ABSTRACT

Karang Endah Village, Terbanggi Besar District, there are several groups of farmers, one of which is Poktan Mekar Sakti 1, which grows soybeans because it is assessed that the selling price of soybeans is relatively stable every year. Farmers have difficulty in determining the type of superior soybean seed so that sometimes many soybean seed plants die and are affected by pests because they are not suitable for the land and weather. As a result of these problems, farmers experience a loss of time and money in planting soybean seeds. The purpose of this study was to create a decision support system in determining soybean seeds for farmers in the Mekar Sakti 1 Poktan group in Karang Endah Village, Terbanggi Besar District using the AHP method. This research uses the Extreme Programming method and will be implemented using PHP and MySQL as databases. This system will be tested using ISO 25010. The results of system testing are carried out with the functionality aspect with a value of 91.11%, the usability aspect with a value of 83.33%, the reliability aspect with a value of 82.2% and the black box test results have a percentage value of 100%. So that the overall average result is 89.17% with a "Good" scale. So it can be concluded that the system is feasible to use.

Keywords: *Decision Support System; Agricultural Seeds; AHP; Extreme Programming; ISO 25010;*