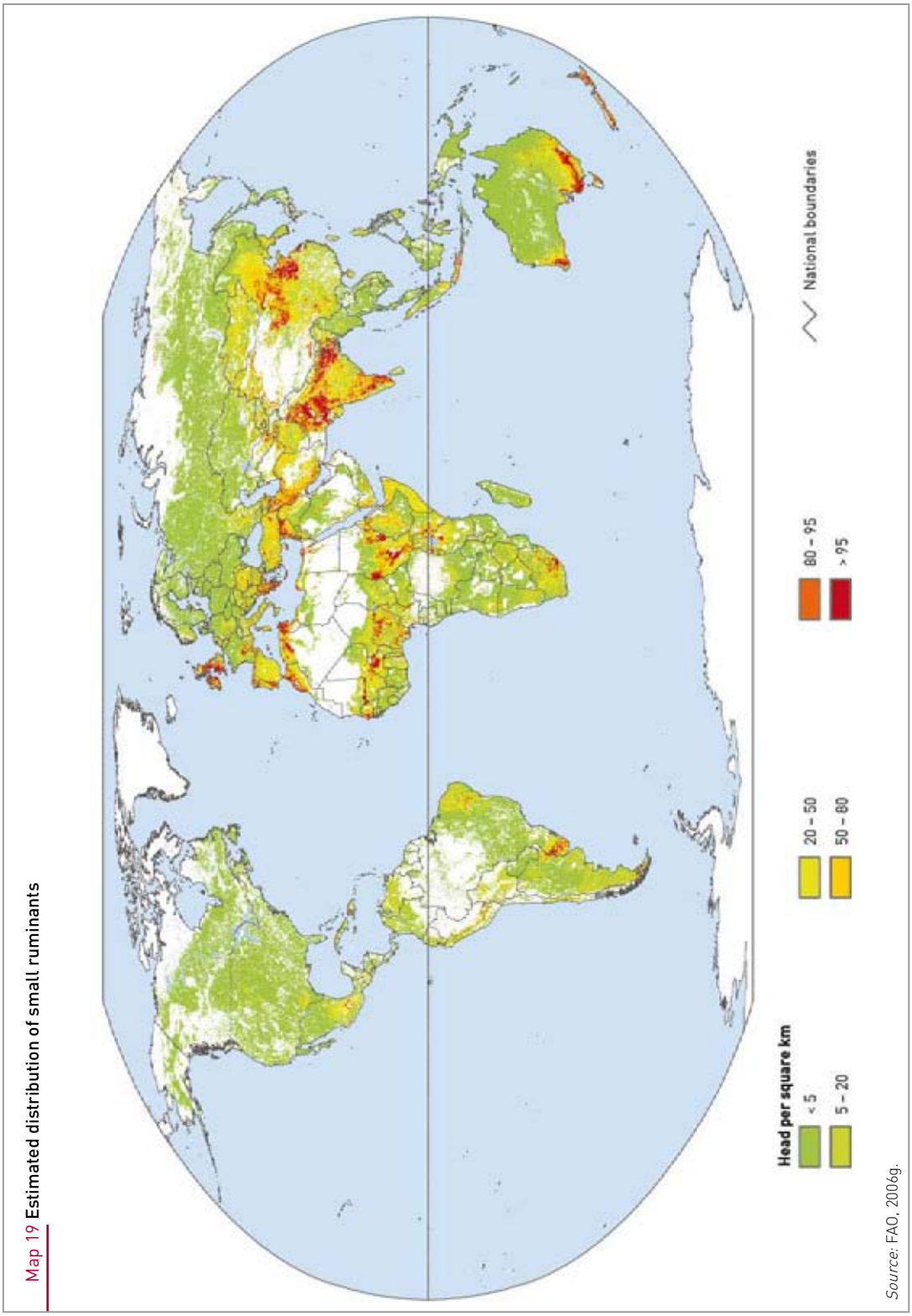
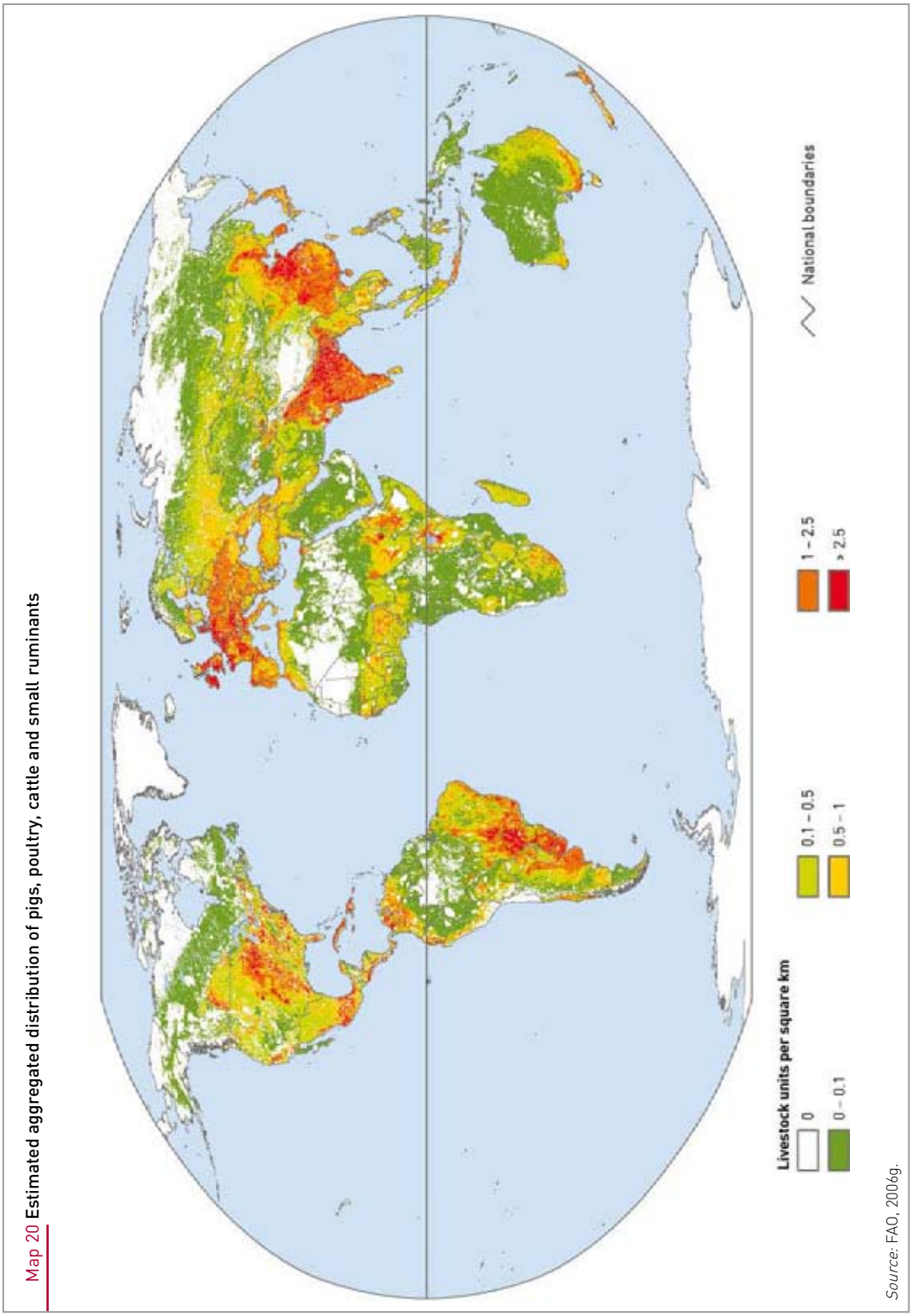


Map 19 **Estimated distribution of small ruminants**

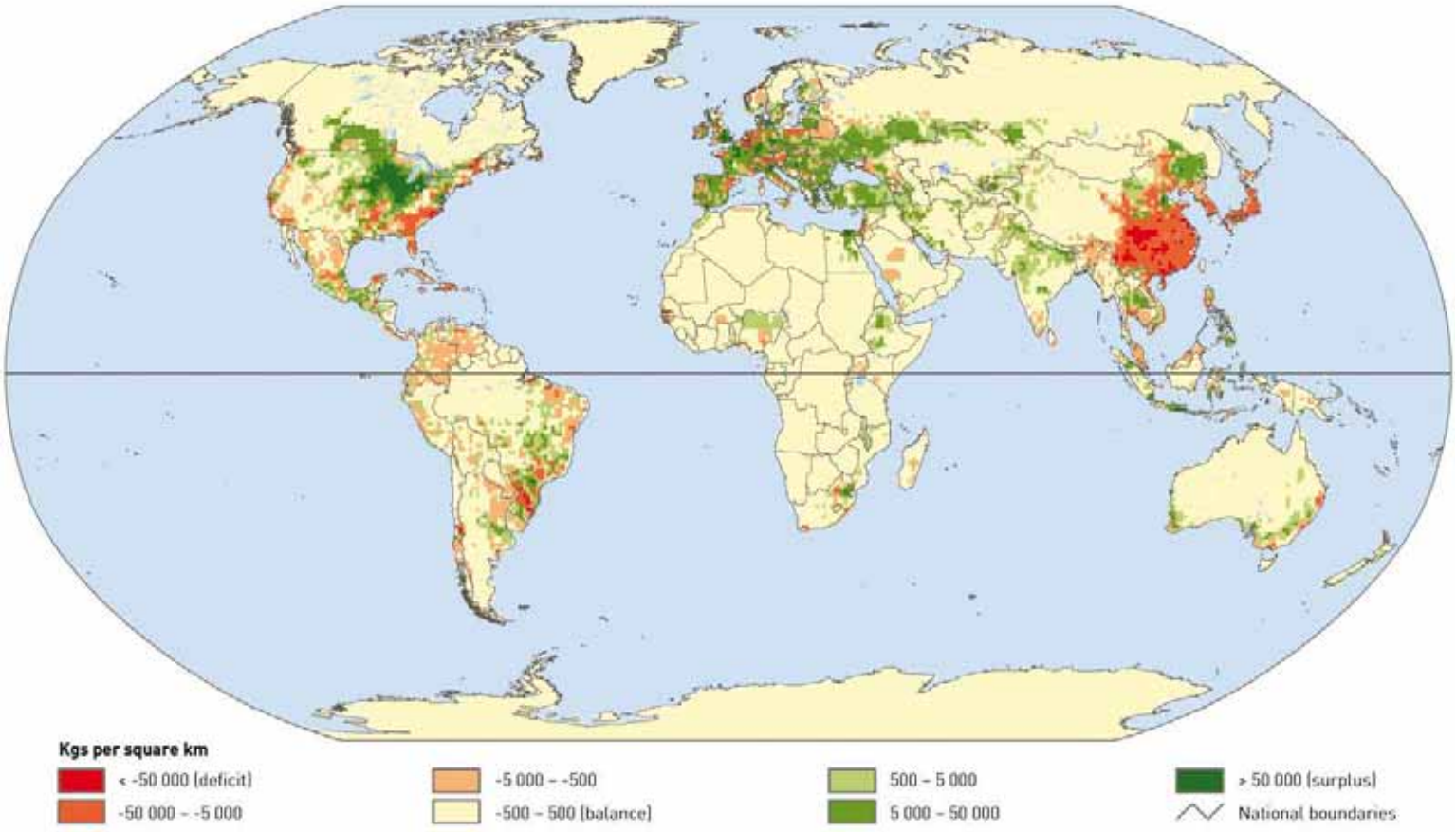
Source: FAO, 2006g.



Map 20 Estimated aggregated distribution of pigs, poultry, cattle and small ruminants

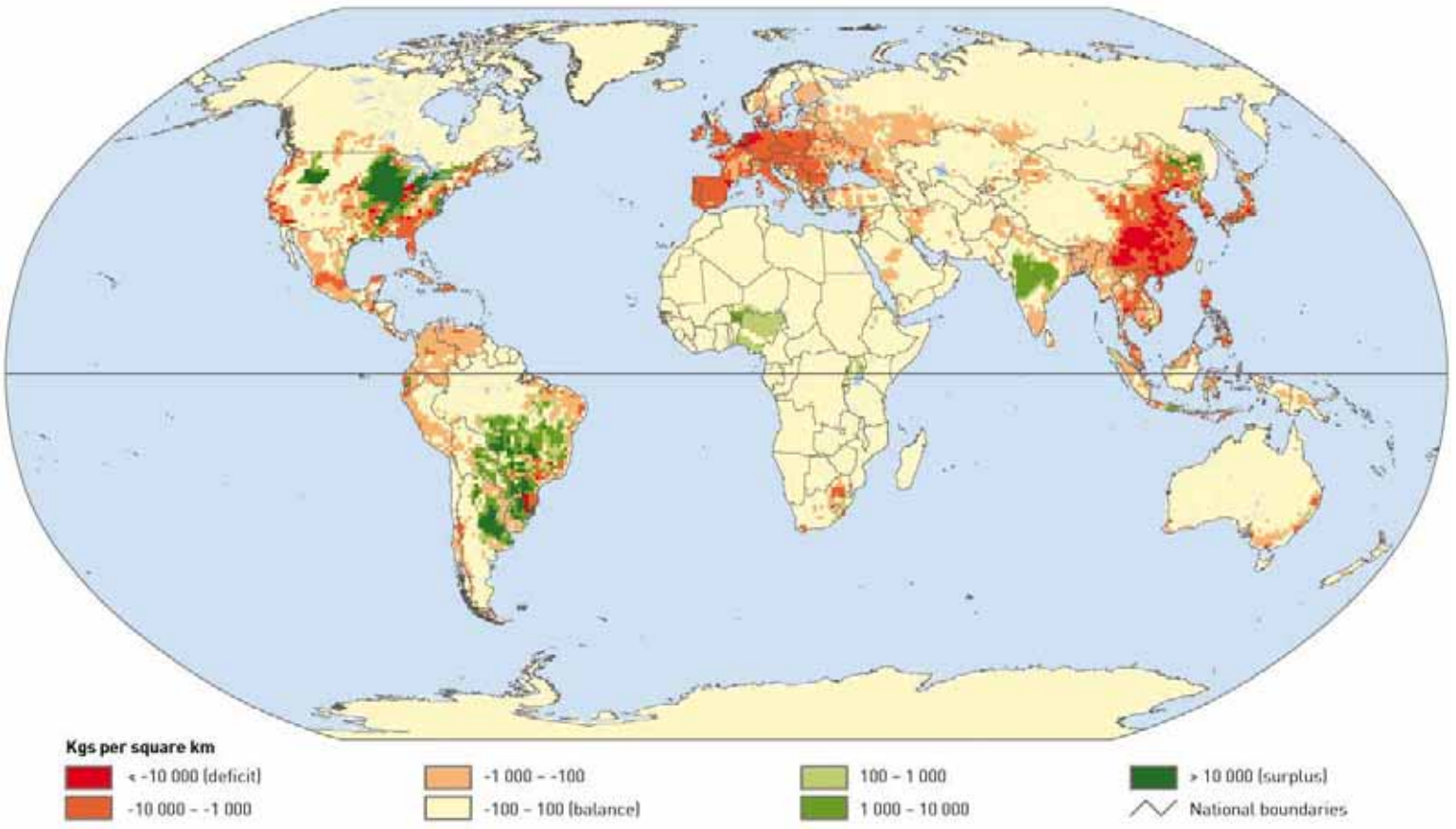
Source: FAO, 2006g.

Map 21 **Estimated feed surplus/deficit – cereals (pig and poultry)**



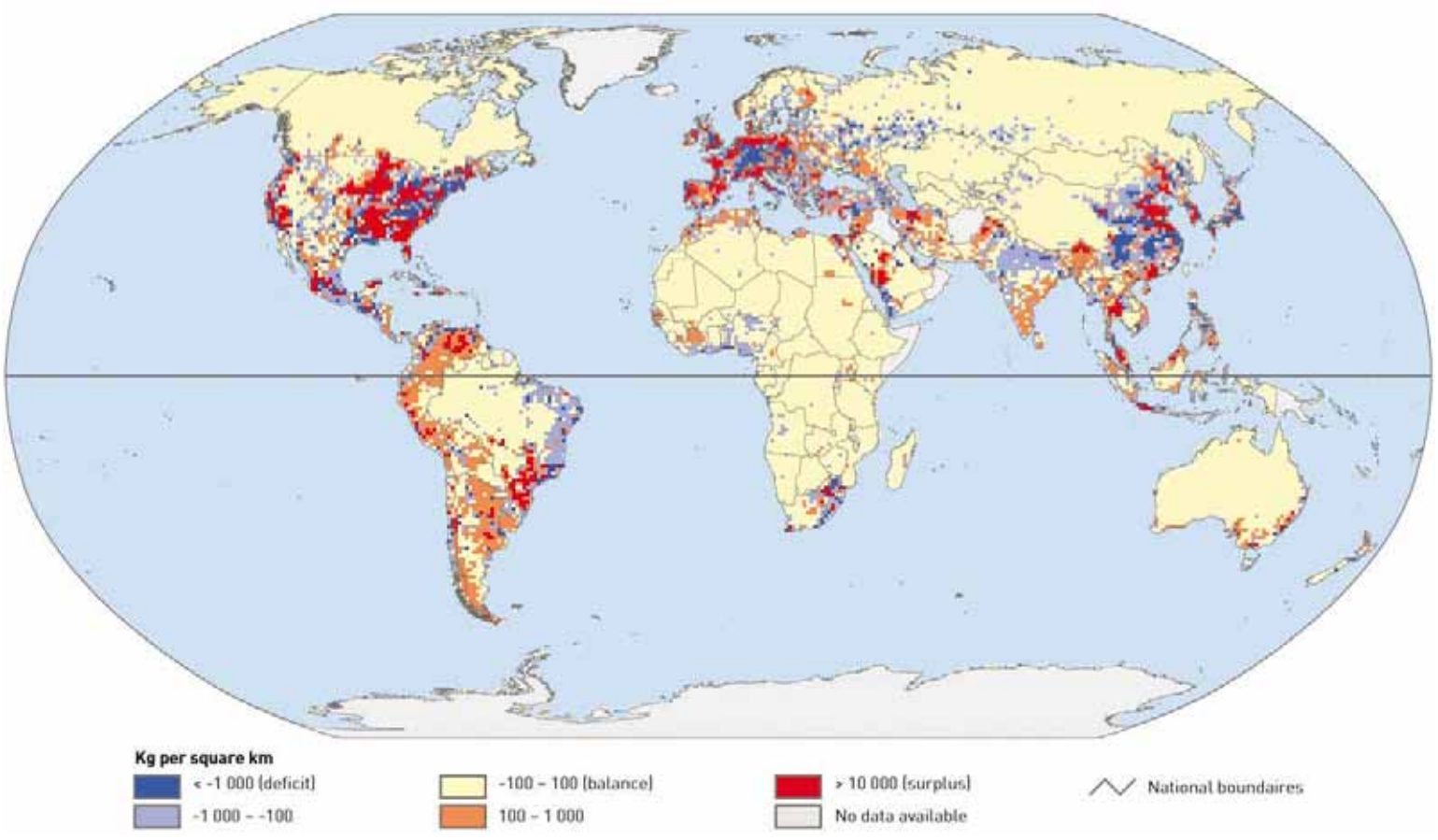
Source: LEAD. For each 100 x 100 km cell, the balance is calculated as the difference between the estimated cumulated maize, wheat and barley (MWB) production for pig and poultry feed and the MWB consumption by pig and poultry. The production map is derived from the estimated MWB production for animal feed (Map 8), removing the fraction of MWB feed dedicated to ruminants (Galloway *et al.*, 2006). The consumption map was calculated from the pig and poultry meat production maps (see source of Maps 23 and 24). National level indexes derived were first used to estimate live weight production and total feed consumption (FAO, 2006b). For each country, the share of MWB in the feed basket composition was then extrapolated from available data (e.g. Chapter 2, Figures. 2.6 and 2.7). This share was finally used to calculate the MWB consumption by pig and poultry in each cell.

Map 22 **Estimated feed surplus/deficit – soymeal (pig and poultry)**



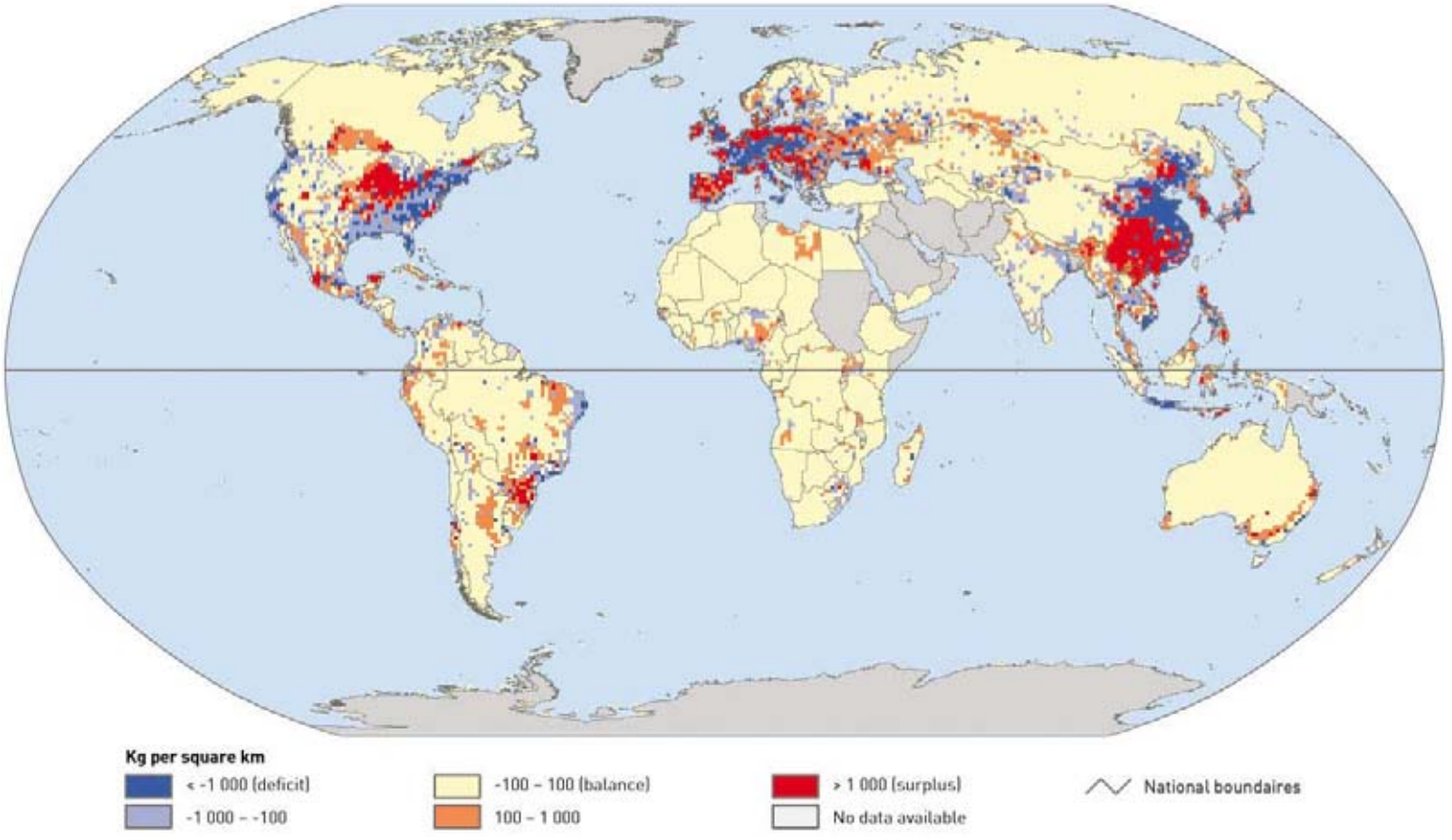
Source: LEAD. For each 100 x 100 km cell, the balance is calculated as the difference between the estimated soymeal production for pig and poultry feed and the soymeal consumption by pig and poultry. The soymeal production map is derived from the estimated soybean production for animal feed (map 8), removing the fraction dedicated to ruminants (Galloway *et al.*, 2006) and applying a bean to meal weight conversion factor (Schnittker, 1997). The consumption map was calculated from the pig and poultry meat production maps (see source of Maps 23 and 24). National level indexes derived were first used to estimate live weight production and total feed consumption (FAO, 2006b). For each country, the share of soymeal in the feed basket composition was then extrapolated from available data (e.g. Chapter 2, Figures. 2.6 and 2.7). This share was finally used to calculate the soymeal consumption by pig and poultry in each cell.

Map 23 **Estimated poultry meat surplus/deficit**



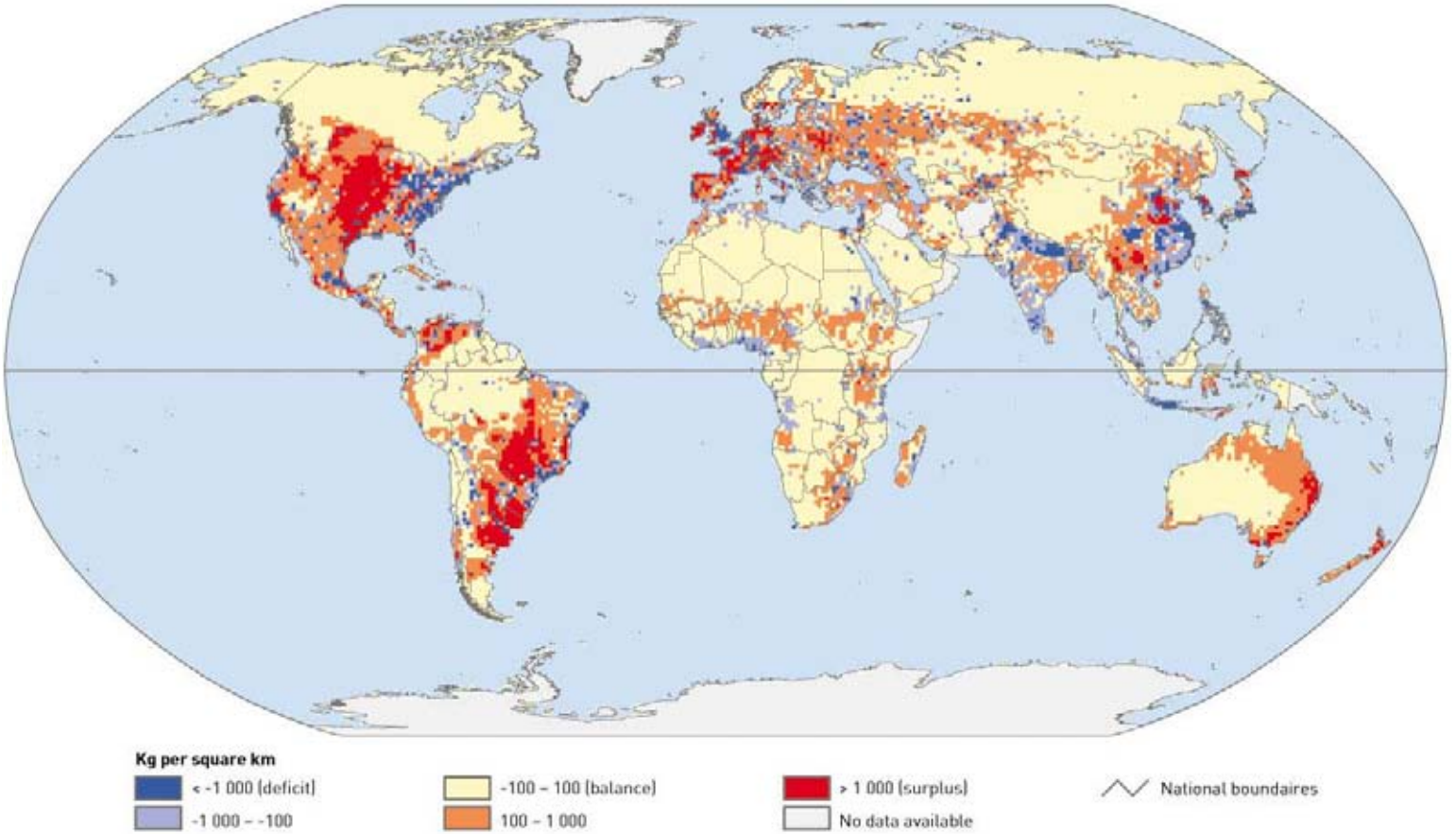
Source: LEAD – For each 100 x 100 km cell, the balance is calculated as the difference between estimated poultry meat production and consumption. The production map is based on national level statistics (FAO, 2006b) distributed along animal densities (see map 16) corrected for the level of production intensity (see map 14). The consumption map was calculated by distributing national level statistics (FAO, 2006b) along human population (see map 3). In developing countries, higher consumption levels were attributed to urban areas (LandScan, 2005) than to rural areas.

Map 24 **Estimated pig meat surplus/deficit**



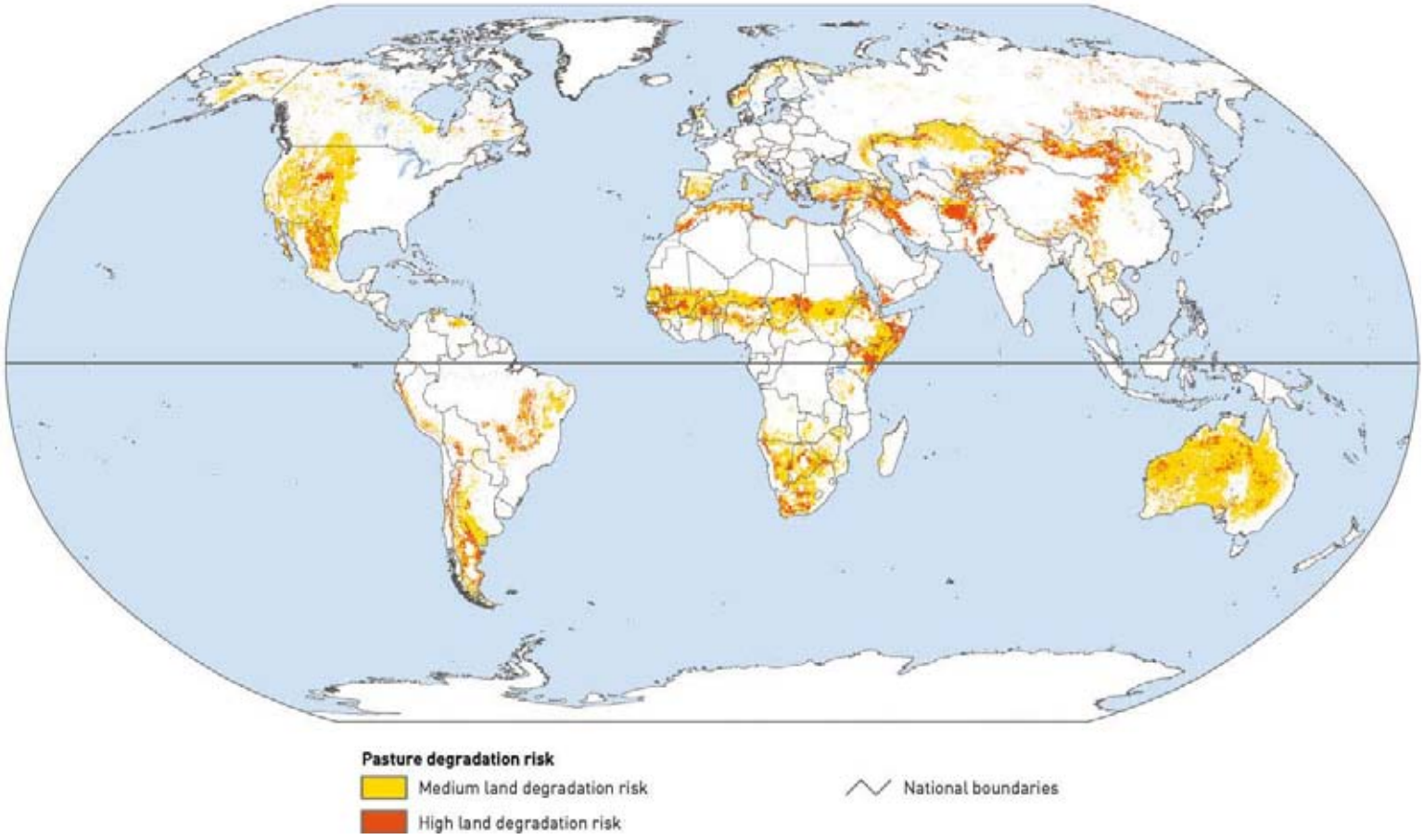
Source: LEAD. For each 100x100 km cell, the balance is calculated as the difference between estimated pig meat production and consumption. The production map is based on national level statistics (FAO, 2006b) distributed along animal densities (see map 17) corrected for the level of production intensity (see map 15). The consumption map was calculated by distributing national level statistics (FAO, 2006b) along human population (see map 3). In developing countries, higher consumption levels were attributed to urban areas (LandScan, 2005) than to rural areas.

Map 25 **Estimated beef surplus/deficit**



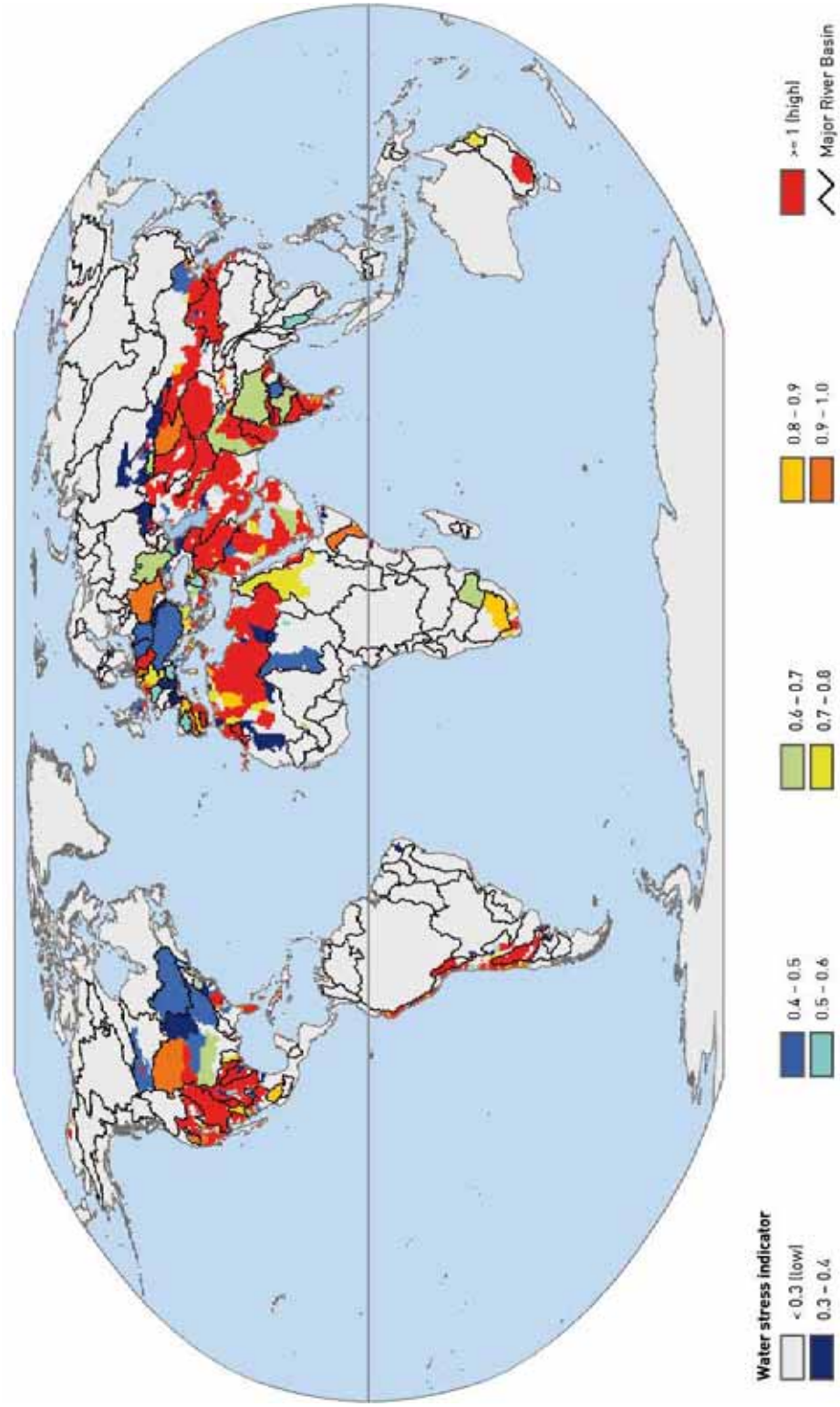
Source: LEAD. For each cell, the balance is calculated as the difference between estimated beef production and consumption. The production map is based on national level statistics (FAO, 2006b) distributed along animal densities (see map 18). The consumption map was calculated by distributing national level statistics (FAO, 2006b) along human population (see map 3). In developing countries, higher consumption levels were attributed to urban areas (LandScan, 2005) than to rural areas.

Map 26 **Pasture degradation risk in the dry and cold lands**

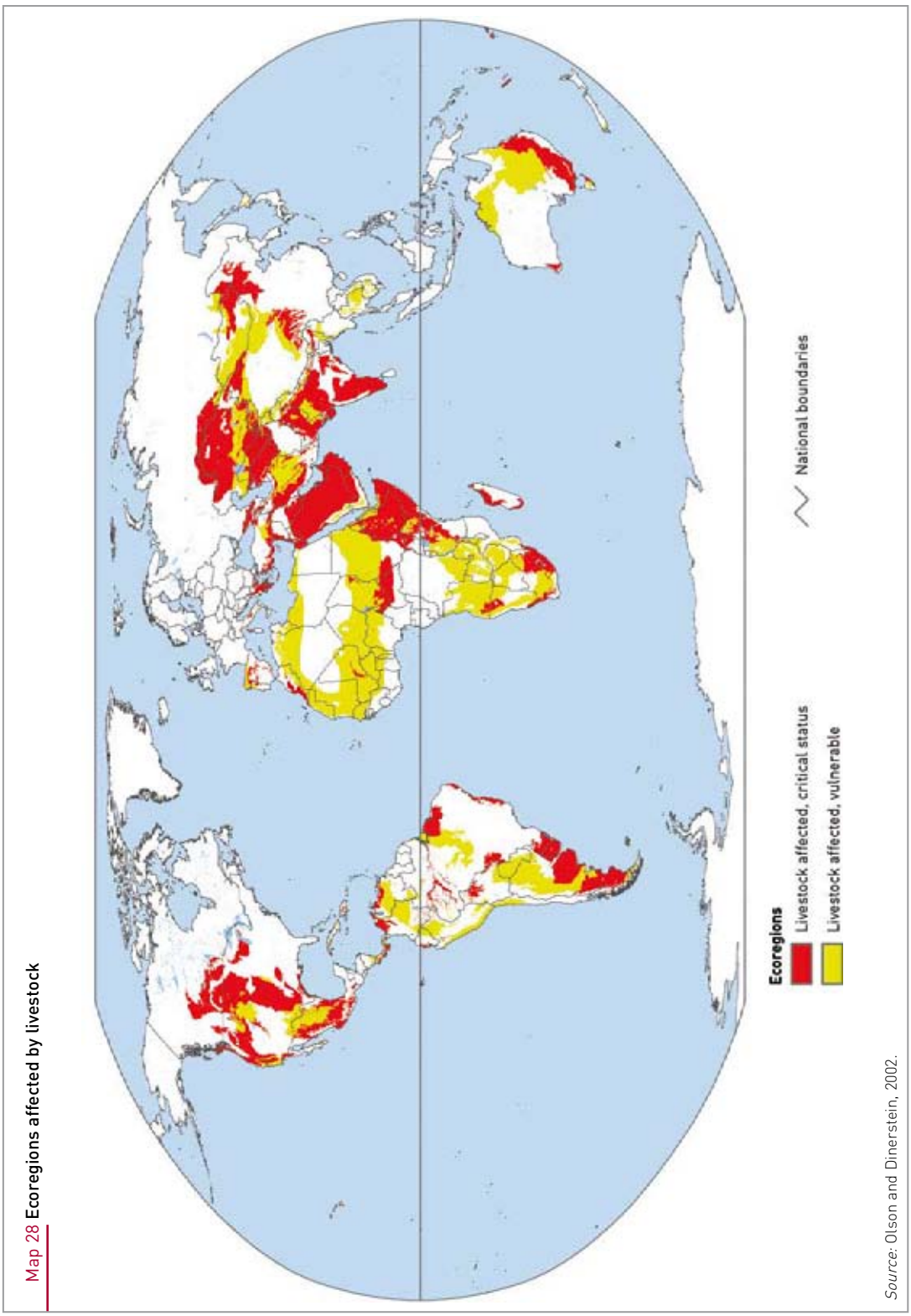


Source: LEAD. Cells with a low or very low suitability for pasture (FAO, 2006f) and at least a third of the area used as pasture (FAO, 2006f) were assigned to the "high risk" class, whereas cells with a medium suitability for pasture (FAO, 2006f) and at least a third of the area used as pasture (FAO, 2006f) were assigned to the "medium risk" class. Both the "high" and "medium" degradation risk classes are assigned to cells with cattle population (see Map 18).

Map 27 Human infringement on environmental water demand (water withdrawal as a proportion of water available for human use)



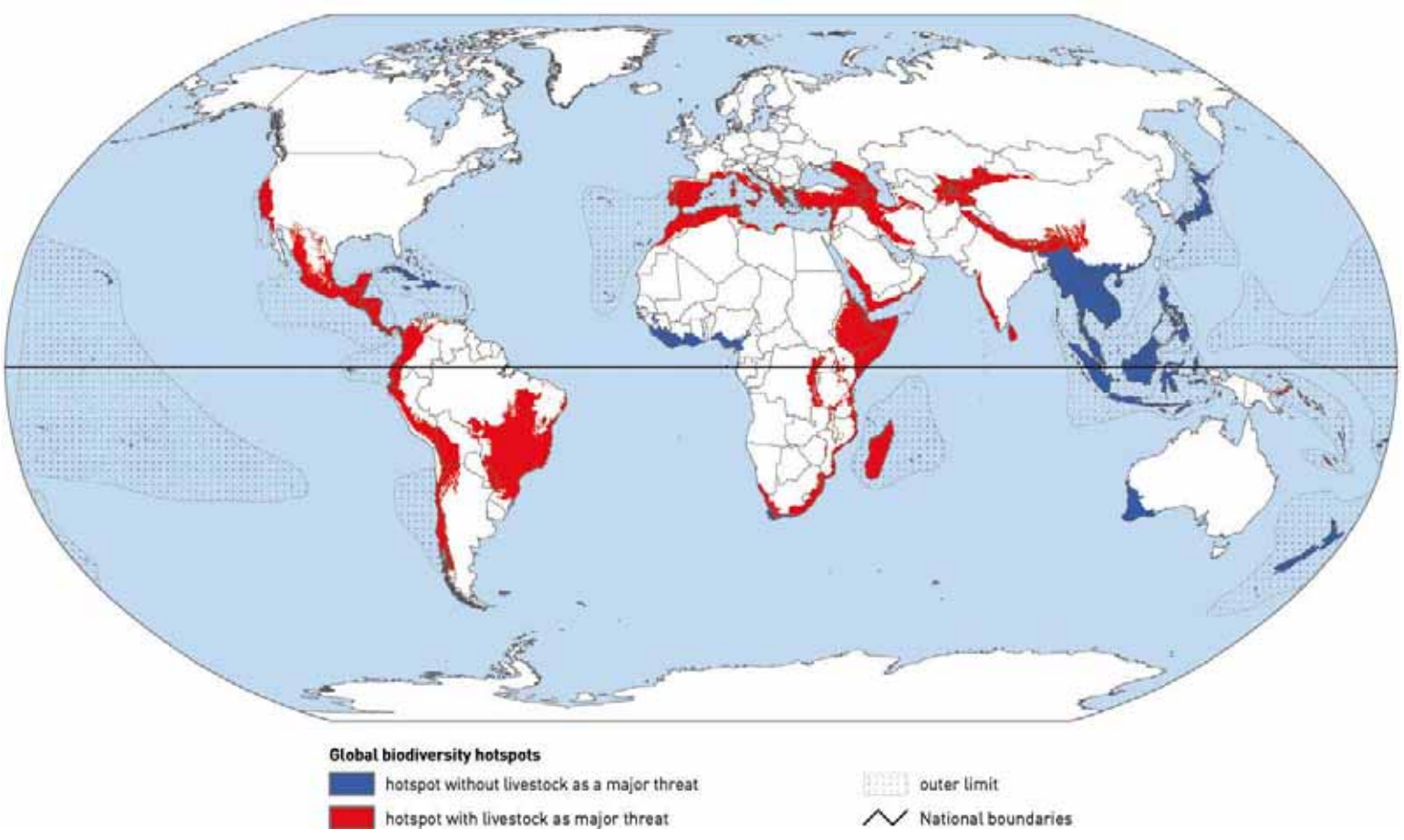
Source: World Resources Institute, 2003.



Map 28 **Ecoregions affected by livestock**

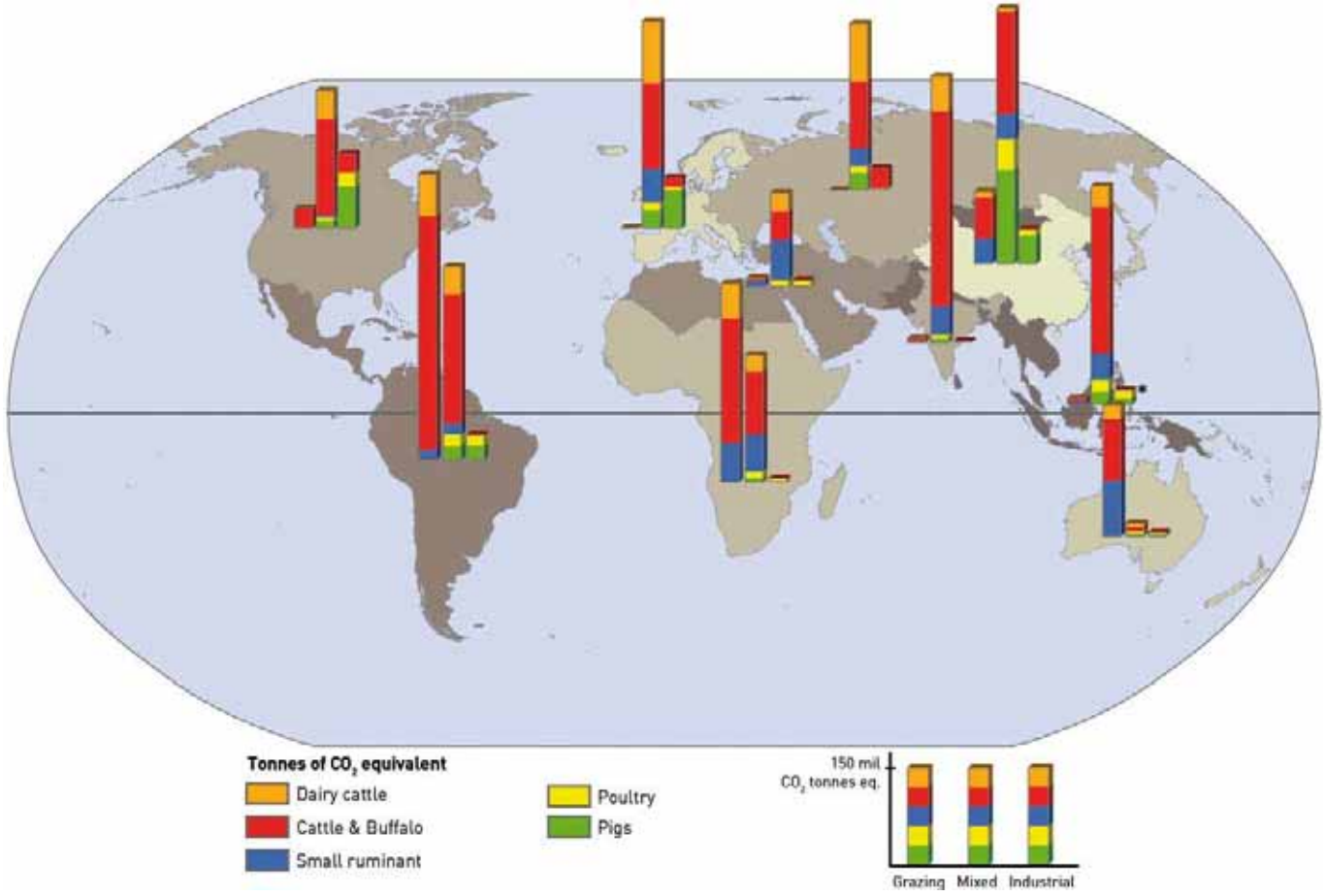
Source: Olson and Dinerstein, 2002.

Map 29 **Livestock as an important cause behind global biodiversity hotspots**



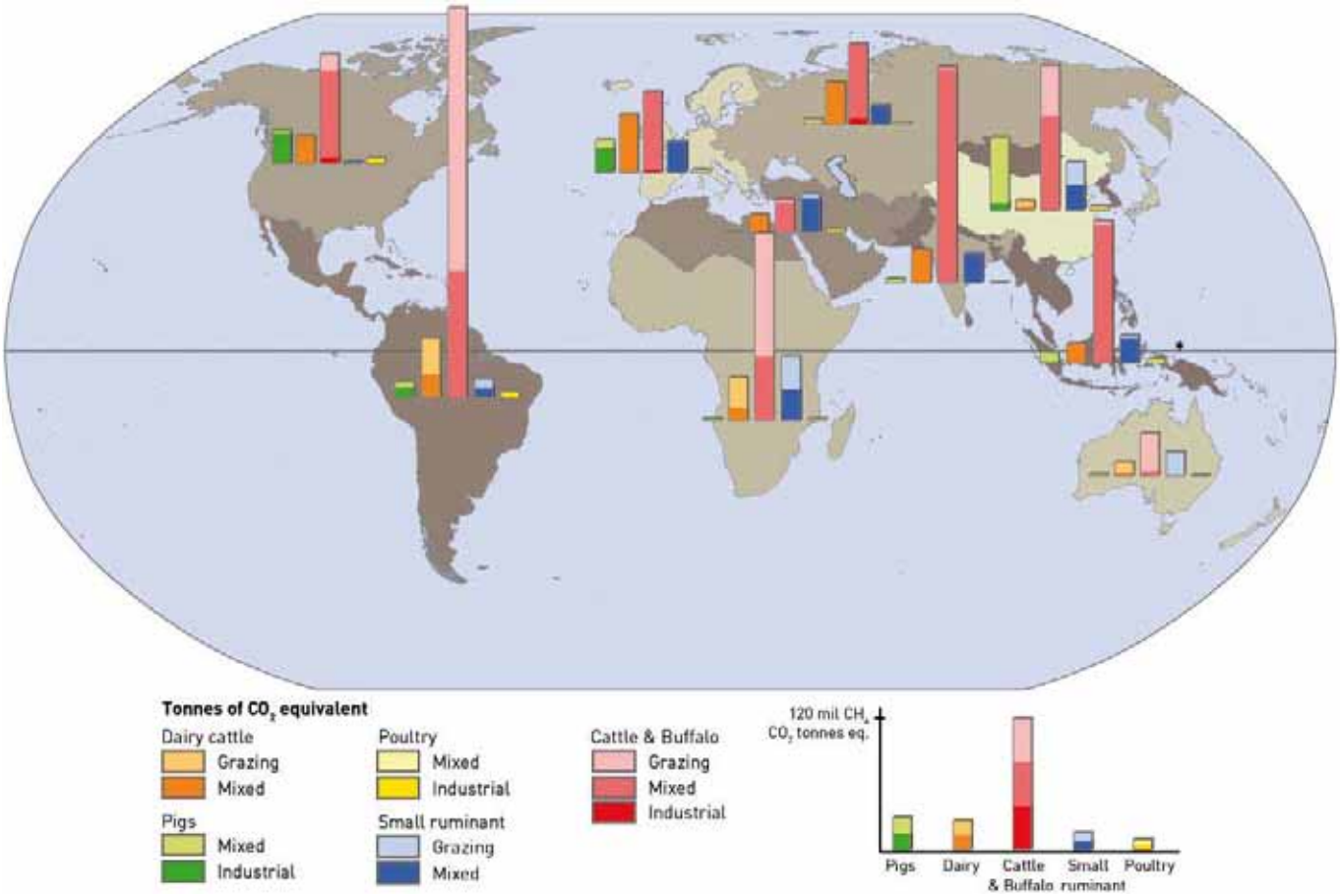
Source: Mittermeier *et al.*, 2004.

Map 30 **Total greenhouse gas emissions from enteric fermentation and manure per species and main production system**



Source: LEAD. Based on region and production system specific population estimates (Groenewold, 2005) and emission factors (see Chapter 3, Box 3.4 and Annex 3.1 and 3.2).
* South and East Asia excluding China and India.

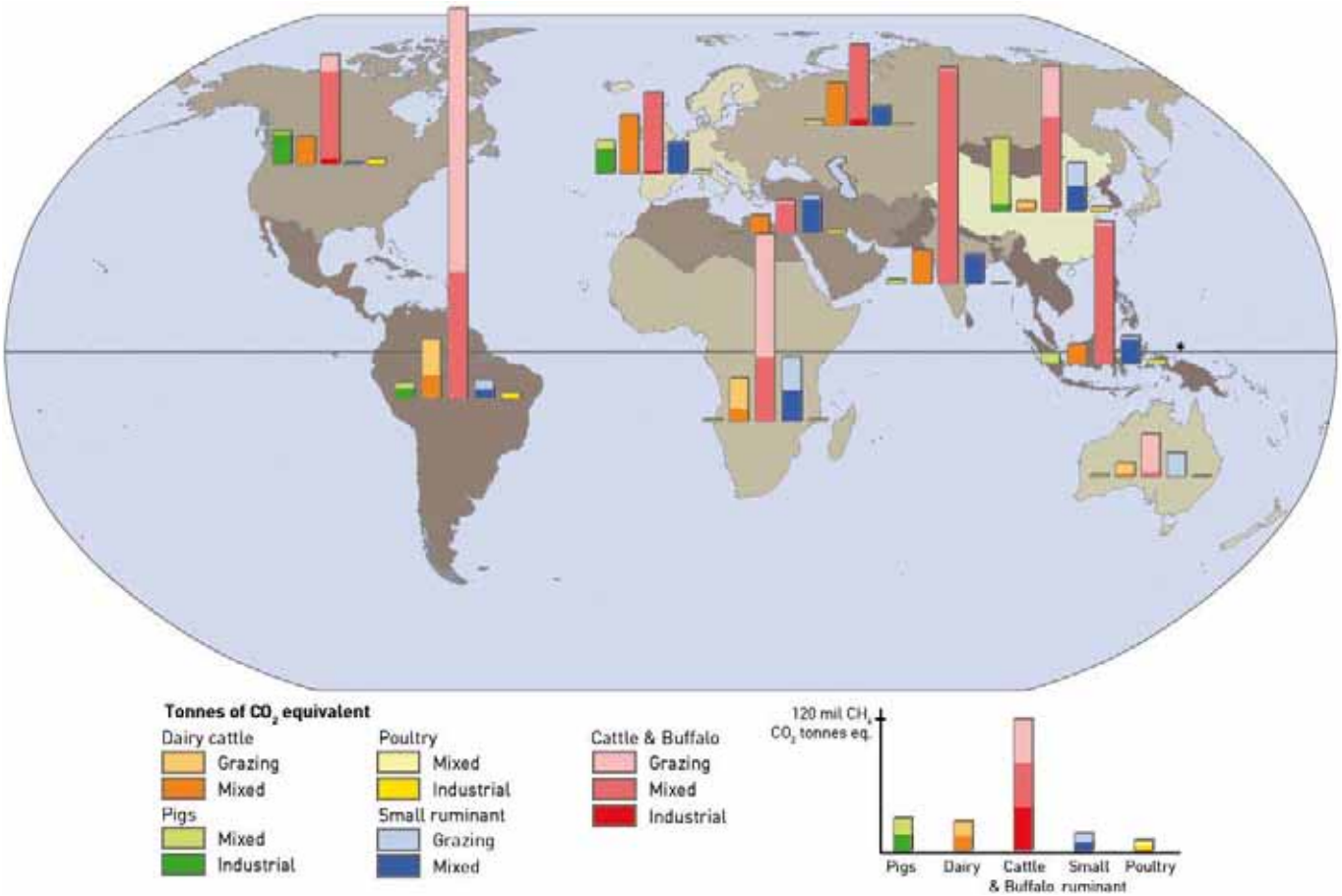
Map 31 **Total methane emissions from enteric fermentation and manure per species and main production system**



Source: LEAD. Based on region and production system specific population estimates (Groenewold, 2005) and emission factors (see Annex 3.1 and 3.2).

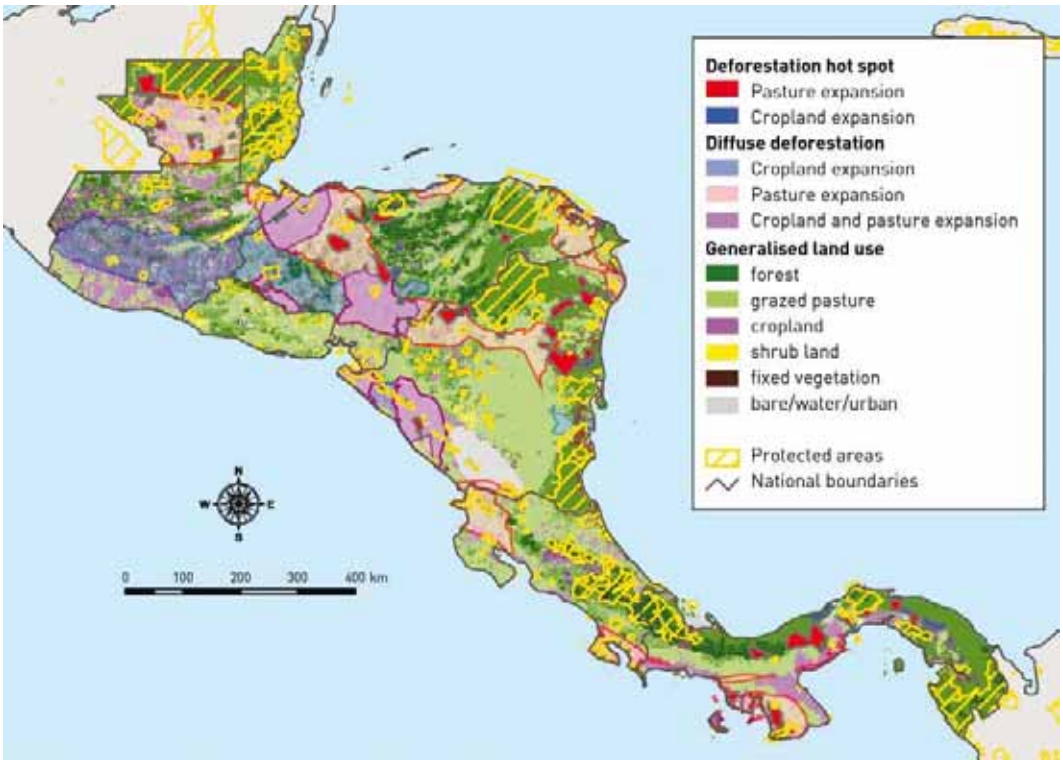
* South and East Asia excluding China and India.

Map 32 **Total nitrous oxide emissions from manure per species and main production system**



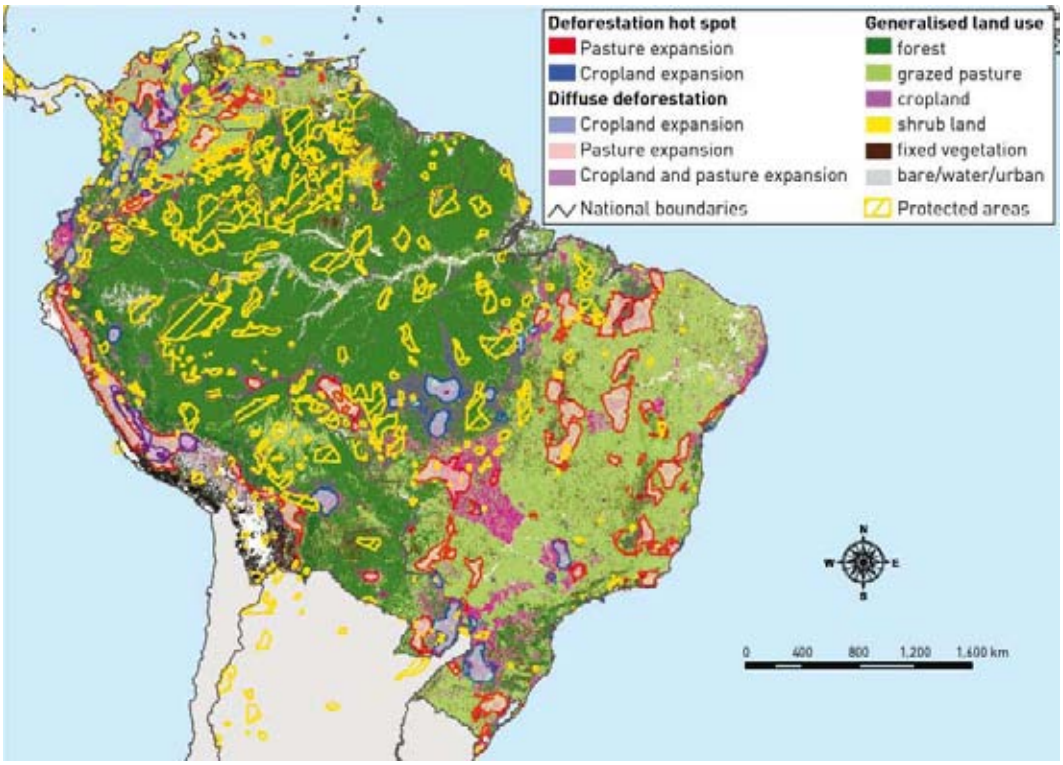
Source: LEAD. Based on region and production system specific population estimates (Groenewold, 2005) and emission factors (see Chapter 3, Box 3.4).
* South and East Asia excluding China and India.

Map 33A **Projected expansion of cropland and pasture into Neotropical forest from 2000 to 2010**



Source: Wassenaar *et al.*, 2006.

Map 33B **Projected expansion of cropland and pasture into Neotropical forest from 2000 to 2010**



Source: Wassenaar *et al.*, 2006.