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Is deforestation inherent to production systems? How field types contribute to understanding the forest frontier

SARAH GRAF¹, CHRISTINE BOSCH¹, EMMANUEL CODJOE², STEPHANIE DOMPTAIL³, CHRISTIANAH OJO⁴, TEMITOPE OJO⁴, OYAKHILOMEN OYINBO⁵

¹*University of Hohenheim, Inst. of Agric. Sci. in the Tropics (Hans-Ruthenberg-Institute), Germany*

²*University of Ghana, Dept. of Economics, Ghana*

³*Justus Liebig University Giessen, Inst. of Agric. Policy and Market Res., Germany*

⁴*Obafemi Awolowo University, Ife, Dept. of Agricultural Economics, Nigeria*

⁵*Ahmadu Bello University, Dept. of Agricultural Economics, Nigeria*

Abstract

West African forest frontiers experience massive forest conversion into tree crop plantations linked to dynamics of accumulation. Deforestation by African farmers is commonly framed as a trade-off between nature conservation and poverty alleviation. However, few studies have actually assessed the mechanisms driving deforestation processes on site. We use qualitative data collected during nine months of fieldwork in two case study villages in Ghana and Nigeria, one of which experienced ongoing deforestation. We assess how farming practices and class relations regarding different “field types” drive deforestation dynamics. A Field Type is characterised by a mix of crops, cropping method, and successive stages of plantation development. Using a political economy approach, we expand this existing concept to include social and institutional relations at field level.

Each study village is characterised by specific tenure and labour relations for each stage of the field types. Common roles in these relations are landlords, tenant farmers and farm labourers. We identify three mechanisms through which the inner logic of Field Types directly fuels forest conversion.

(i.) Food crops: In the Ghanaian village, maize, cassava and plantain are interplanted between young cocoa trees. Once the tree canopy closes, farmers seek new land to interplant food crops.

(ii.) Tenure relations: Planting cocoa or oil palm trees in a plot ensures secure land rights. Additionally, landowners enforce tree planting to maximise land rent.

(iii.) Reinvestment: Farmers continuously seek to expand their holding of cocoa and oil palm. After tree planting on one plot is finished, farmers reinvest the freed up capital and labour plus the proceeds from tree crops into tenancy agreements for additional plots and wages to plant new tree crops.

Our research challenges two myths about forest loss: Firstly, while deforestation by African farmers is commonly framed as poverty-driven, deforestation drivers on system level are rather linked to accumulation. Secondly, while agricultural expansion and intensification are commonly presented as substitutes; intensification does not halt the drivers identified in our study. Instead of perpetuating such myths, initiatives to stop deforestation should acknowledge and intervene in system-immanent mechanisms.

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