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The Development of Sub Terminal Agribusiness Sumillan As A Transaction Center of Agribusiness Results in Enrekang Regency, South Sulawesi Indonesia

*Jonarti Dj,[1] Muhammad Yamin Jinca,[2] Muhammad Saleh Pallu[3],
[1]*Postgraduate Student, Master Engineering of Infrastructure Planning, Hasanuddin University*
[2]*Department of Regional and City Development, Faculty of Engineering, Hasanuddin University*
[3]*Department of Civil Engineering, Faculty of Engineering, Hasanuddin University*
*Corresponding Author: *Jonarti Dj,[1]*

ABSTRACT: This research analyzes the potential of agribusiness and the availability of facilities and infrastructure, formulating a strategy of developing agribusiness product transaction centers. The method used is field survey and comparative study at Sub Terminal Agribusiness of Sewukan and Central Market of Puspa Agro East Java and SWOT analysis. The results showed that the potential of vegetable agribusiness in Sub Terminal Agribusiness of Sumillan is very high, management of information management is still limited. Building lods of vegetables, warehouses and packing house building, vegetable waste processing technology have not been equipped facilities.

Keywords: Potential commodities, infrastructure and facilities, agribusiness transactions

I. INTRODUCTION

Enrekang Regency is located in the East of South Sulawesi Province. Agricultural sector, which is the leading regional economic development. The agricultural sector's role in GRDP formation is 45% [1,2]. Based on the above, it is stipulated in the Regional Long-Term Development Plan (RLTDP) as an independent, sustainable and environmentally oriented *agropolitan* area by developing various agricultural products based on Community Economy and market oriented such as production of seasonal vegetables and fruits, onions, tomatoes, cabbage and cayenne pepper[3,4,5].

The procurement of Sumillan Agribusiness Sub Terminal to become the marketing and transaction center of farmers commodities is an effort to realize the vision and mission of the district seems not yet optimal [6,7,8,12].

II. RESULTS AND DISCUSSION

Sub Terminal Agribusiness of Sumillan is located in Sumillan Village, Alla Sub district located + 40 km from Enrekang City, located on an area of 21,953 m², built in agricultural production, commodity in Alla Sub district, in accordance with the Spatial Plan of Enrekang Regency and the wishes of agribusinesses [5]. This location can be accessed through the primary collector road [14] on the Agro and Kalosi-Cece Market roads as shown in Figure 1.

Figure 1. STA Sumillan Site

Organizational Structure and Market Information

The organizational structure of Sumilan Agribusiness Sub Terminal is adjusted to the Directorate General of P2HP Ministry of Agriculture of 2006 [3]. But the implementation of the structure, duties, and functions of the organization has not been done well.

Based on observations found that 68% of managers at Sub Terminal Agribusiness of Sumillan have not met their expertise, 13% of staff/stewardship in accordance with their expertise, only 19% of STA Sumillan managers have full time to organize professional institutions and are limited to conventional areas such as administration, finance, and vehicle parking section.

Human resource development is obtained through technical guidance and counseling at the management level of STA Sumillan and government, especially Horticulture Field of Agriculture and Plantation Office of Enrekang Regency, so that STA Sumillan management is still running conventionally and affect STA Sumillan operations that stagnant.

Market information is still limited to price, quantity, and quality information.

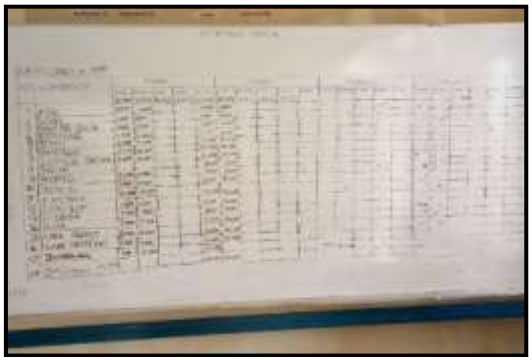

Figure 2. Example of the market price information board at STA Sumillan

Information and price updates of vegetable commodities are based on the result of buying and selling transactions that occur and are determined by the trader, not through agreements between the traders, buyers and managers. Farmers have low market information, so they do not know what's going on in the market. Limitedly they can share market information with neighboring farms, but access to market information is the price and type of commodity, the number of requests, and with whom the agricultural commodity to be sold in STA Sumillan is minimal.

Infrastructure and STA Facilities

The condition of vegetable grocery building in STA Sumillan is a permanent building, with no walls, roof with steel structure and covered by corrugated sheet. The height of the roof cavity is 6 m. This area is used as a sorting place for vegetable commodities (sorting), packaging, and buying and selling transactions as in Figure 3.

Figure 3. Loading and unloading activities of vegetable commodities

Loading and unloading is the activities of moving the harvested product from the temporary collection into the post-harvesting ward/packing house building [3,7,9,14]. The loading and unloading of goods at STA Sumillan is done on the access road to the grocery wholesaler or covering the wholesale vegetable drainage, and in open areas such as parking spaces so that direct contact with sunshine and rain during transport causes the vegetable commodities to be less secure and transferred to the wholesale vegetable building, not to the packing house warehouse as in Figure 4.

Warehousing and Packing House

Figure 4. a) Storage warehouse conditions, b) commodities in wholesale vegetables

Figure 4 shows the storage warehouse of vegetable commodities in STA Sumillan never used, not even maintained, so that unsold vegetable commodities are only stored in vegetable wholesalers (natural storage) as in Figure 6.

Figure 5. Building packing house at STA Sumillan

The packing house building at Sub Terminal Agribusiness of Sumillan has never been functioned, has no equipment and facilities, so the building has since been closed only as shown in Figure 5.

Figure 6. Packaging activities of vegetable commodities at STA Sumillan

The packaging of fresh horticultural products is generally not done by the producers; they argue that the packaging takes a long time; the desire of the product can be sold more quickly because it is still requires special treatment to protect the freshness.

Figure 7. Waste disposal at STA Sumillan

Solid waste market waste in the form of vegetable waste, stacked beside Sub Terminal Agribusiness of Sumillan without further management as shown in Figure 7. Overcrowding caused pollution, nesting of pests and the incidence of unwanted odors.

III. DEVELOPMENT STRATEGY

Management and Human Resource Management

The organizational structure and management of the auction market or Sub Terminal Agribusiness must be integrated, staffing/stewardship of the auction market should be from various backgrounds of expertise and employment status, especially those involved in the marketing structure and commodities that have been handled in the relevant areas according to their expertise [11]. Human resources are positioned according to the external and internal competencies that are owned and full time to organize professional institutions. Professional Sub Terminal Agribusiness (STA) management will facilitate the distribution of horticultural products so that marketing problems can be overcome and farmers are motivated to develop their farming scale. The technical training of personnel [7] is the key to the smooth management and operation of the Sub Terminal Agribusiness by organizing management bodies and agencies coordinating among relevant agencies, developing annual work plans, formulating regulations, conducting operations, regularly recording/reporting and supervising/supervising operations and maintenance management Sub Terminal Agribusiness of Sumillan.

Conducting trainings and workshops for quality control of products and market information, including price/quality and trading volume through international and local training programs, with the support of the Ministry of Agriculture and Ministry of Commerce [3] and other related agencies. Provide operational techniques, and maintenance of facilities and equipment, as well as operational knowledge of the accounting system, including fees/charges, financial statement formulation and cash flow accounting.

Market Information and Transactions

The development of the agribusiness market information system through internet network requires active involvement from all related parties. For bigger and distant buyers of STAs and have computer access, the latest sites are recommended to be updated with the latest commodity price information, via SMS or mobile phones specially set up in the STA office, and information shared with farmers and buyers in the consumer area (e.g. in the Central Market of Puspa Agro East Java). It is required renewal of mobile phone and PC data. The management should provide information on where the vegetable center is located and where it is sent. Transaction volumes in the Sub Terminal Agribusiness can also be broadcast via cell phones and sites to potential customers, so more customers are expected to come to Sub Terminal Agribusiness [3.7].

The forward auction needs to be intensified ie farmers and *Gapoktan* bring samples of agricultural commodities to the manager of Sub Terminal Agribusiness to be submitted as auction material. Prospective buyers/buyers, wholesalers and manufacturers register and fill in the auction form. Commodities owned by farmers/*Gapoktan* are offered to buyers who are also auction participants. But before the official auction is held, should first meet in a business meeting forum for the assessment of the owner of the goods and prospective buyers before the price agreement occurs. From this business meeting forum, it is expected that the agreement can be formalized in the official auction forum, resulting in a price agreement and the signing of a memorandum of understanding (MoU) and a Cooperation Agreement (CA) between the Sub Terminal Agribusiness and prospective business partners.

Supporting Infrastructure and Warehousing

Loading and unloading or moving activities of crop products from temporary collection points into postharvest handling wards should refer to the Minister of Agriculture of the Republic of Indonesia [3] as follows: a) preparing officers and/or lifeboats in accordance with product characteristics; b) prepare a calibrated

instrument of scale, c) use clean means of transport, avoid hauling vehicles carrying hazardous substances and containing contaminants, d) weighing containers and their contents, e) loading containers and their contents into conveyance cautiously, f) adding up the order of containers and their contents according to the ability of the container, g) avoid direct contact with sunlight and rain during transport, h) discharge cautiously.

The mechanical refrigeration system used in the cooling chamber should be based on the simple principle of heat exchange, changing the refrigerant into the gas form. There are several cooling techniques in horticultural commodity storage that can be used, such as room cooling, forced air cooling, and hydro cooling.

Processing and Marketing for each type of horticultural commodity requires different handling according to each character and generally done post-harvest and warded are product acceptance, pre-cooling, soothing, plumbing, cleaning, draining, drying, agglomeration, surface coating, withering, dipping in chemical solutions, artificial curing, sap absorption, packaging and labeling, as well as storage of end products and auxiliary materials. Packaging technology of fresh horticultural products is conventional packaging, current packaging trends (active packaging, smart packaging and intelligence, fruit maturity indicator labels, packaging design).

Market waste processing can be done by composting, namely the decomposition of organic materials/biodegradable through biological processes with the help of organism decomposes. The decomposing microorganisms take food sources from waste or biodegradable organic matter and produce metabolic waste in the form of CO_2, water vapor and heat. To obtain good compost, the procedure to be carefully implemented is the sorting of waste, enumeration of organic materials, preparation, mixing, watering, maturation, filtration, and compost ready for use.

IV. CONCLUSIONS AND RECOMMENDATIONS

Potential agribusiness vegetables in STA Sumillan are onion, tomato, cabbage, cayenne pepper, and carrots. These commodities require Post Harvest technology, embracing market information and distribution. The availability of facilities and infrastructure at Sub Terminal Agribusiness of Sumillan is still very limited, as well as to market information and prices, building lots/wholesale vegetables, commodity auction process, warehousing, packing house, and packaging technology and vegetable waste processing, not in accordance with good operational standards.

The development of strategy is started from management, management, human resource development, and information system. It is expected that the government's attention to optimize the function of Sub Terminal Agribusiness in increasing the value of agribusiness Commodity [9,12,13] so that the impact of welfare on farmers and can increase the Locally-generated revenue of Enrekang Regency.

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