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Oil palm expansion, food security and diets: Comparative evidence from Cameroon and Indonesia

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ABSTRACT

Farm households in the tropical regions of Africa, Asia, and the Americas continue to rapidly adopt oil palm, often at the expense of rainforests and traditional food crops. The environmental and income implications of oil palm expansion have been extensively documented, albeit primarily using data from Southeast Asia. Beyond a few case studies, research on the links between oil palm adoption, food security and dietary diversity among smallholders is scarce. This research gap is partly addressed in this study using data from Cameroon and Indonesia, two countries with different backgrounds in oil palm production, history and marketing systems. Oil palm is native to Cameroon but is an exotic crop in Indonesia that was commercialized a few decades ago. Household food insecurity experience scales and dietary diversity scores are computed, and descriptive and regression estimations are employed for the empirical analysis. Opposing results are revealed, reflecting the contextual differences between the two oil palm production frontiers. Oil palm farmers in Cameroon consume less diverse food than non-oil palm farmers. In Indonesia, on the other hand, oil palm farmers perform better than their non-oil palm counterparts and consume more diversified foods, possibly explaining why smallholders in Southeast Asia continue to adopt the crop rapidly. No statistically significant relationship is obtained between oil palm production and food security. The findings also suggest that income, employment, and farm production diversity may explain the observed relationship between oil palm adoption, food security and diets. Given this, oil palm production may not be a universally suitable strategy to improve food and nutrition insecurity but may be useful in some production frontiers. Context-specific and tailored policies are needed to make oil palm cultivation and food systems more nutrition-sensitive and environment-friendly.