ABSTRACT

In recent years, fish farming has become an increasingly important aquatic agricultural sector in providing sources of animal protein. The fish farming process starts from hatching torearing. The habitat or living environment for fish is in fresh water where the water is not too strong or in calm waters such as lakes, ponds, swamps, reservoirs and ponds. Many factors influence fish development, one of which is temperature, oxygen levels and pH in the water. However, cultivating fish has obstacles that farmers must face, namely maintaining stable water quality.

With the development of technology, it is hoped that it will be able to provide innovationin the field of fish cultivation. The system was originally created manually, now there is technology and several control methods, one of which is Fuzzy Logic. Fuzzy logic resembles human decision making with its ability to work from interpreted data and find the right solution,making it easier for fish farmers to control water quality so that it remains stable.

Control systems for pH, temperature and oxygen levels in fish ponds can be developed using quantitative research methods. Quantitative research methods Refer to the collection andanalysis of numerical or quantitative data to understand phenomena and the relationships between certain variables. In this context, numerical data will be used to monitor and measurepH, temperature and oxygen levels in fish ponds as well as to measure the effectiveness of thecontrol system being developed.

Keywords : Fish farming, Fuzzy, Water quality