

COMPARISON OF LAND FAIL ANALYSIS IN CIMULU IRRIGATION AREA

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Abstract

The Cimulu Irrigation Area irrigates three secondary canals, namely the Cimulu channel, the Dalam suba channel, and the Cihayang channel. In 2019 there was a drought on agricultural land with an area of 19.36% or 306 ha. The risk of land failure can be interpreted as a loss due to not achieving production from arable land as result of actions in the decision-making process in the irrigation water management planning process. The study using the meta-analysis method was used to examine the comparison of land value was in September 3 at the 3rd rice planting period during maturation to harvest, which was 0.296. The area of the two previous studies is 1546.2 ha and the area used by the author is 1032.47 ha due to land changes. The comparisons obtained are for Nendra Setiawan's research 7.50% or 115.97 ha using optimization methods with the help of VBA applications, for Dadan Firmansyah's research 40% or 618.49 ha using sample survey methods at each door, and those studied by the author 2.85% or 29.45 ha using the sample method in the upstream, middle and end of irrigation which is equipped with mapping ArcGIS applications based on topography and land distance from the floodgates. The overall result area projected on ArcGIS 10.6 in the form of images accompanied by descriptions.

Keywords : Land Failure, k Factor, Irrigatrion