MANUFACTURING INDUSTRY DEVELOPMENT
MODEL BASED ON PREDOMINANT
AGRICULTURAL COMMODITIES
IN JOMBANG REGENCY

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ABSTRACT

Jombang Regency has considerable potential in the agricultural sector. However, the agricultural sector has not been able to generate added value in the regional development of the Jombang Regency. Therefore, the development of the agricultural sector should be followed by the industrial development based on agricultural products so that will be obtained the source of added value to agricultural products. To increase the added value, it requires the development of a model of manufacturing industries based on predominant agricultural commodities in the Jombang Regency.

This study uses five analysis tools which consist of LQ analysis, Shift Share analysis, Descriptive analysis, AHP analysis, and dynamic model analysis using STELLA software. LQ analysis and Shift Share analysis was used to determine the predominant agricultural commodities. Descriptive analysis was used to determine the factors. AHP analysis was used to determine the integrity of the factors. Dynamic model analysis by using STELLA software was used to formulate a dynamic model of manufacturing industry development, to simulate a dynamic model, and to formulate a scenario of the manufacturing industry.
development based on predominant agricultural commodities in the Jombang Regency.

From the results of the analysis, it is shown that the predominant agricultural commodities in Jombang is corn commodities. The four factors that obtained in the development of corn manufacturing industry in Jombang Regency are the availability of raw materials, availability of industrial labor, availability of industrial infrastructure, and availability of industrial facilities. The dynamic model that was developed is a model of animal feed industry development in Jombang Regency. The best scenario for increasing the production of animal feed industry and for increasing the revenue of animal feed industry is increase of 5% in the proportion of labor investment and increase of 10% in the proportion of raw materials investments. The development of the animal feed industry will absorb the raw material in 9 districts in Jombang Regency that are District of Perak, Diwek, Mojoagung, Jogoroto, Peterongan, Jombang, Kudu, Ngusikan, and district of Ploso, and will absorb the labor in the District of Mojoagung.

Key Words : manufacturing industry development, dynamic model, regional development