ABSTRACT

Sigi Regency’s efforts in achieving the goals of improving welfare and increasing work competence of human resources, especially hybrid corn farmers in Rarampadende Village, Dolo Barat District, are through the application of the use of a moisture tester (Moisture Tester), which is a full-time activity for measuring corn moisture content. From the beginning, the average moisture content of 28-30% when harvested to 14% moisture content. How is the economic influence of farmers on the marketing of dry-shelled corn with a moisture content of 14% in Rarampadende Village, West Dolo District, Sigi Regency, and how is the economic influence in the use of the Moisture Tester on dry-shelled corn in Rarampadende Village, West Dolo District, Sigi Regency. Based on the description of the discussion above, it can be concluded that: The structure of the corn market that takes place in Central Sulawesi Province is not yet efficient, and the market structure that is formed leads to an imperfect competition market (oligopsony). And wholesalers as the dominant marketing agency in determining the price of corn. This is due to collaboration in price formation between brokers and wholesalers, one of the causes of price domination by wholesalers.

Keywords – Dry Pipilan; Water Content 14%; System Moisture Tester

INTRODUCTION

Today the agricultural sector is an integral part of national development. This sector has a central meaning because of its very strategic role in laying the basic foundation of the Indonesian economy. This is in line with the targets to be achieved in today’s agricultural development, namely increasing the production of food crops towards self-sufficiency, including secondary crops and vegetables (1).

The aim of the development of food crop agriculture is to realize advanced, efficient, and resilient agriculture, which is reflected in the vision of agricultural development, namely the realization of a prosperous society, especially the farming community, through
the development of competitive, democratic, sustainable and decentralized agribusiness systems and businesses. In this regard, agricultural development's mission is to realize Tangguh agriculture for food security stability, increase added value and competitiveness of agricultural products, and increase farmer welfare. Efforts made by the government through the Ministry of Agriculture to realize agriculture are optimizing the agricultural reform agenda by positioning the agricultural sector as a driving force for the national economy so that it can be independent, prosperous, and just in carrying out its farming activities (2).

In the regional development program, it has been formulated that development is directed at increasing the income and standard of living of farmers, expanding employment and business opportunities, as well as filling and expanding advanced, efficient, and resilient markets so that they are increasingly able to diversify results, improve the quality and degree of production processing and support development region (3).

Based on the formulation of the agricultural development planning deliberation, the direction of agricultural development policy is through three programs, namely (1) the Food Security Improvement Program, (2) the Agribusiness Development Program, and (3) the farmer welfare improvement program (4). Operationalizing programs to increase food security that is sufficient, safe, and halal in every area at any time and anticipated so that food riots will not occur. The development of the food crop sub-sector will be focused on accelerating productivity increases in areas where productivity levels are still low (5). In this regard, the action to strengthen food security is planned by carrying out sustainable rice self-sufficiency, self-sufficiency in corn, beef, and soybeans in 2015 (Word from the Vice President (Vice President) Jusuf Kalla (JK) initiated the signing of a Circular (SE) specifically for achieving food self-sufficiency by the Minister Amran Sulaeman’s Farm.

In terms of production, corn often competes with other foods in the use of land resources, especially on dry land. Thus, it can be said that, directly or indirectly, the development of corn prices will also affect the prices of other commodities in general or at least for some food crop commodities.

The main problems faced in agricultural development, especially in a pandemic (Covid-19), Indonesia generally experiences many problems that impact the economy and jobs. Many impact various fields, especially food crops like dry-shelled corn. Marketing is influencing the selling price and expectations in strategic environmental conditions to increase production and productivity, including decreasing land and water resources, low capital, and low technology adoption (6). The quality of agricultural workers is generally still dominant with elementary school education and below, so they have not been able to adapt and apply advanced technology, and have an impact on the low efficiency of farming and the quality of the products produced (7).

Sigi Regency has special specifications compared to other districts: plains, hills, and mountains as well as protected forests, as is the case with other areas that have public waters in the form of oceans as a source of marine fish income. However, this Regency can contribute to the progress of its area sourced from freshwater that is sourced from fresh
water. Produced from public waters (lakes) and fish from aquaculture are abundant and have the potential to be developed. Sigi Regency is a new Regency resulting from the division of Donggala Regency as a new autonomy which was ratified on July 21, 2008, based on Law Number 27 of 2008 concerning the establishment of Sigi Regency; Donggala Regency DPRD Decree Number: 9/2005; Governor’s Decree Number: 135.52/28/ROPEM.G.ST/2006.

The agricultural sector is one of the important pillars of becoming the "ICON" of the Sigi Regency in the future. The achievement of goals in the agricultural sector is very much determined and cannot be separated from the ability of human resources of the agricultural apparatus and non-agricultural apparatus. Improving the work competence of farmers' human resources through counseling is one solution to solve the problems this time: changing the mindset and behavior of farmers who are still oriented to production. According to him, the younger generation who work in the agricultural sector, weak organizations/institutions farmers (Farmers Group, Farmers Association Association, KTNA), farmers still have weak access to capital, technology, production facilities, and market information as well as the low quality of human resources working in the agricultural sector.

This study aims to determine the economic effect of farmers on the marketing of dry-shelled corn with a moisture content of 14% in Rarampadende Village, Dolo Barat District, Sigi Regency. And to find out economically about the use of Moisture Tester on dry-shelled corn in Rarampadende Village, Dolo Barat District, Sigi Regency.

**METHOD**

This research was conducted in Rarampadende Village, Dolo Barat District, Sigi Regency. The research location was determined purposively considering that Rarampadende, Dolo Barat District, Sigi Regency, is one of the producers of dry-shelled corn with a moisture content of 14%. This research was conducted from January to March 2022. Respondents were selected purposively by directly interviewing farmer groups and the local government. They collected data in this study through observation, interviews, questionnaires, and literature study. The data analysis used in this study's implementation was observation and survey using a questionnaire.

**RESULTS AND DISCUSSION**

**Phenomenon of the Practice of Accounting Applications in the Household**

Seeing the marketing process of dry-shelled corn in Rarampadende Village, West Dolo District, corn farmers are very familiar with measuring moisture content (Moisture Tester). Newly harvested corn generally has a moisture content above the average of 28-30%. Then the owner of the corn will dry the corn in the form of cobs up to a moisture content of 18% for easy shelling. Then shelled and re-dry the shelled corn for approximately four days with a temperature of 34ºc so that the corn would be at a 14% level. The dry-shelled corn can be sold to collectors or wholesalers in this condition.
In marketing, qualitative analysis is used by looking at the three market characteristics put forward, namely: 1) pricing system and price formation between traders; 2) sales and buying practices; 3) cooperation network system between institutions, 4) Corn marketed by farmers is sold to wholesalers who are also inter-island traders (PAP). Furthermore, wholesalers market to consumers (feed factories) outside the province of Central Sulawesi. There are three marketing institutions, namely intermediaries, brokers and wholesalers. Based on Figure 1, the pattern of corn marketing channels formed is as follows: 1) Farmers - traders I (brokers) - wholesalers - Consumers (feed entrepreneurs). 2) Farmers - wholesalers - Consumers (animal feed entrepreneurs). 3) Farmers - traders II (middlewares) - Consumers.

In the three marketing channels, on average, farmers sell their corn products in the form of dry harvest. Then, wholesalers sell in the dry-shelled form to consumers, namely feed entrepreneurs, as a raw material for a mixture of animal feed products. The marketing channel that farmers mostly do is the second channel. The analysis of the efficiency of the marketing system is carried out by analyzing the marketing function as presented in Table 1. Each participant in marketing corn carries out this functional analysis. The function of exchange (selling and buying) is carried out by all traders, while farmers only perform the function of selling. Transactions between farmers and traders are carried out directly and in cash, because the product volume is relatively small, so weighing (sales) activities are carried out immediately after harvest.

Most of the farmers in the location do not have certain ties to traders, so in the buying and selling process, farmers have complete freedom in determining who to sell their crops. Brokers and wholesalers only carry out the processing function. Brokers and wholesalers perform the storage function in each channel. Marketing agencies carry out packaging activities while farmers only cultivate, not on acid. All involved corn marketing agencies carry out the transportation function. The sorting/grading function is not carried out at the level of farmers and intermediaries traders because the maize marketed is relatively uniform. Sorting and grading are only done at the level of brokers and wholesalers.

![Figure 1. Marketing of Dried Corn](image-url)
The demand for corn to meet the needs of the food and feed industry continues to increase, which will affect the development of corn prices in the market. The existence of the level of availability of corn and corn distribution system in the market can result in price fluctuations and the amount of corn supply in the market. Price fluctuations will affect the decisions and abilities of the corn marketing agencies involved in responding to price changes. The price of corn in 2019 at the farm level was Rp. 3,000 – Rp. 3,500 per kilogram of dry shells, while at the retail level, it was Rp. 5,000 – Rp. 6,000 per kilogram of dry shells. In other words, there is a difference in the price of corn at the farmer level from the price at the retailer level, which means that the marketing costs incurred to retailers are 50 percent.

The agricultural product, in this case, corn, basically cannot be separated from the aspect of marketing results. Where corn, especially to meet the needs of the food and feed industry, requires a process and time in its distribution to consumers. Distributing corn from producers to consumers involves several marketing institutions ranging from producers (farmers), intermediary traders such as collectors at the village level, sub-district/district collectors, and provincial collectors to consumers. The distance between producers and consumers causes marketing agencies to play a very important role in distributing corn. The more corn marketing institutions involved, the longer the corn marketing chain and, ultimately, the higher the marketing margin. The marketing channels used in distributing products from producers to consumers will determine the costs incurred by marketing agencies. In other words, production activities into dry shelled corn in the marketing system will cost money whether the costs incurred in production activities can respond to an efficient marketing system.

The efficiency of the marketing system in this study can be assessed through technical efficiency (marketing costs, marketing margins, and farmer share) and price efficiency (market integration). In this marketing, the decision-making system by marketing agencies is measured through the number of sellers and buyers, product differentiation, market entry barriers, and market concentration.

The market structure will affect market behavior, namely sales and purchases made by marketing agencies, price determination, formation, and cooperation between marketing agencies. The interaction between market structure and behavior ultimately determines market performance. The indicators used are marketing margin, farmer share, and market integration. The interaction between market structure and behavior will ultimately determine market performance. The indicators used are marketing margin, farmer share, and market integration. The determination and formation of prices that occur are related to market behavior, which is influenced by the structure of the formed corn market. Price changes at each marketing agency formed will ultimately determine the performance of the corn market in the Sigi Regency.

In addition, the implementation of a strategy in marketing that sees market needs from the marketing mix side can affect the determination and formation of corn prices. However, market strategy analysis will determine how much the marketing mix can
respond to efficient corn marketing. The marketing system can also be determined by the marketing strategy the marketing agency uses. The marketing strategy is carried out at the dominant corn marketing agency in Sigi Regency by looking at the mix of marketing activities, including product, price, place, and promotion. The risks farmers face are crop failure and price fluctuations that affect uncertainty in farming.

Collector traders (brokers) risk financial losses caused by errors in estimating the moisture content during weighing. The risk for wholesalers is financial losses caused by not fulfilling the amount/value of the sales contract according to the corn quality specifications requested by consumers (feed factories). Farmers cannot access market information, such as the general price level, because they only act as price receivers. Mechanisms in the marketing of corn are largely determined by the use value of the form (dry corn), the time use value, namely crop failure, which affects the fulfillment of quotas, and the value of the sales contract. In addition, it is also determined by the use value of the place (market), namely the location and distribution system and the ownership of goods that affect the determination and formation of prices.

**Market Behavior**

**Price Determination and Formation System Between Traders**

The top market players in the marketing of corn are wholesalers as the first party in determining the price of corn products within the province of Central Sulawesi. Wholesalers determine prices for lower-level traders based on the price of corn given/offered by traders in Sigi Regency as consumers of the animal feed industry. The determination of corn prices is based on price information that occurs in the domestic market and even the international market.

Determining the price by wholesalers is usually done based on information on corn prices from traders outside Sigi Regency as consumers of the animal feed industry. The prices offered by wholesalers have considered several costs used for the corn production process, namely in the form of dry-shelled corn. Wholesalers have the power to determine the purchase price for traders at lower levels. This is because the products controlled by farmers are few, so farmers tend to accept the prices given by wholesalers.

This price determination process causes farmers to be in the lowest position in determining selling price decisions, so they are the weakest in determining price levels. Traders outside Sigi Regency as traders in the feed industry are the most dominant party in determining the price of corn, followed by wholesalers, brokers, and intermediaries in Central Sulawesi Province.

**CONCLUSION**

This study concludes that the structure of the corn market in Central Sulawesi Province has not been efficient. And wholesalers as the dominant marketing agency in determining the price of corn.
SUGGESTION

Recommendations are suggestions. It is necessary to strengthen farmer groups, especially in the marketing system, for results to increase the bargaining position at the farmer level. This can assist farmers in determining prices by brokers and intermediaries.

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