KOHONEN SELF ORGANIZING MAPS FOR CLUSTERING ZIS, APBN AND WELFARE INDICATORS BY DEVELOPMENT TARGET IN 2016 BASED PROVINCES IN INDONESIA

(Case Study : ZIS Fund, Number of Muzakki, State Budget and Four Welfare Indicator 2016)

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ABSTRACT

The 1945 Constitution, explicitly audits the main tasks of the government of the Republic of Indonesia and local governments is to promote the common welfare, to educate the life of the nation and also to encourage social for all Indonesian people. In this case In addition to idic Wellbeing, national development planning has the function of various countries and management regulated by the government. Zakat has the power of distribution in the context of justice and social welfare. zakat potential in Indonesia is huge. Recorded, in 2010 around Rp 217 trillion continues to increase rapidly in 2016 reached Rp 286 trillion. Data from the Ministry of Finance of the Republic of Indonesia in the 2016 report in its development based on the existing achievement targets 9.0-10 percent or down from 2015 which pegged 10.3 percent. Active gini ratio and human development index (HDI) of 0.4 and 69.4 By 2015, gini ratio and HDI are 0.39 and 70.1 percent. at the disabled level of 5.2-5.5 percent. In an effort to achieve the national development targets, it is necessary to group some supporting indicators. Researchers use supporting data such as: 1) ZIS Fund, 2) Number of Muzakki, 3) Receipts Receipts, 4) Financing Receipts 5) Expenditure, 6) Financing Expenditure, 7) Poverty, 8) Gini Ratio, 9) Unemployment 10) Index Human Development. The method used is Kohonen Self Organizing Maps (SOM). SOM is a visualization and analysis tool for high-dimensional data and in its irrational grouping of assumptions. Based on the WCSS charts and cluster number validation, the number of clusters is 7 with some provinces in Cluster 1, thirteen provinces are in cluster 2, the four provinces are in cluster 3, the three provinces are in cluster 4, while the Central Java Province and the Java Provisi East is in cluster 5, DKI Jakarta Province is Cluster 6, West Java Province as cluster 7.

Keywords: ZIS, APBN, Welfare Indicator, Cluster, Self Organizing Maps (SOM)