



Does land use decision-making affect food security in rural farming households? Evidence from Tanzania

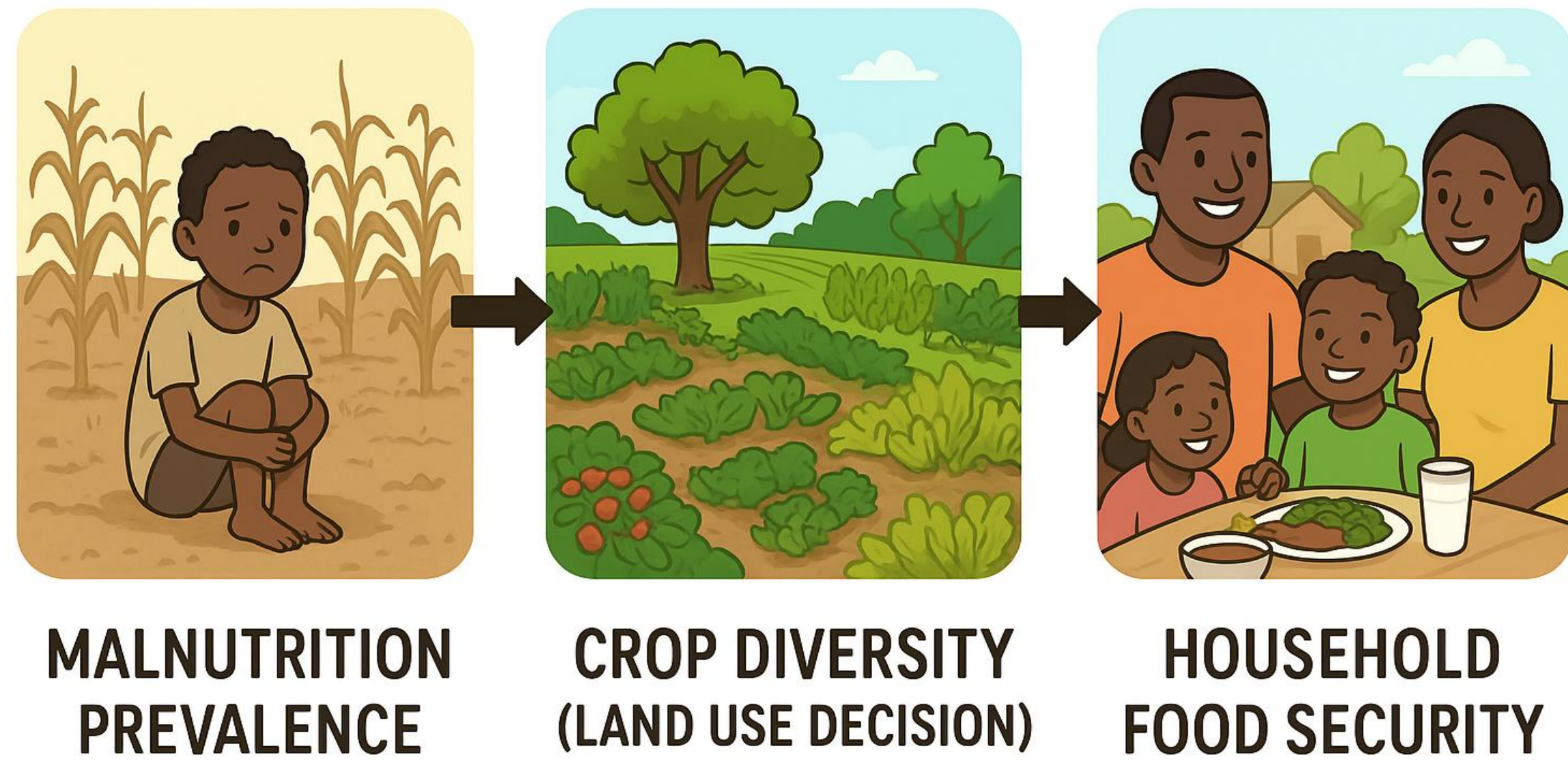


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Introduction



Objective

To examine the impact of land use decisions (crop diversity) on the food security of rural smallholder farmers' households.

Methodology

Sample and study design

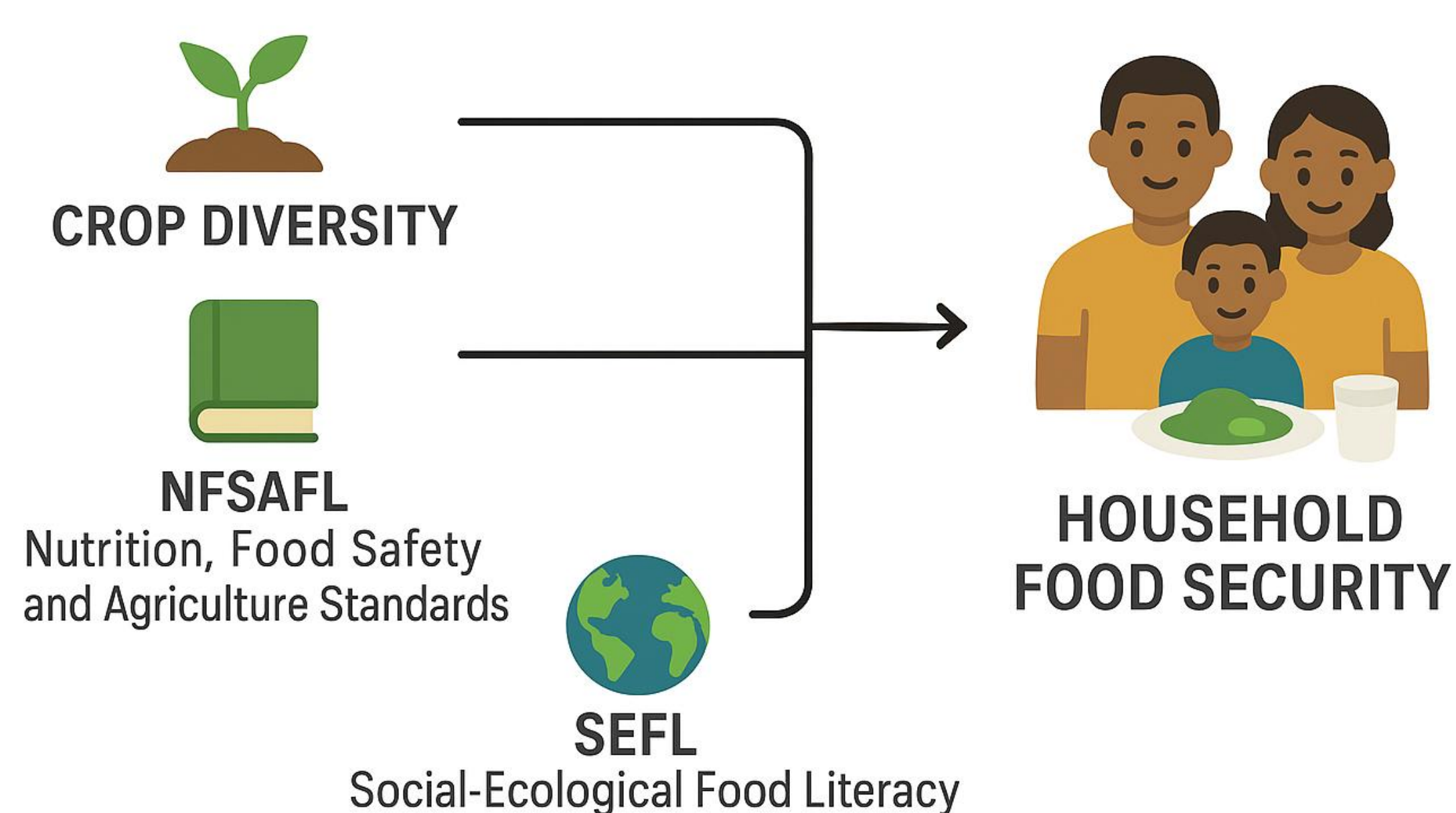
- Cross-sectional study surveyed 303 smallholder farmers in Mkuranga District, Pwani Region, Tanzania.
- A semi-structured questionnaire gathered demographic data, land use, food literacy (FL), and crop diversity.
- The three aspects of FL included nutrition, food safety, and agriculture standards (NFAFL); social-ecological food literacy (SEFL); and cultural and relational food literacy (CRFL).
- Household food security information was collected using a food consumption score (FCS) questionnaire
- The crop diversity was calculated using a farmer's crop count in the previous season.

Analysis

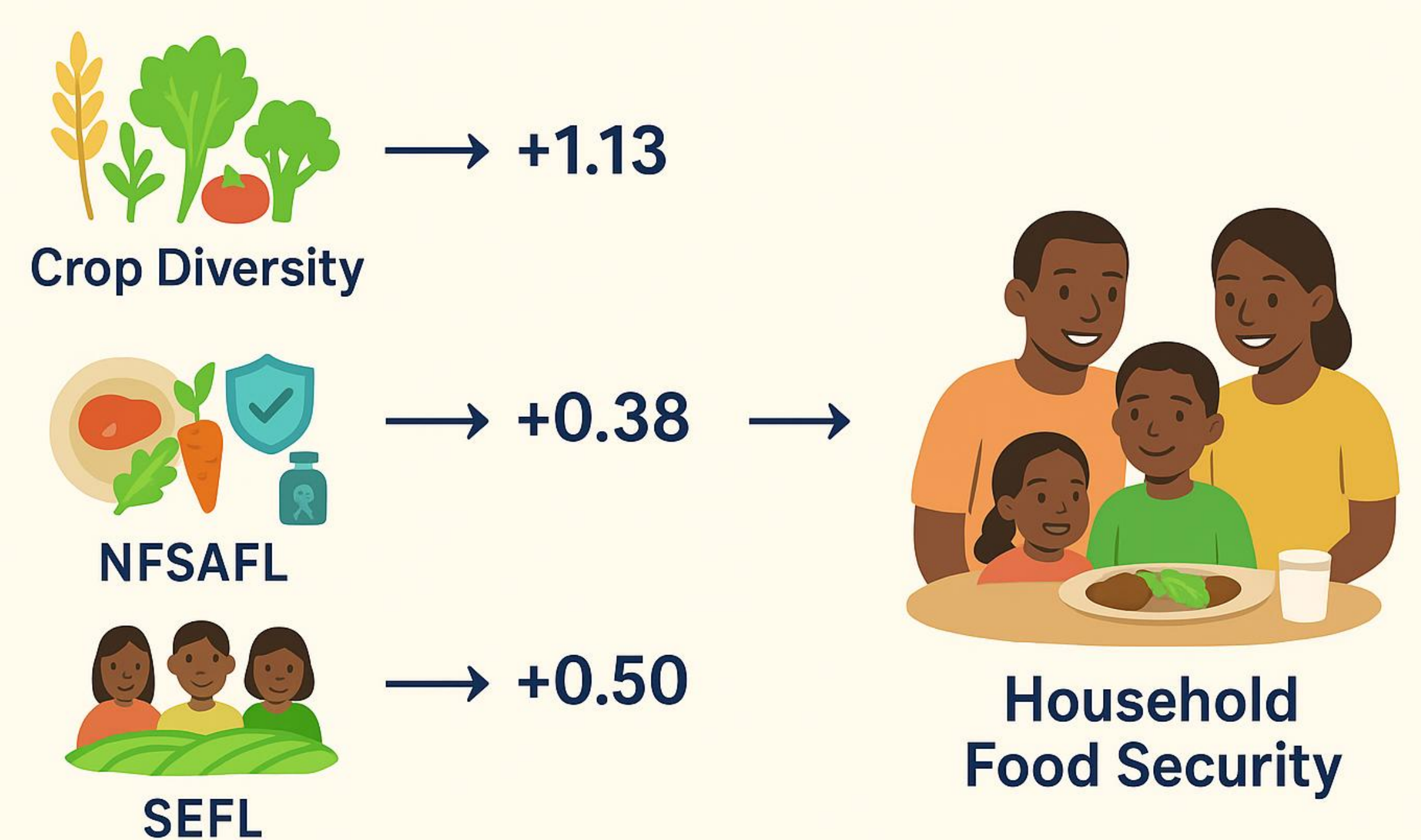
- Linear regression analysis established the relationship between FCS and crop diversity.

Results and Discussion

Predictors of Household Food Security ($p < 0.05$)



Predictors of Household Food Security



Multiple regression analysis ($R^2 = 0.51$, $p < 0.001$) identified crop diversity ($\beta = 1.13$), NFAFL ($\beta = 0.38$), and SEFL ($\beta = 0.50$) as significant predictors of household food security.

Conclusion and recommendations

- This study underscores the need for crop diversity and FL strategies to improve household food security.
- Enhancing crop diversification increases food varieties, while food literacy equips farmers with the competence to interact with food systems to make healthier food choices.
- Further initiatives should focus on integrating food literacy's socio-ecological, nutritional, and safety aspects within agricultural frameworks to facilitate sustainable dietary improvements and achieve better nutritional outcomes.

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