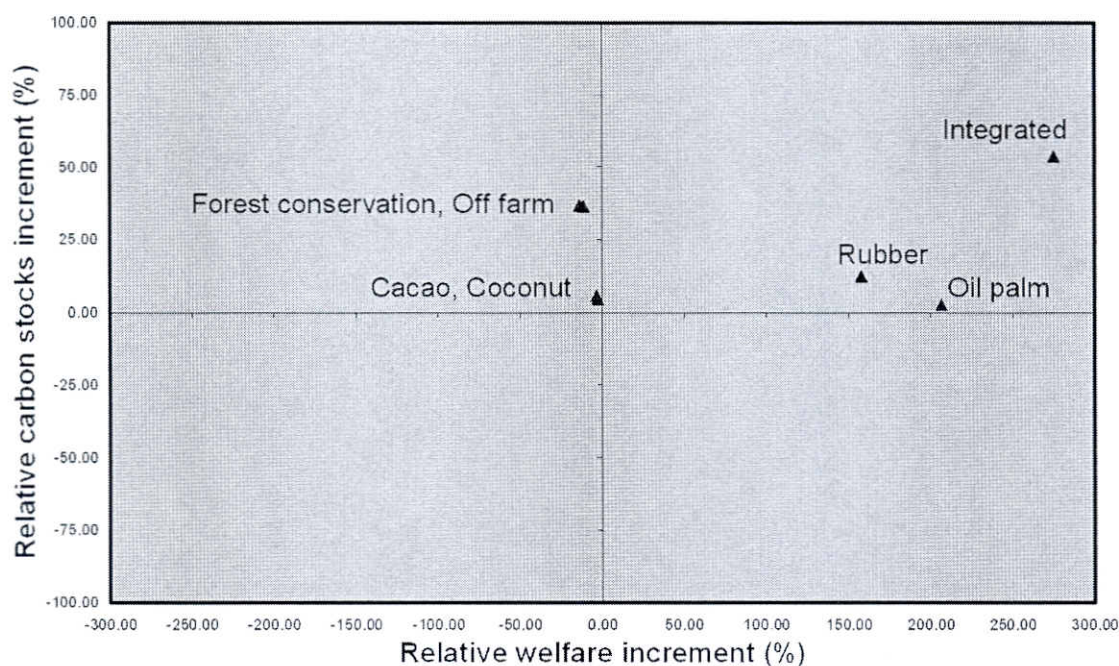


## PROSPECTING SOME SCENARIOS ON GREEN DEVELOPMENT STRATEGIES IN ARONGAN LAMBALEK, WEST ACEH, INDONESIA, USING THE FALLOW MODEL D.

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The FALLOW Model was applied to prospect some scenarios on development strategies in West Aceh, to find the best option to balance economical growth and environmental services, as part of green rehabilitation efforts after tsunami through smallholder agroforestry systems. Specifically, the model was applied in Arongan Lambalek, by prospecting the development of smallholder rubber-, cacao-, coconut- and oil palm-based systems in the area. As comparison, other development strategies with the main focus to conserve forests and to create better off farm jobs were also prospected. Finally, increments on community welfare and landscape carbon stocks relative to their baselines were used to indicate economical and ecological gains/losses, as plausible impacts of each development scenario. Prospection was conducted for 25 years, starting from the initial condition of the area in the year 2002.



According to the model, improving smallholder rubber-based systems could likely gain the best balance between economical and ecological benefits. Improving smallholder oil palm-based systems could likely gain higher economical benefit than rubber, but with lower environmental benefit. Improving smallholder cacao- and coconut-based systems in Arongan Lambalek could likely gain relatively small economical and ecological benefits. Conserving forest and providing better off farm jobs could likely gain the highest ecological benefit with the cost of losing economical benefit. Integrating all development strategies could likely lift up the increments on both economical and ecological values.

Furthermore, credibility of the FALLOW Model for prospection studies in Arongan Lambalek, based on validation results and based on local stakeholders' judgements are presented and discussed.

**Key words:** FALLOW Model, prospection, smallholder agroforestry systems-based developments, model's credibility