

Extended Data Table 2 | Compilation of published estimates of emissions associated with anthropogenic land-cover change and land management until present (industrial and pre-industrial)

Reference	Land management activities considered	Cumulative emissions
Total cumulative emissions from land use		
DeFries et al., 1999 ⁶¹	--	182-199
Strassmann et al., 2008 ⁶²	--	233
Olofsson and Hickler, 2008 ⁶³	Crop harvest	194-262
Pongratz et al., 2009 ⁶⁰	--	171
Kaplan et al., 2010 ²⁰ , Hyde 3.1 based*	--	137-189
Kaplan et al., 2010 ²⁰ , KK10 based*	Land-use intensity, shifting cultivation	325-357
Stocker et al., 2014 ⁶⁴	Wood and crop harvest, tillage, shifting cultivation	243
<i>This study, FRA- and Pan-based</i>	<i>Top-down, all activities</i>	<i>431-469</i>
<i>This study, inner quartiles of 42 estimates</i>	<i>Top-down, all activities</i>	<i>375-525</i>

Note that most model-based results include fluxes from soils and wood products. Datasets are from refs 20, 60–64.

*Pre-industrial emissions only.