

CHAPTER V. CONCLUSION

A. Conclusion

Based on the research, it can be concluded:

1. Efforts to cultivate siam oranges in Andieng Village, Lima Puluh Kota Regency involve manual land clearing. The majority of respondent farmers use non-certified seed bought from Riau Province. However, land maintenance practices such as fertilization, pruning, weeding, and pesticide application do not follow government recommendations in general. The siam orange trees of respondent farmers are 6.9 years which are still in their productive age. The average production of siam oranges obtained by siam orange farmers at Andieng Village in 2023 was 27.56 kg per tree per year. This production is far below its potential, which could reach up to 95 kg per tree per year. It happened possibly due to the continued inappropriate use of input factors as recommended by the government and maintenance that does not meet the recommendations.
2. Factors affecting the production of siam oranges in Andieng Village, Lima Puluh Kota Regency, are fertilizer and labor. Conversely, factors such as pesticides, seed types, and land topography do not influence siam orange production. The coefficient of determination (R^2) is 0.690. This value indicates that siam orange production in Andieng Village, Lima Puluh Kota, is not entirely influenced by the production factors included in the model, namely the fertilizer and labor, which account for 69% of the variation. The remaining 31% is influenced by other factors not included in the model. The production scale of siam oranges operates with Increasing Return to Scale conditions, implying that the percentage increase in the quantity of production factors—such as fertilizer, labor, pesticides, plant age, seed types, and land topography which higher than 1.

B. Suggestion

1. Support from the Lima Puluh Kota government, particularly the Department of Plantation, is necessary to be more active in guiding farmers on proper orange cultivation techniques and fertilizer application according to the prescribed dosage instructions. Additionally, it is essential to impart knowledge on preventing and managing orange plants affected by pests and diseases.
2. It is recommended for future research to include additional variables that have not yet been tested, such as capital, to improve the R^2 .

