

ABSTRACT

The development of infrastructure is the fundamental and strategic in improving dictric economy. In the other hand there are many things should be discussed in the purchasing of infrastructure sector. In case of ennumerous problems discussion in infrastructure sector, in this research, the limitation of this research in 2 sub-infrastructure sectors, they are main road and irrigation system. The aim of this research are to measure efficiency of the infrastructure especialy main road and irrigation system, the comparation efficiency level between main road and irrigation, and provide solutions to improve the efficiency for each regencies/cities in Central Java. The method that is used in this research are Frontier and DEA. The coverage of the datas which are analyzed in this research is 35 regencies/cities in Central Java.

The efficiency of infrastructural sector in Central Java which are represented by the sub sectoral of main road and irrigation system generally not efficient. The average level of efficiency of the main road during 3 years research period is 88,91 % based on frontier and 97,16 % based on DEA. The average level of efficiency of the irrigation system during 3 years research period shows that based on frontier the result is 86,85 % and 96,35 % based on DEA.

The comparation between the efficiency of sub sectoral main road and irrigation shows that the main road sector is more efficient than the irrigation system. It shows that main road get more attentions from all regencies/cities during 3 years research period because the main road was the most important infrastructure that support local economic growth especially manufactured and trade industry which need fine and proper distribution line.

According to DEA analysis, from 2007 until 2009 local government especially regencies and cities in Central Java still can increase their main road efficiency by increase the quantity of fine main road until 7,44 % and should economical calculating their main road budget 2,90 %, and vehicle limitation 4,76 %. For irrigation system, local government can increase technical irrigation 2,46 %, should economical calculating their irrigation budget 3,80 %, and there is 3,70 % rice field area that not optimal irrigated.

Conclusion results is that infrastructure sector was not efficient because there are many problems that need to match between input and output, the cooperation between main road and irrigation system in supporting economical growth, the plan which concern to the better output.

Key words : efficiency of infrastructure sector, main road, irrigation system, technical irrigation, amount of vehicle, and rice field area