

## V. CONCLUSIONS AND SUGGESTIONS

### 5.1. Conclusion

Based on the results of the discussion, the conclusions of the research can be formulated as follows:

1. Climate change events have a negative and significant effect on rice production in Buduran District. This is shown by the regression model  $Y = 7891.255 - 49.892X$  with an  $R^2$  value of 0.944 and a significance of 0.006 ( $<0.05$ ). The increase in the incidence of climate change leads to a decrease in rice production.
2. The level of sustainability of rice farming in Buduran District in facing the challenges of climate change is in the less sustainable category, with a multidimensional index value of 48.31. Partially, the economic dimension received a score of 47.70, the social dimension 47.42, and the environmental dimension 46.78, all of which were included in the less sustainable category.
3. The strategy to increase the sustainability of rice farming in the face of climate change in Buduran District needs to be focused on strengthening key factors that are priorities, namely adjusting planting patterns based on climate conditions, implementing more efficient water management, optimizing and efficient use of production inputs, controlling plant pests in an integrated manner, diversifying businesses through an intercropping system, and strengthening income through the sale of crops and Institutional support

## **5.2. Suggestions**

The author suggests that local governments and agricultural agencies strengthen farmer capacity building programs in dealing with climate change through planting pattern adaptation training, the use of agricultural technology, and more intensive counseling assistance.