

## From Growing Food to Growing Cash: Understanding the Drivers of Food Choice in the Context of Rapid Agrarian Change in Indonesia

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### Key Takeaways

- As indigenous households in rural Indonesia transition from traditional livelihood strategies (swidden farming in West Kalimantan and hunting/collecting in Papua) to oil palm cultivation, their diets are concurrently changing.
- Oil palm households were wealthier overall in both sites, but the increased wealth did not result in unequivocally healthier diets; the differences mirrored those of changes often seen in the 'nutrition transition' except that in Papua the transition seems to be more towards the 'modern Indonesian' diet.
- As more households participate in the cash crop economy in Indonesia, we can expect to see losses of nutrient rich fruits, green leafy vegetables, and fish and increased consumption of sweets, highly processed foods, commercial dairy and eggs unless policies are put in place to change these trends.

### Objectives

The overall project objective was to understand how changes from traditional to commercial agriculture are affecting the food choices of farmers in rural Indonesia.

### Background

Indonesia has been undergoing rapid changes on many fronts in the last two decades – accelerated economic development, dramatic alterations in land use, and dietary changes resulting in new health and nutrition burdens. A key driver of these changes in rural areas is a transition away from traditional agriculture to commercial oil palm production. The rapid expansion of oil palm has drawn attention from conservationists for its negative environmental impacts, but it is also changing local food systems

and food environments. In the face of rapid change and potential loss of positive dietary traditions, it is important to understand how changes from traditional to commercial agriculture are affecting the food choices of farmers in rural Indonesia. This knowledge is critical for designing policies to mitigate the effects of the nutrition transition that is underway in Indonesia and to try to prevent deterioration in the quality of indigenous diets.

### Methods

This mixed-methods study design compared diets of mothers and children in indigenous households practicing traditional livelihood strategies with those engaged in oil palm production in two regions of Indonesia – West Kalimantan and Papua. Quantitative methods were used to assess quality of diets under different production systems. Data were derived

from household surveys (including demographic, agricultural, and food source data), 24-hour dietary recall of mother-child pairs, anthropometric measurement (weight and height for the mother-child pairs), and hemoglobin assessment for the mothers. Qualitative methods were used to understand peoples' perceptions of dietary change over time, using focus group discussions and key informant interviews.

## Results

In West Kalimantan, children from swidden cultivation households generally consumed diets higher in dark green leafy vegetables, fruits, fish and rice than children in oil palm households. Children in oil palm farming households consumed more eggs, dairy products, and sweets. In Papua, children in hunter-gatherer households ate more tubers, fish, and fruits than those whose parents worked in oil palm, while children in the oil palm households consumed more rice, dark green leafy vegetables, and spices-condiments-beverages. Patterns for mothers were very similar. There was significantly more wasting in children from oil palm households in

West Kalimantan in one season, but no statistically significant differences in stunting between the two types of households. There were no statistically significant differences in nutritional outcomes for children between the two types of households in the Papua site. Many households from both sites with both livelihood strategies consumed a substantial amount of wild food, although the traditional households consumed more wild foods. Households who transitioned to oil palm livelihoods relied more on markets, but were still getting foods from their farms and the wild. Despite the greater wealth of oil palm households (as measured by an asset index), mother and child consumption of some nutrient-rich food groups was lower.

These results show that rural transitions to more market oriented livelihoods do not result in nutritionally-equivalent substitution for own-produced (and/or collected) foods with market equivalents but create dietary changes that may reduce consumption of some nutritionally-important food groups.

## More Information

- Policy Brief - Purwestri, RC, Powell B, Rowland D, Wirawan NN, Waliyo E, Lamanepa M, ... Ickowitz A. (2019). "From growing food to growing cash: Understanding the drivers of food choice in the context of rapid agrarian change in Indonesia. From growing food to growing cash: Understanding the drivers of food choice in the context of rapid agrarian change in Indonesia" (pp. 1–6). Bogor, Indonesia: CIFOR. - <https://www.cifor.org/knowledge/publication/7360/>
- "From growing food to growing cash: the impact of agrarian transitions on diets and nutrition in rural Indonesia." By Ickowitz, A. 4th Agriculture, Nutrition & Health (ANH) Academy Week, Hyderabad, India, 24–28 June 2019. - [https://driversoffoodchoice.org/wp-content/uploads/2020/07/3A\\_Amy-Ickowitz-ANH2019.pdf](https://driversoffoodchoice.org/wp-content/uploads/2020/07/3A_Amy-Ickowitz-ANH2019.pdf)
- **Project Page** - <https://driversoffoodchoice.org/research/project-descriptions/rapid-agrarian-change-in-indonesia/>

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