## ABSTRACT

Catfish farming is a promising undertaking. The need for high fish in the market, making open opportunities for entrepreneurship in the fish farm sector. Stable catfish market makes cultivation of catfish farming in demand. Easy to develop catfish is one of the supporting factors for the progress of catfish farming. Catfish have many variants or species, one of them is masamo catfish. Masamo catfish has a stronger physical endurance than other types of catfish and can be harvested more quickly. The cultivation of this catfish catfish has been done on the group of fish cultivators Sonya Mina Makmur residing in Kedungwuni Districts, Pekalongan Regency, Central Java.

Every catfish cultivation production process is needed production means as input, such as land, seed, labor, feed, fertilizer and medicine, length of business or experience, and education. The purpose of this research is to analyze the technical efficiency of the use of input production on the cultivation of catfish catfish in Kedungwuni District. The DEA method is used to analyze the efficiency of this study. DEA is a mathematical program optimization method that measures the technical efficiency of an economic activity unit (UKE) or DMU (Decision Making Unit) and compares relative to other DMU. Software used in this research is Win4Deap2.

By using Data Envelopment Analysis (DEA), we can know the efficiency of 50 masamo catfish by using probiotic and central drain pond in group of cultivators Sonya Mina Makmur. The efficiency value will indicate which cultivators operate most efficiently, technically, scale, or overall, as indicated by 100% efficiency (1), and inefficient cultivators are shown with values less than 100%. As for technically, there are 41 DMU / cultivators that have been efficient and there are 9 DMU that has not been efficient either on a scale, technical, or overalls.

Keyword: masamo catfish, efficiency, DEA, DMU