SUMMARY

IMAM WAHYUDI. Cluster of the Potential for Regency/City in Indonesia in Developing Plant Commodities Food and Horticulture. Supervised by NUNUNG NURYARTONO and AMZUL RIFIN.

Indonesia is an agricultural country which makes the agricultural sector has an important role on the national economy. Agricultural sector contribution to GDP in 2014 reached 14.43% (BPS 2014). The agricultural sector in addition to meet domestic food needs, also as revenue (income) countries in the event of surplus production. Dependency on food imports (food trap) as a result of agricultural productivity in the country that tend to slow down, causing the amount of imports increased. Major food sectors supporting Indonesia in 2014 experienced a trade deficit. Food crops sector deficit of US $ -7.45 billion, US $ -1.12 billion horticulture and animal husbandry had a deficit of US $ -3.2 billion.

Efforts to increase the production of food crops and horticulture, in order to reduce dependence on food imports (food trap), can be done if the government knows the potential of the area. Potential agricultural commodities in the area can be identified by looking at the potential of the resemblance. Policies in agriculture, especially food crops and horticulture can be focused on areas of potential.

Potential agricultural commodities can be identified as a group by using clustering analysis (cluster analysis). The group formed show similarity characteristics of the region with other regions in the group. One method used cluster is a top-down clustering (k-means).

Regency/city which is the object of research there are as many as 511. The commodities which are used as variables are sorghum, rice, soybeans, corn, cassava, peanuts, potatoes, onions, garlic, peppers, oranges, grapes and apples. The initial selection of potential areas obtained 268 regency/city which has a minimum of one commodity production of 13 commodities above the average production of the Regency/City.

The using of cluster analysis towards 268 regency/city can get the best cluster formation, with a look at the value of the standard deviation in the cluster (Sw) is the smallest and the standard deviation between clusters (Sb) are optimum or value Sw/Sb smallest. Results of processing by performing eight times the simulation group, the smallest value in the number of clusters formed by 7 clusters in the amount of 0569, with Sw = 65 229.90 and Sb = 114 707.55. This result makes the grouping as many as seven clusters is considered as the best grouping at k-mean method. The clusters which are formed first (I) as many as 154 regency/city, Cluster II by 2 regency/city, cluster III in 1 regency/city, cluster IV as many as 8 regency/city, cluster V as many as 24 regency/city, cluster VI 75 regency/city, cluster VII as well as 4 regency/city. Each cluster has a dominant characteristic commodities.

Sector basis or featured on the cluster formed in food crops and horticulture, can be performed using Location Quotient (LQ). Seventh clusters are formed which became the basic sector of food crops and horticulture to the value Location Quontien (LQ)> 1. Cluster I commodities to the value of LQ> 1 are paddy, maize, potato, citrus, apples and grapes. Cluster II superior commodities

are maize, cassava, peanuts, garlic, peppers and grapes. Cluster III with commodity cassava. Cluster IV commodities superior are soybean, maize, cassava, peanuts, potatoes, peppers and apples. Cluster V commodities are sorghum, rice, soybeans, onions, peppers, oranges and apples. Cluster VI main commodities are sorghum, rice, soybeans, corn, peanuts, potatoes, onion, garlic and chilli. While commodities cluster VII with cassava, peanuts and chilli.

Zoning strategy based cluster formed by using Klassen typology. The growth of food crops and horticulture at the rate of progress and grow faster than 13 commodities there are 6 commodities, namely on cluster I; rice and corn. Cluster II commodities cassava. Cluster III commodities cassava and rice. Cluster IV with maize, cassava and chili. Cluster V with paddy and apples. Cluster VI has commodities as rice, corn and onions. Cluster VII only commodity cassava. While six commodities which are lagging behind growth; sorghum, potatoes, soybeans, peanuts, oranges and grapes.

The main obstacle in getting food crops and horticulture which leads to low productivity due to plant pests, high operational costs, climate, soil conditions and natural disasters.

Keyword : Cluster, food crops, horticulture, imports, and leading sector.