ABSTRACT

Rr. Erlina: Bioethanol Agro-Industry Development Strategy in Lampung Province, under the Supervision of E. Gumbira Sa'id, Machfud, Sukardi, and Zainal Mahmud.

Agro-industry development is an important part of the industrialization process. Agro-industrial development based on potential agricultural areas in Indonesia plays an important role in driving the economy of Indonesia. Based on the potential areas of Lampung province, there are some superior agricultural commodities such as sugar cane, maize, cassava, sweet sorghum, sweet potatoes, and palm juice that can be utilized as raw materials for bio-ethanol industries.

The objectives of this study aimed to: a) Get the superior commodity that can be used as feedstock for bio-ethanol industry in Lampung Province, b) determine the key elements of the bio-ethanol agro-industry development in Lampung Province, and c) determine the bio-ethanol agro-industry development strategy in Lampung province.

Analyses were performed by utilizing the Exponential Comparative Method (ECM), Interpretive Structural Modeling (ISM), and analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT). The results of the Exponential Comparative Method (MPE) analysis showed that cassava is the most superior raw materials. The analysis of ISM-VAXO found that the key elements of bio-ethanol development of agro-industry in Lampung Province is as followed: a) supporting the development of key elements: 1) the suitability and availability of land for raw materials, 2) infrastructures production, 3) support local governments in developing agro-bio-ethanol. b) inhibiting the development of key elements: 1) limited funding for the development of small-scale agro-industries, 2) low productivity of raw materials, 3) Continuity of raw materials that are not guaranteed.

Based on the analysis of IE / EF-SWOT, the strategy for agro-industry development of bio-ethanol in Lampung province are: (1) Intensification and extensification of agricultural land to meet the needs of raw materials, (2) Making the Lampung province as a source of national bio-fuel, (3) Promote technological innovation and institutional innovation to accelerate the delivery and adoption of bio-ethanol technology, and (4) Develop agro-industry cluster bio-ethanol which is supported by facilities and infrastructure cluster.

Key words: superior raw materials, agro bioethanol, cassava, strategy development, Lampung province