

V. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusion

1. Arabica coffee and avocado plants are in the S3 (Marginal Suitable) and N (Non-Suitable) classes with the main limiting factors in the form of water availability (wa), root oxygen (oa), root conditions (rc), nutrient availability (nr), alkaline saturation (na), and erosion hazard (eh). All sample points for cayenne pepper and cabbage are in class N, with the heaviest limiting factors of slope slope and erosion hazard.
2. The ideal combination of crops for agroforestry on rather critical and potentially critical land is a multi-strata system with perennial crops (coffee and avocado) as the main component, annuals such as chili peppers and cabbage are not recommended due to heavy limiting factors especially slope slopes, but can be used as intermediate crops between crowns at the beginning of the planting period.

5.2. Suggestion

1. Consider proportional sampling of areas that have been stratified based on slope gradients (0–15%, 15–30%, and >30%) so that variations in topographic conditions can be represented more accurately.
2. Consider an agroforestry system with a combination of deep-rooted plants and leguminosa as soil cover to improve slope stability, strengthen soil structure, add organic matter, and accelerate critical land recovery