Do Farmers Higher Benefit and Value Added from Collective Marketing?
(The Case of Coffee Marketing in Lampung Province Indonesia)

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Abstract—The global economy and the paradoxical phenomenon of coffee caused by asymmetry information between producers and consumers, so that the market is not enough to be a price controller. The phenomenon requires a solid institutional role at the producer level to cope with market imperfections. This paper attempts to analyze whether collective marketing can provide higher prices and added value to farmers. All respondents are members of farmer groups who do marketing both individually and collectively. The information was gathered through interviews with farmers, local traders, managers of farmers group, and representatives of companies/exporters. Two marketing chains (individual and collective) were analyzed with value chain analysis. The results showed that in the case of the coffee marketing chain, many actors were involved such as traders, wholesalers, farmer groups, federate farmer groups, and exporters. The involvement of many actors in this marketing chain raised the cost of handling during the marketing process. Based on the results of the value chain analysis found that the marketing chain collectively provide better prices and value added for producers and actors involved.

Keywords—collective marketing, value added, prices of coffee bean

I. INTRODUCTION

Lampung Province is one of the potential coffee producers, with the contribution of export volume of Lampung coffee exports in 2013 reaching more than 70% [1]. Coffee plants cultivated in Lampung Province are Robusta coffee with an area of 162,954 ha, production of 131,501 tons, and productivity of 965 kg/hectare. Coffee farming is dominated by small farmers with land ownership between 0.5—2 hectare; the average productivity less than 1 ton/hectare/year [2], and involving 230,760 heads of households, marketed in the form of coffee beans for export purposes [3].

Coffee seed sales are mostly still in the form of raw materials, and sold to local collectors/brokers/wholesalers, individually and sold to farmer groups/federate farmer groups/joint business groups, collectively. Both through individual channels and collective coffee are sold in the form of green beans. The first channel is known as the traditional channel and the second channel is a partnership channel because farmers through farmers' organizations sell directly to coffee exporters through cooperative contracts. Thus, there are two options for farmers whether selling individually to local collectors/brokers/wholesalers or collectively through farmer organizations (groups/federate farmer groups/joint business groups).

Economic globalization and trade liberalization as well as the implementation of the Asean Economic Community (MEA) by the end of 2015 encourage competition in an increasingly competitive integrated commodity market. This requires that business actors in the agricultural sector can compete due to market changes that occur, such as access and market information. How to improve competitiveness through increasing value added, handling results that ensure quality, improving the quality of human resources and increasing access to information, especially by small scale farmers.

Farmer organizations can serve as a tool for solving some of the problems faced by market changes faced by changes in agricultural markets and global trade patterns, especially by small-scale farmers, such as lack of market information, access to credit and technical assistance [4]. Increasing market access for farmers through producer farming organizations can lead to increased income and food security, more opportunities for rural employment, and sustainable agricultural growth [5,6].

Marketing is collectively carried out by farmers through farmer organizations (farmer groups/federate farmer groups/joint business groups) in the hope that if sold collectively farmers can receive a better price. Collective action is defined as voluntary action taken by individuals, who invest time and money to pursue common goals [7]. Matin found a positive effect of collective action of farmer groups and farmer marketing organizations (cooperatives) as an important catalyst for innovation adoption through efficient information flow [8]. A related proposition is that collective action of farmers and marketing partnerships (through informal associations or groups) can improve performance such as market channels and improve marketing efficiency [9]. It is therefore necessary to examine whether the collective action provide better price, profit and value added for farmers?
This study explores the marketing performance of coffee beans both individually and collectively to assess whether collective marketing is capable of providing higher profit and value added to farmers.

II. METHODS

First are identified the marketing channels and activities that can add value of coffee beans by every actor in the marketing channels of both individual and collective. Next is a value chain analysis, an approach to see the process of increasing or creating value added in a supply chain [10]. A value chain is formed when all actors in the chain work in such a way as to maximize value creation along the chain. The definition of the value chain is based on a broad approach looking at complex activities carried out by various actors (major producers, processors, traders, service providers) to bring raw materials through a chain to the final product being sold [11].

Value added is the result of revenue minus middle-level costs as a financial indicator showing the amount of welfare reward for labor and management payments in generating added value of coffee beans. Profits are net income (revenue minus total cost) of the business performed by each actor in the coffee bean marketing system. Before conducting the value chain analysis, it was determined that the coffee bean market are exporter and the entry point of the analysis is the farmer, and the actors involved in the marketing chain of coffee beans from the point of producer to exporter. Value Chain Analysis (VCA) is one of the concepts of how to increase activity and maximize product value in supply chain [12]. Additional activities within an organization are also included in the general category of the value chain. Value chain analysis refers to what the price and how long to prepare or present the goods for sale. To build a good value chain should be conditioned good supply chain.

Value added of a commodity by Kawagoe et al. is to increase the value of a commodity because through processing, transportation or storage in a production [13]. It can be as simple as maintaining ownership of the product through the storage process in the warehouse. value added is the difference between the value of the product and the value of input costs, excluding labor costs. While the margin is the difference between the value of the product with the price of raw materials alone and includes the components of production factors used are labor, other inputs and wage of employers.

Revenues or sales value (price x volume) obtained in a value chain was part of the value added of the actors in the marketing chain of coffee beans. The revenue and operational services were produced by the perpetrator who is not a core part of the value chain. The components of total value generated from value chain are:

\[ \text{Value added} = \text{Total of Revenue} - \text{The value of Intermediate\_Level goods} \]  

The added value and benefits gained by using the value chain analysis were the value added and benefits for one season which is equivalent to one kilogram of coffee beans.

III. RESULTS AND DISCUSSION

There are two marketing systems run by coffee producers in Lampung. The first is by conducting direct sales of bulk coffee to collectors/local middlemen/intermediaries/wholesalers (channels 1, 2, and 3) (traditional channel). The second one is collective sales through farmer organizations (farmer groups / cooperatives business groups/Gapoktan) (channels 4, 5, 6, 7, and 8) which is also known as partnership channel.

Collective sales through farmer groups can only be conducted if coffee bean quality satisfies the minimum grade required. Selling coffee beans by farmers either through traditional channel or partnerships channel should be in the form of green coffee beans. In addition, the prevailing price of coffee bean at the farm level is the international price minus the costs arising from the marketing process. Farmers have a free choice of selling either individually or collectively. Marketing channels of coffee beans that can be identified from this study consist of:

- Farmers (F) – Collectors (C) – Exsporters (E)
- Farmers (F) – Collectors (C) – Wholesalers (W) – Exsporters (E)
- Farmers (F) – Wholesalers (W) – Exsporters (E)
- Farmers (F) – Collectors (C) – Joint Business Group (JBG) – Exsporters (E)
- Farmers (F) – Farmers Group (FG) – Business Group (JBG) – Exsporters (E)
- Farmers (F) – Farmers Group (FG) – Exsporters (E)
- Farmers (F) – Joint Business Group (JBG) – Exsporters (E)
- Farmers (F) – Farmers Group (FG) – Federate Farmers Group (FFG) – Exsporters (E)

The value added analysis received by the actors on the price of coffee beans is done by comparing 8 (eight) marketing channels of coffee beans in West Lampung. The unit used in value-added analysis is equivalent to one kilogram of bean coffee. This means that the amount of physical material and raw material is calculated and converted to an equivalent value to produce one kilogram of coffee beans.

Comparisons to individual and collective marketing channels are done to determine which channels offer added value and higher returns for actors directly involved in marketing channels. The assessment aspect is seen from comparison and distribution of added value, total profit, and total added value of each marketing channel identified ie channel 1 through 8.

Based on the results of the analysis it is found that all channels of marketing collectively ie channels 4, 5, 6, 7, and 8 have total profits (figure 2) and total value added (figure 3) with higher values than channels individuals are channel 1, 2, and 3. Total profit on channel 7 is IDR14,066.7/kg is highest and on channel 1 is IDR12,095.8/kg is the lowest. The total value added on the 6th and 7th channels of IDR20,017.7/kg is...
The highest and the 1st channel of IDR17,846,9/kg is the owest. This added value and profit is an added value and profit for a season of kilogram equivalent of coffee beans. Thus it can be said that selling together for coffee beans will be better than their own, meaning that farmers are better off selling coffee collectively than selling individually.

Fig. 1. Proportion of benefits of each actor on the marketing channel of coffee bean.

In addition, marketing collectively also provides a higher price than individual marketing. The price received by farmers if selling individually and collectively at different levels of marketing actors can be seen in Table 1.

TABLE I. THE AVERAGE PRICE OF COFFEE BEANS AT DIFFERENT LEVELS OF COFFEE BEAN MARKETING IN WEST LAMPUNG

| Actors | Collectors | Wholesalers | FG | JBG | FFG | Exp |
|--------|------------|-------------|----|-----|-----|-----|
| contract | no | no | Yes | yes | yes | yes |
| Price (IDR/kg) | 21,06 | 22,75 | 22,7 | 23,2 | 23,1 | 23,8 |

The organization of producer in Lampung (farmer groups, Joint Business Group (JBG), or Faderate farmer groups (FFG) is a partnership of institutional mediation in order to help to increase the income of farmers through increased efficiency on marketing system. The group is composed of coffee producer organizations of individual farmers or several farmer groups. The groups perform the function for the economic interests of the farmer members by providing services that support agricultural activities, such as bargaining with customers, organizing input and doing other technical assistances [4].

The sample group in this research has made a coordination function resulting from farmer linkages with buyers (exporters) to shorten the marketing chain between producers and exporters. 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 establishing informal cooperation directly to farmers to maintain the continuity of supply of coffee beans to the group.

IV. CONCLUSION

- Marketing collectively provides higher profit and added value than individual marketing.
- Increased farmer earnings macro can be developed through co-operation between farmer groups and entrepreneurs (exporters) in the form of marketing contracts so there is a higher price guarantee for farmers.

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