

1. Regional classifications

According to the Intergovernmental panel on Climate Change the fifth assessment (IPCC AR5) and Tian et al. (2016), we divided the world into seven regions including North America, South America, Africa, Europe, southern Asia, northern Asia, and Oceania. To be clarified, southern Asia was divided into five parts (i.e., West, South, East, Central and Southeast Asia) since sub-regions within it have become hotspots for nitrogen inputs and greenhouse gas emissions (e.g., South and East Asia) (Fig. S1).

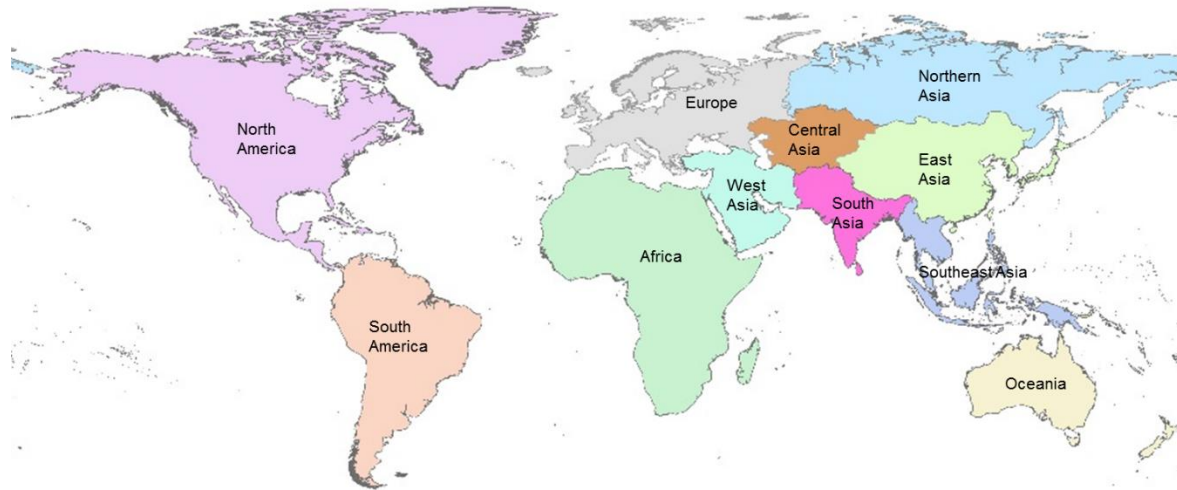


Figure S1. The classification of regions in the world.