## ABSTRACT

Community Health Center or Puskesmas is a technical unit of Health Office of District/City in charge of organizing the health development sector in a work area. In 2011, the total number of Puskesmas recorded in Bandung District amounted to 62 buildings that spread in 31 sub-districts with the population of 3.299.988 people. Based on Kepmenkes (Decree of Health Minister of the Republic of Indonesia) No. 128/Menkes/SK/II/2004, ideally, there is at least one Puskesmas for every 30,000 people in an area. However, increasing the number of Puskesmas in Bandung regency requires huge funding, for which the Health Office of the local government finds it difficult to increase the number of Puskesmas simultaneously. Therefore, a system is needed to assist the Technical Unit of the Health Office and the Program Development Division of the Health Office of Bandung regency in making optimum decision for the efficiency and effectiveness of health service development.

The tool used in this research is the geographic-based Decision Support System (DSS) with Prototyping method as system development utilizing the feature of buffer so as to provide information regarding the coverage of each health center.

The system is capable of providing decision through analysis of capacity and location of Puskesmas in Bandung regency by the Program Development Division of the Health Office of Bandung regency.

This geographic-based DSS will enable the Program Development Division to find the optimal location in an area by using the method of rating factors contained in the application. In addition, this application may provide some basic information of a Community Health Center.

Key words: Puskesmas, Community Health Center, Health, Decision Support System, Rating Factor method, geographic, GIS