ABSTRACT

Climate change can affect many aspects of food security. Food security is closely related to the price of agricultural commodities. But now Farmers are difficult to sell their agricultural products because the price of their agricultural products is cheaper than the price of production so that farmers suffer huge losses, and become a burden for the community.The increase in agricultural commodity prices is caused by several factors, one of which is the weather factor, because Indonesia is experiencing extreme weather changes so that farmers are difficult in planting seeds so as not to crop failure.

Therefore it is needed a model to predict the price of agricultural commodities that aims to help the farmers. Previous studies have been conducted to predict gold prices using Random Forest Algorithm [1]. After making predictions, there will be a recommendation classification of farmer price cropping. Similarly, this final research uses only different data that is agricultural commodity price data using Random Forest Algorithm.

Based on the predicted random forest model performance, average training 78.25% And testing 95.75% Accuracy. As a whole the system has a good performance and both dataset scenarios can be used to classify the price of regular chilis well.

Keywords*: Classification, Random Forest, Agricultural Commodity Price*