## CHAPTER V CONCLUSION AND SUGGESTION

## A. Conclusion

- 1. Production of corn farming in Kinali District is influenced by several factors, including seed usage, fertilizer usage, and pesticide usage. The research results indicate that seed usage have a positive and significant impact at a 90 percent confidence level on corn production. This means that if farmers increase the amount of seed used, corn production can increase. On the other hand, pesticide usage has a negative and significant impact at a 90 percent confidence level. This means that excessive pesticide use can reduce corn production in Kinali District. Furthermore, fertilizer usage has a significant impact at a 90 percent confidence level. However, labor does not have a significant impact on corn production because its t-value is smaller than the t-table value.
- 2. The technical efficiency level of corn farming using the stochastic frontier production function in Kinali District is on average 0.74. This indicates that most farmers still have the opportunity to improve their technical efficiency by 0.26. There is variation in the level of efficiency, with the lowest efficiency level at 0.33 and the highest efficiency level at 0.99.
- 3. Inefficiency factors such as land ownership status and capital source significantly affect technical efficiency in corn farming, with an 90 percent confidence level. This suggests that farmers who own their land and have their own capital tend to have lower technical efficiency compared to farmers who rent land or use borrowed capital. However, social factors such as age, education, and the number of family dependents do not have a significant impact on technical efficiency in corn farming.

## **B.** Suggestion

- 1. Based on the first and second conclusions regarding the production factors that affect the technical efficiency of corn farming in Kinali District, the following recommendations can be made first, farmers in the research area should focus on improving their skills in allocating production factors, especially seed usage, as these factor have the most significant and positive impact, farmers should follow recommended guidelines for seed usage.
- 2. Regarding social factors, such as land ownership status and capital source, it is advisable for the government to facilitate access to loans or capital for farmers to enhance corn farming in Kinali District. This support can help farmers who own their land and have their own capital improve their technical efficiency. Farmers who rent land or use borrowed capital tend to allocate inputs more efficiently to achieve their desired results.
- 3. In summary, it is crucial for farmers to optimize the allocation of production factors, especially land and seed usage, to improve corn production efficiency. Additionally, government programs should facilitate access to capital for farmers, promoting better resource allocation and overall efficiency. Farmers who own land and capital should adopt rational farming practices similar to those of renters and borrowers to maximize profits and repay their investments effectively.