

## **Abstract**

**Indonesian farmer plow their field and plant many kind of plants or fruits. One of the most popular plant is chili since it has high economy value. Chili is a commodity with fluctuative price. There are many factors which make chili price become fluctuate, one of it is weather. Weather affect yield. A poor yield can make the price become expensive because of crop failure hence the commodity become rare and vice versa if the yields are good it can bring fortune. In this research, an analysis of the price of chili with weather in Bandung Regency has been carried out using the Self Organizing Maps algorithm that can be used to predict the future so as to minimize crop failure. There are 48 data with linkage cluster of weather and chili's price as the result with  $K=2$  and  $K=3$ . The analysis result is the farmer can get more profit if they plant the chili when the rainfall is above 260mm.**

**Keywords: Chili, Weather, SOM, Economic Status**