



Pacific Institute
for Climate Solutions
Knowledge. Insight. Action.

SDG 14

Nutrient pollution: sources, impacts and potential solutions

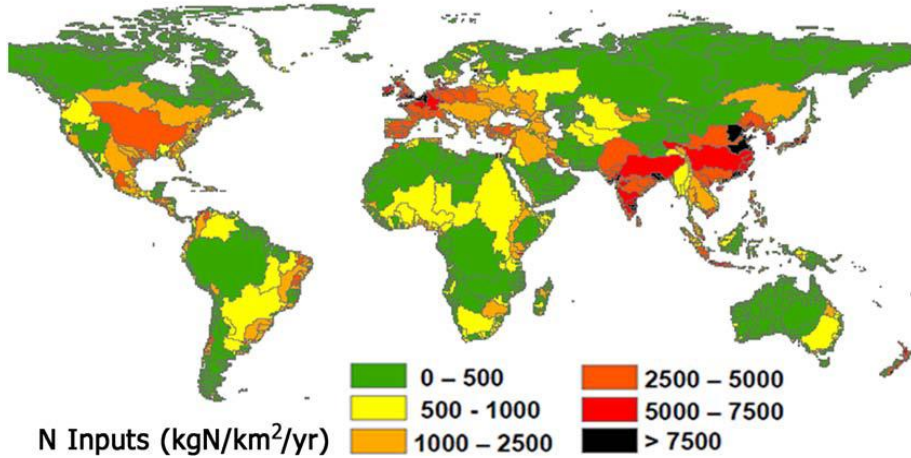
Sybil P. Seitzinger

Executive Director

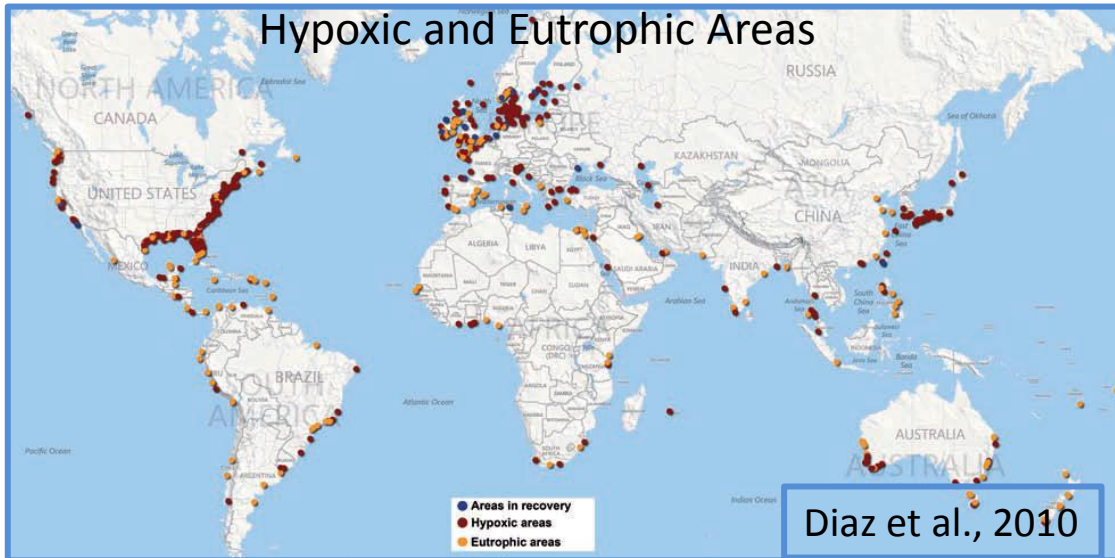
Pacific Institute for Climate Solutions

University Victoria, BC, Canada

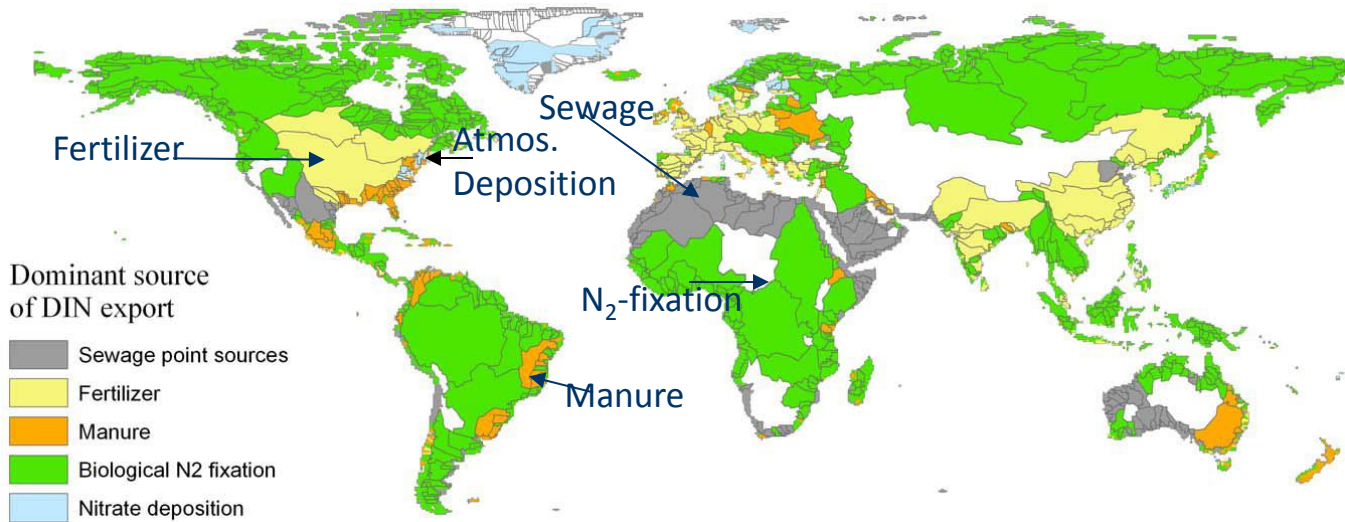
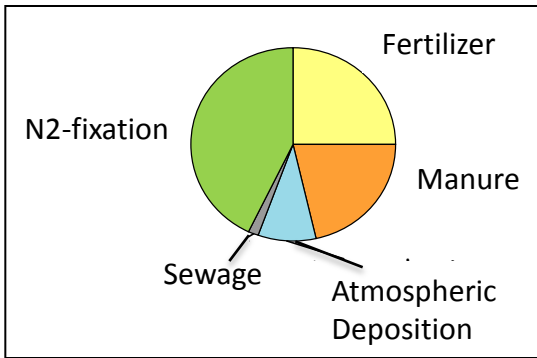
Anthropogenic N Inputs to river catchments



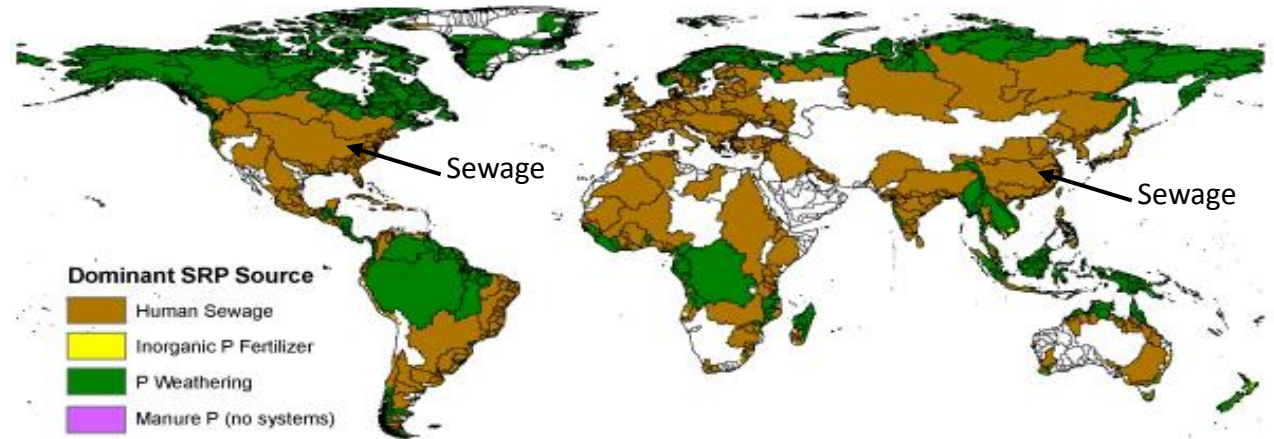
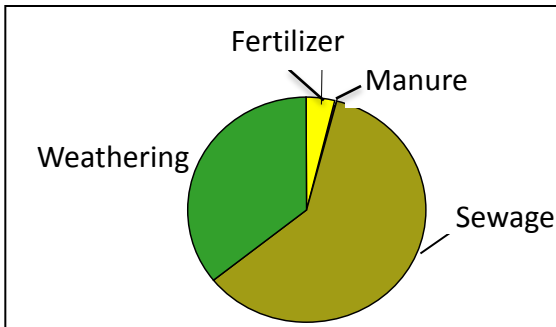
Billen et al 2013



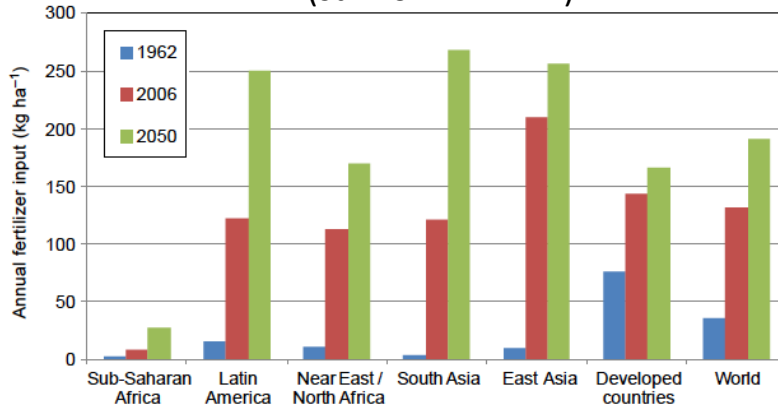
DIN Export -- Dominant Source



DIP Export -- Dominant Source



Fertilizer input to agricultural land (sum of N + P + K)



Sutton et al. 2017

Fertilizer subsidies - \$40 billion in 2011



2 ZERO HUNGER



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



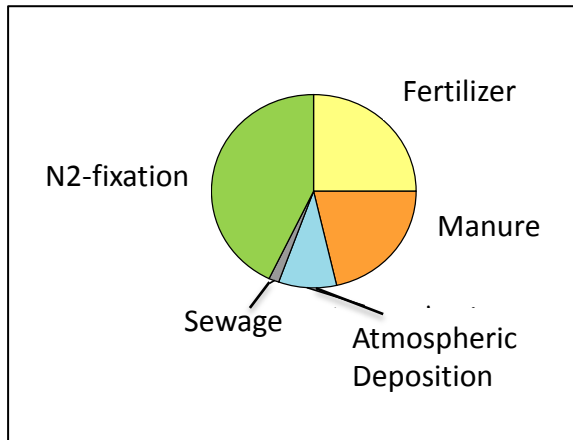
13 CLIMATE ACTION



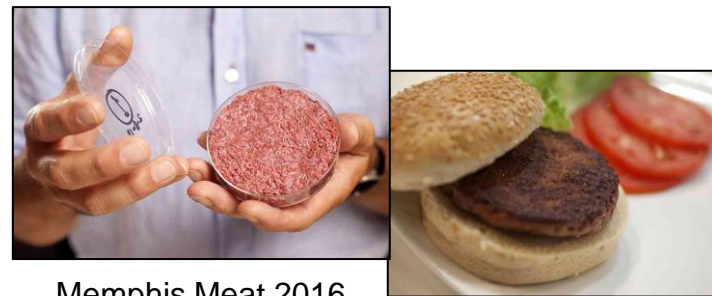
15 LIFE ON LAND



Global DIN source to coasts



Lab grown meat – what's the future?



Memphis Meat 2016

