

The effects of forest change on agricultural productivity:
Evidence from Indonesia

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January 2018

Abstract

We examine how forest cover change can affect agricultural productivity using household panel data and remote sensing data on forest change. The focus is on rural Indonesia, where intensive biodiversity loss is occurring from deforestation while agriculture is the main industry. We estimate an agricultural production function and find that farmers experienced reduction of agricultural productivity of 44% or \$2.63 billion across rural Indonesia between 2001 and 2014. In addition, we explore the mechanisms underlying the productivity loss and find that biological pest control is the most plausible explanation.

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