Supplementary to

History of anthropogenic Phosphorus inputs (HaPi) to the terrestrial biosphere from 1860 to 2020

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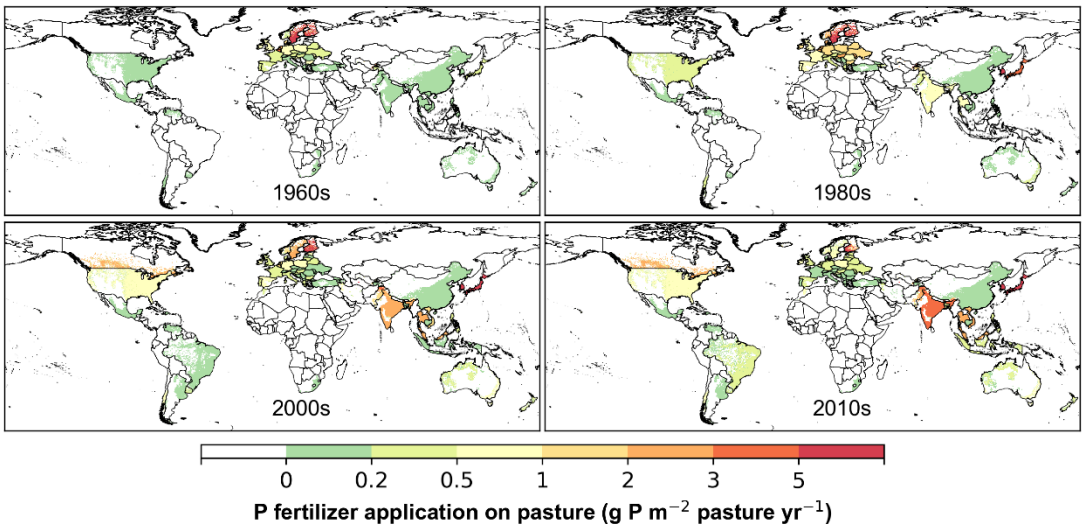

Figure S1. Global patterns of P fertilizer application on pasture in the 1960s, 1980s, 2000s, and 2010s.

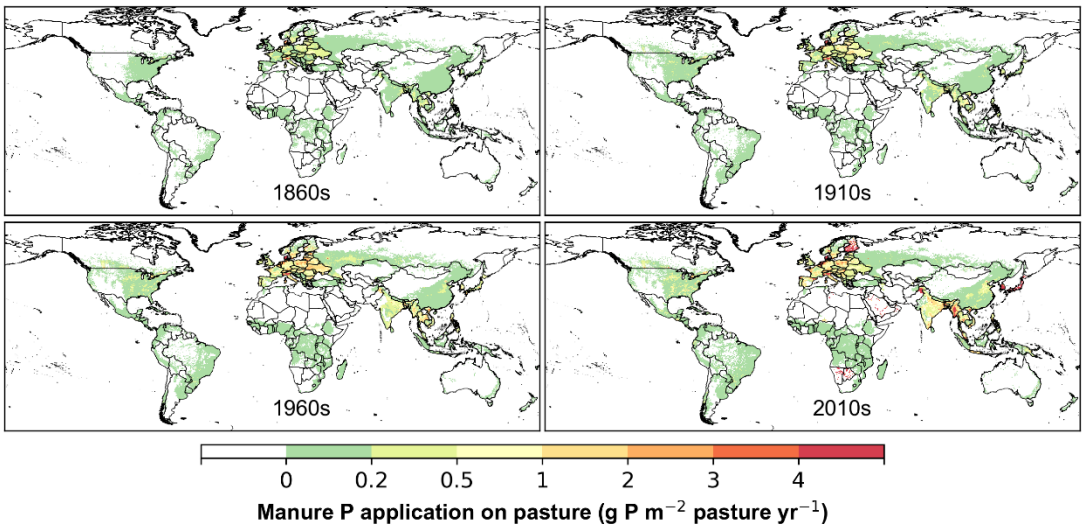

Figure S2. Global patterns of manure P application on pasture in the 1860s, 1910s, 1960s, and 2010s.

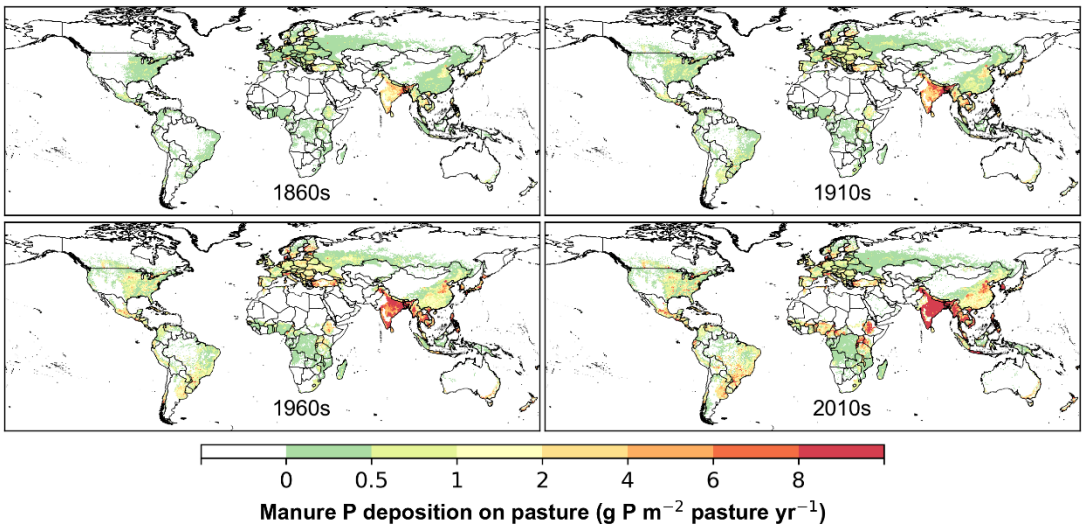

Figure S3. Global patterns of manure P deposition on pasture in the 1860s, 1910s, 1960s, and 2010s.

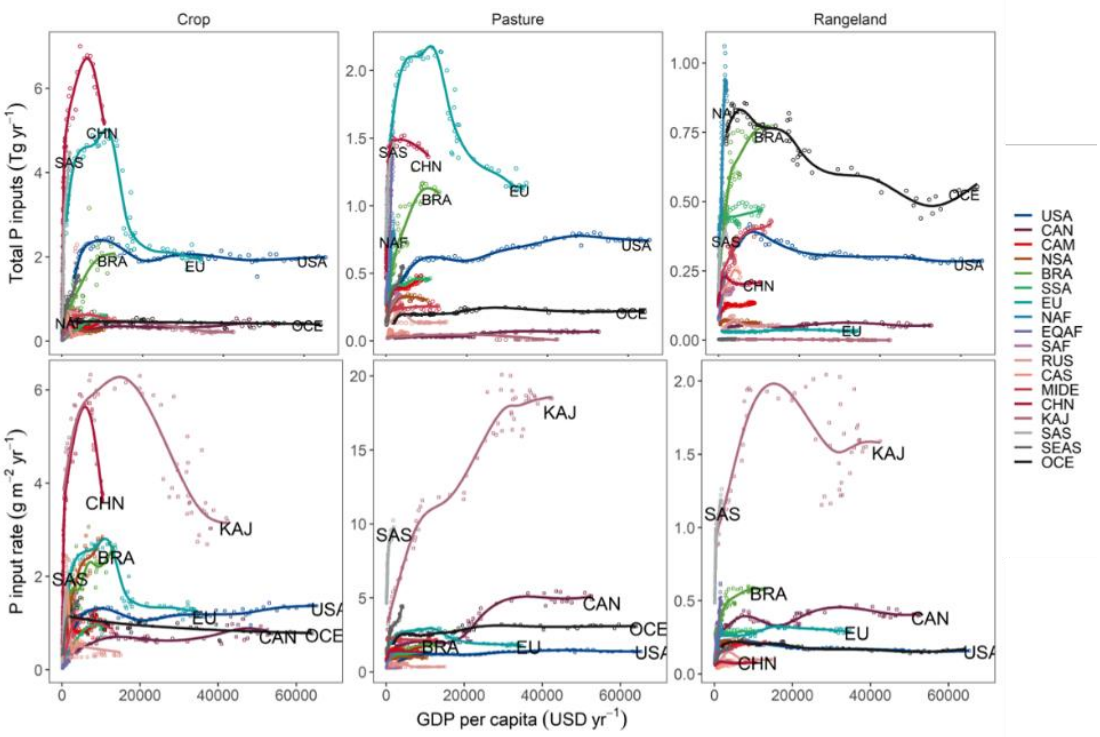

Figure S4. Changes in annual P inputs (excluding atmospheric P deposition) and P input rates with growth of GDP per capita across cropland, pasture, and grassland in 18 different regions. The colored trend lines are fitted by generalized additive models. The 18 regions include the USA, Canada (CAN), Central America (CAM), northern South America (NSA), Brazil (BRA), southwestern South America (SSA), Europe (EU), Northern Africa (NAF), Equatorial Africa (EQAF), Southern Africa (SAF), Russia (RUS), Central Asia (CAS), the Middle East (MIDE), China (CHN), Korea and Japan (KAJ), South Asia (SAS), Southeast Asia (SEAS), and Oceania (OCE). For visual clarity, not all region names are shown in each panel.