales collectively through farmer organizations (farmer groups cooperatives business

groups/Gapoktan) is channel 4, 5, 6, 7, and 8 are called channel partnerships based on grade requirements. Either through traditional channels as well as channel partnerships coffee is sold in the form of coffee beans (green beans) and the prevailing price at the farm level is the base price of the formulation results in international prices minus the costs arising from the marketing process. Farmers allowed to sell coffee beans both individually and collectively.

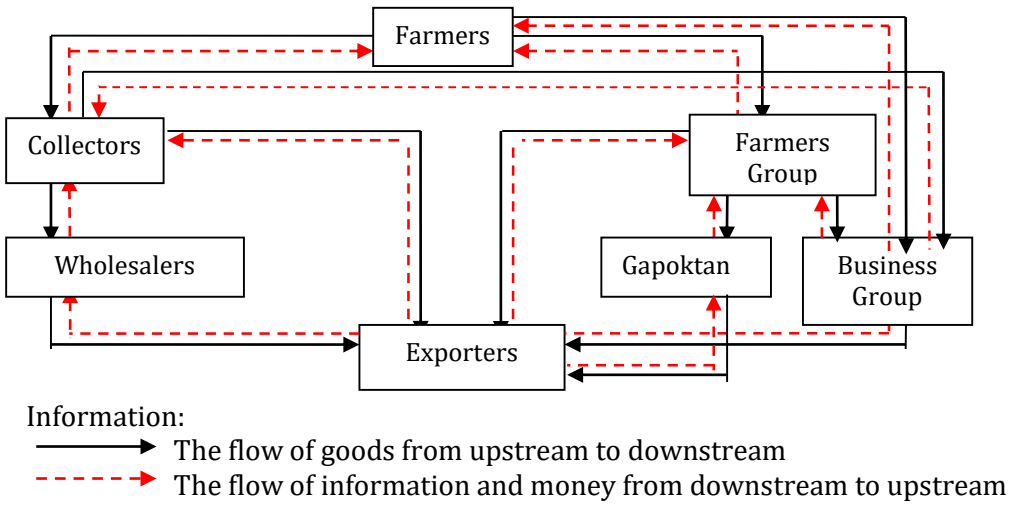

Figure 3. Marketing Channel off Coffee Beans in Lampung Province

Marketing Value Chain off Coffee Beans in Lampung Province

Marketing value chain of coffee beans was analyzed with value added received by actors on the price of coffee beans than 8 (eight) green coffee marketing channels was identified. The units used in the analysis of the value added is equivalent to one kilogram of coffee beans. This means that the number of physical materials and raw materials is calculated and converted to an equivalent value to produce one kilogram of coffee beans.

Aspects of fairness in marketing channels of coffee beans can be seen from the distribution of value-added each actors and the total value added of actors, the proportion of value added received by actors on the price of coffee beans, as well as the advantages and total profits each actors, it can be used as a reference for determining which channel provides the best value.

Distribution of value added received by actors on the price of coffee beans

Most of the value added of coffee marketing channels is for the actors who involved directly in the marketing channels (84.75% - 86.51%) while the rest (13.5% -15.3%) is for actors which not directly involved in the marketing channels of coffee beans (Figure 4). When viewed from the distribution of value-added each actor and a total of value added of actors, the greatest value added obtained by the actors on the channel to 7 while the lowest on channel 1. The analysis showed that the value added is the largest recipient of farmers, which is 73% -82.5 % and the smallest is collectors of 2.3%.

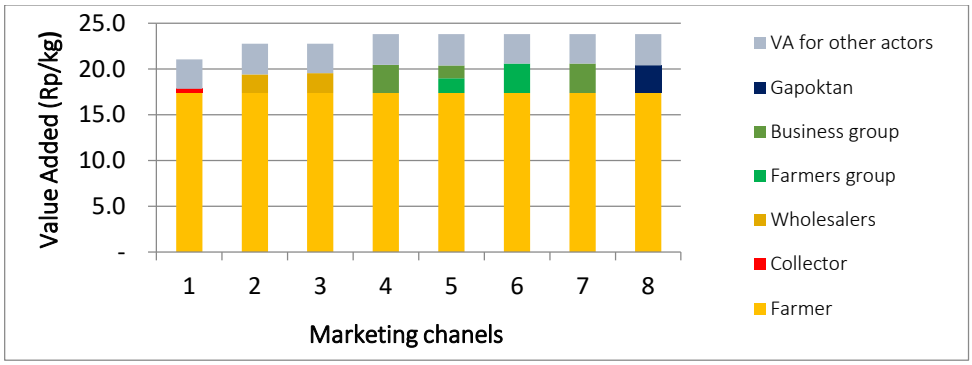

Figure 4. Distribution of value added received by actors on the price of coffee beans

Fair or not the value added was gains for each actors, not only based on the proportion of the value added but also in comparison with the production cycle (business cycle), a cycle of cash flow and investments are excluded. Based on these indicators are very reasonable and fair when the farmers get the greatest value added. The value added of the activity of farmers obtained cultivation of coffee with maintenance and post-harvest handling labor costs and internal input and requires a long time to wait for harvest time ranged from 5 to 6 months, and only one time in a year.

Proportion of Value Added for Each Actors against to Value Added Total and Total Benefits for Each Actors on the Marketing Channel of Coffee Beans in Lampung Province

The results of comparative analysis of the value added received by each actors in green coffee marketing channels either individually or collectively can be seen in Figure 5. The value added and the largest proportion of value added to the actors on channel 7; and the lowest on channel 1.

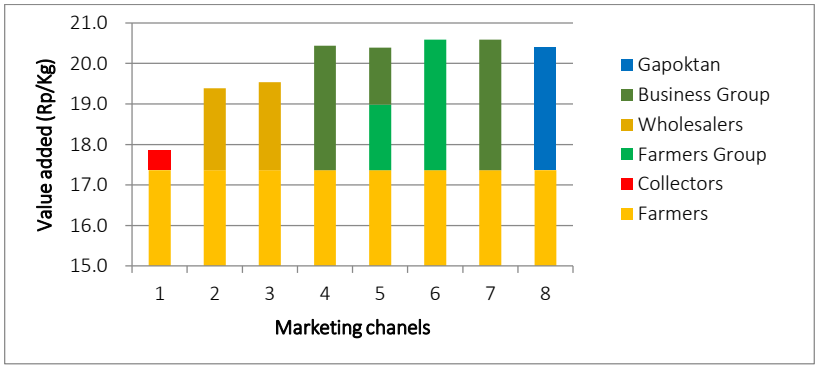

Figure 5. Proportion of Value Added Each Actors in Marketing Channels of Coffee Beans

The result of the comparison profits earned every actor with a total profit on each marketing channel can be seen in Figure 6. The total benefit all actors get coffee beans from farmers in the channel 7 is the highest compared to other channels and the lowest is the channel 1. Proportion of farmers' profits ranged between 79.82% -96.59%. The smallest gain obtained by collectors on channel 1 of 3.41%.

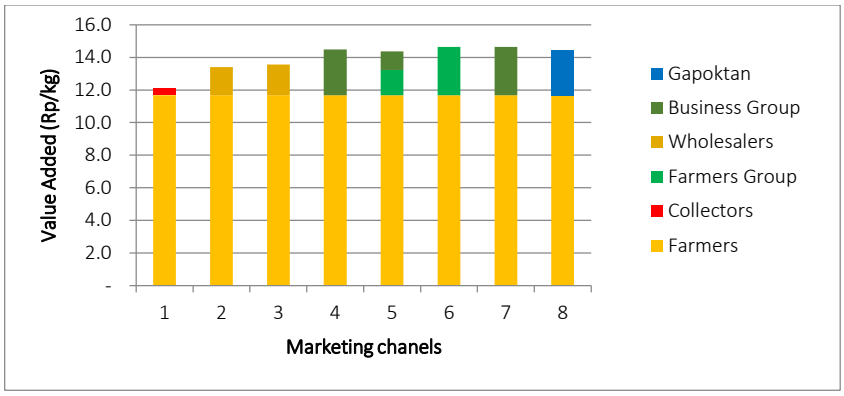

Figure 6. Proportion Profits Each actors in Marketing Channels of Coffee Beans

Based on the analysis of the value chain, it was found that the marketing channels collectively have value added and total profits for the actors better than the individual channel. Channel 7 is the highest value added for farmers and marketing actors, where the coffee beans from farmers sold collectively through KUB then to the exporter. The value enjoyed by every actor in marketing channels is an accelerator to increase the income of the actors involved in the marketing of coffee beans and to encourage an increase in the welfare of farmers.

Organization producer in Lampung, both farmers group, Business Group (KUB), and Gapoktan is a partnership of institutional mediation in order to help increase the income of farmers through increased efsiensi on marketing system. The group is composed of coffee producer organizations form individual farmers or a combination of several farmer groups. The group perform the function for the economic interests of the farmer members by providing services that support agricultural activities, such as bargaining with customers, organize input and other technical assistance (Bijman and Wollni, 2008).

The sample group in this research has made coordination function resulting from farmer linkages with buyers (exporters) to shorten the marketing chain between producers and exporters. Coffee collection efforts by groups in addition directly with individual members of the group, also did a coffee bean collection effort of collecting village built by the group. Coaching is done to a collector for the village which has had an emotional closeness with farmers and live in the same village, by providing training on a regular basis through informal meetings between managers with collectors. The group gives credence to collectors to perform the functions of an intermediary (broker) between farmers and groups, dissemination of information relating to prices, as well as establish informal cooperation directly to farmers to maintain the continuity of supply of coffee beans to the group.

The lack of technology and sorting equipment owned by farmers, causing farmers hardship for sorting and grading of coffee beans are produced. If the farmer sells the group collectively through the process of handling the sorting will be done by the group, and farmers receive payments in proportion to the classification of coffee beans sold at a price which is in accordance with the standards set by the average price of exporters is Rp 23,800/kg. The group, not only serves as a mediator between farmers and the company but also has the economic function of improving the welfare of farmers through increased value-added coffee beans to get a better price. Besides the direct effect on the price of coffee beans were acceptable, improving the welfare of farmers who are members of the benefits obtained by the group of active members who sells coffee beans to the group. When farmers sell to collectors (collectors and wholesalers), the parties do grading is an exporter that prices received by farmers is the price of coffee at random (moisture content 20%) minus the costs incurred by collectors, with the calculation as follows:
The water content of 20% - 14% water content = 6%,

then: 100% - 6% = 94% - random (2%) = 92%
If the average price exporter base in 2016 was Rp. 23,800/kg,
then the price of coffee beans: Rp. 23,800/ kg x 92% = Rp. 21,896/ kg

Although marketing collectively provide value added and a better price than the individual marketing, but for some reason farmers also do marketing individually. In addition because of the lack of technology, another factor is the immediate need for cash led to farmers prefer to sell coffee beans to collectors who were accomplices of exporters and wholesalers or directly to wholesalers. For groups that have good financial capability can make sales breaking up and pay cash to farmers not so for groups that do not have the financial ability, payments to farmers would be delayed for three days. Other factors such as aspects of emotional closeness and mutual relationship between the farmer and the mediator (such as venture capital loans) into a binder so that farmers do not sell to the group.

Conclusion:

Collective Marketing provide prices and better value added to farmers compared to individual marketing, but for some reason farmers sell individually to collectors because:

1. Quality of the coffee beans are produced mostly less meet the requirements of most of the coffee beans grade are produced is 5—6, while the grade for export and company of processing coffee is grade 1—4.
2. The lack of equipment owned by farmers for sorters cause farmers are not able to do the sorting to separate the coffee beans according to the requirements.
3. The immediate need for cash will cause farmers to sell individually for receipt of cash collectively delayed for three days.
4. Factors emotional closeness and mutual relationship between the farmer and the mediator (such as venture capital loans) into a binder.

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