



The ECOLOGICAL FOOTPRINT

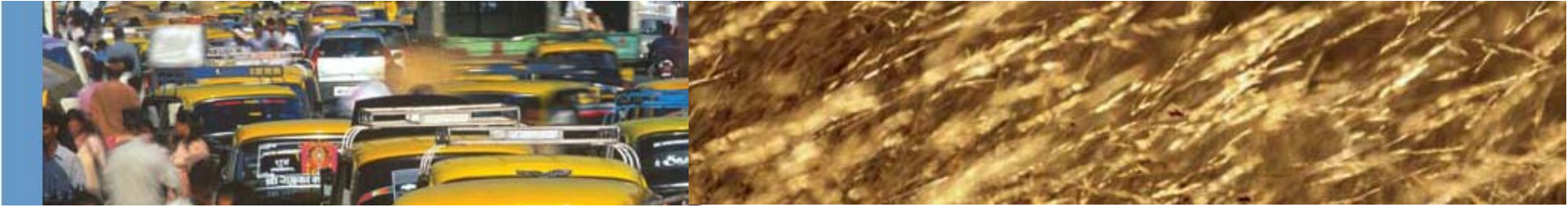
A TOOL FOR MEASURING HUMAN DEMAND ON OUR NATURAL WORLD

Meredith Stechbart

25 March 2010

Openhagen presentation

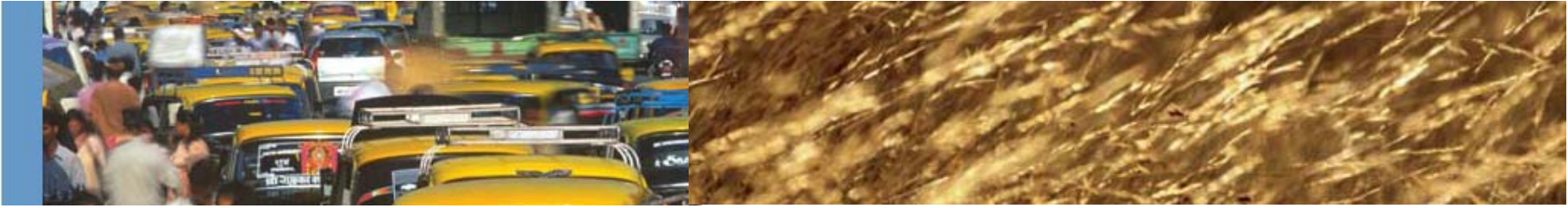




What is the Ecological Footprint?

Quantitative measure of the demand humanity places on the biosphere





Calculation of the Footprint

Ecological Footprint

- How much area do we **demand**?

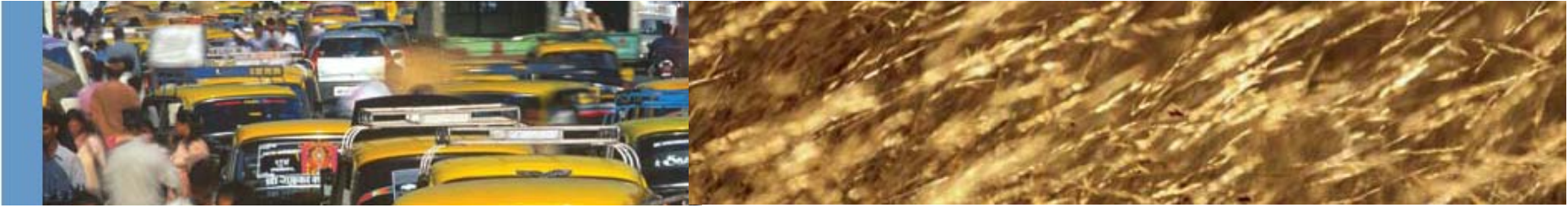
13.4 billion bioproductive hectares worldwide

Biocapacity

- How much area is **available** to us?

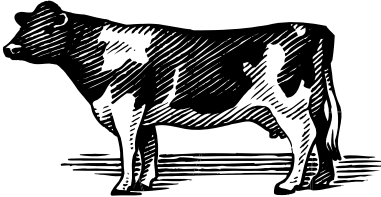
6.5 billion people





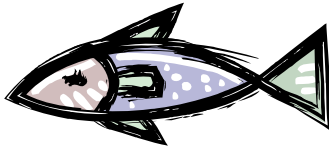
Components of the Footprint

Cropland



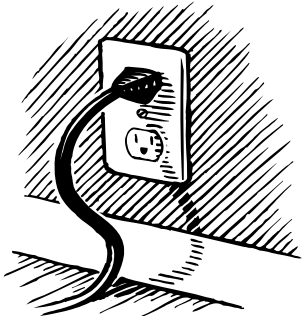
Grazing Land

**Fishing
Grounds**

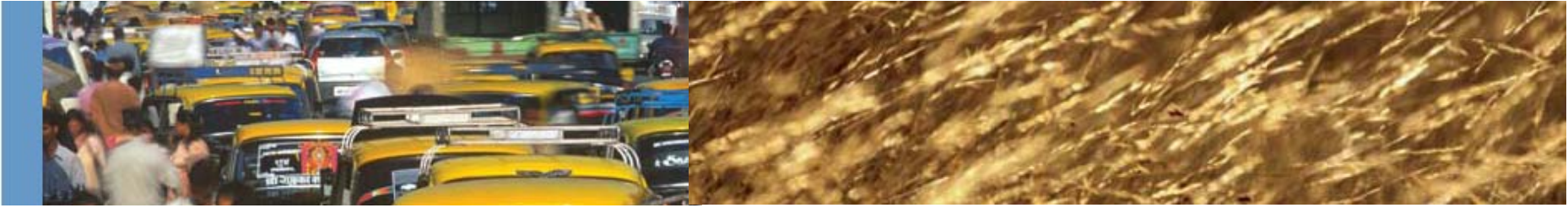


Forest

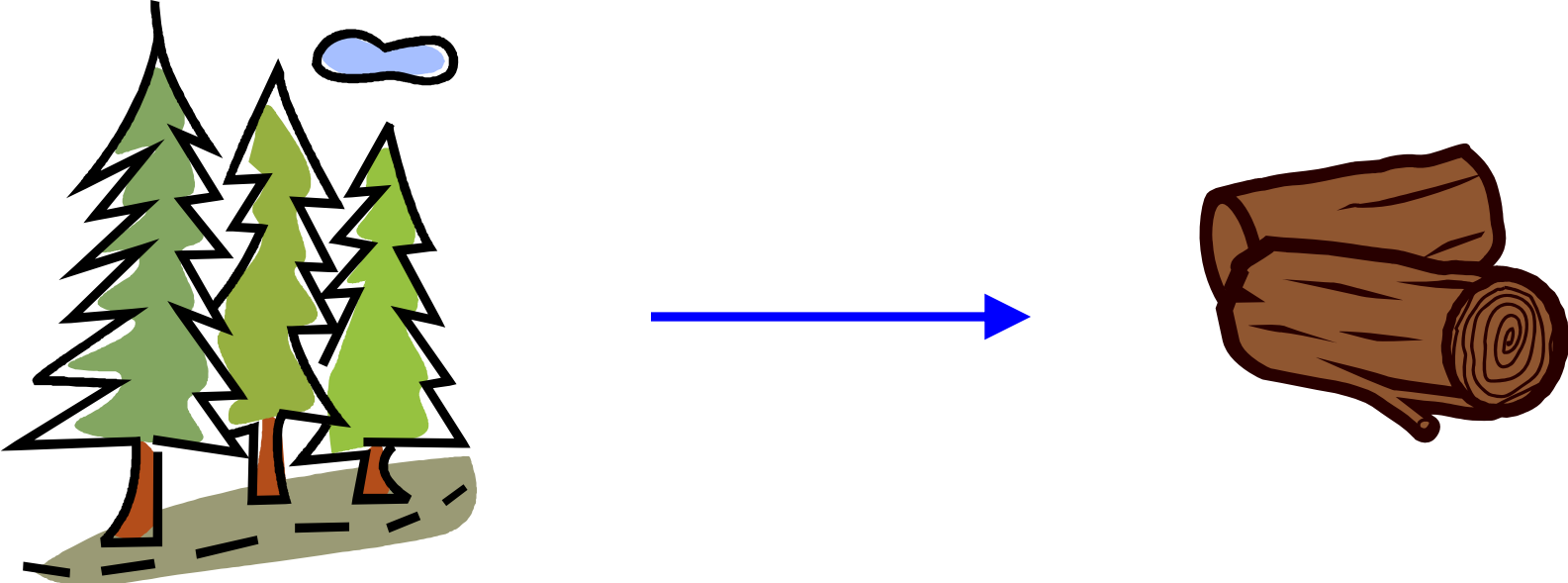
**Carbon
Uptake
Land**



Built Area



Components of the Footprint

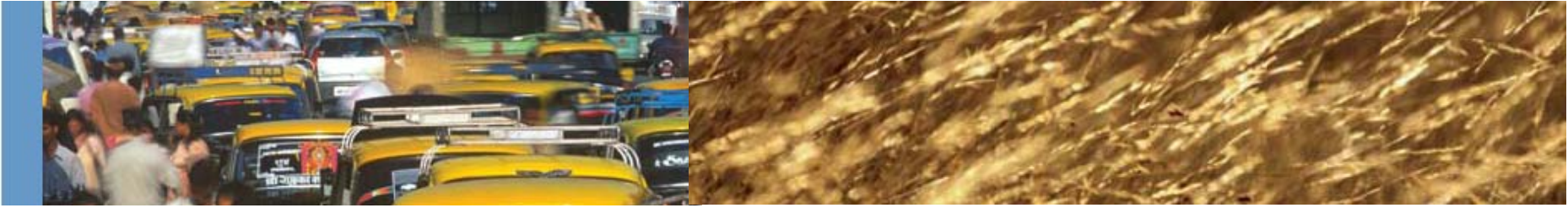


$$\frac{110 \text{ m}^3}{3.10 \text{ m}^3 / \text{US ha}} \times \frac{3.10 \text{ m}^3 / \text{US ha}}{2.36 \text{ m}^3 / \text{World ha}} \times 1.33 = 62 \text{ global hectares}$$

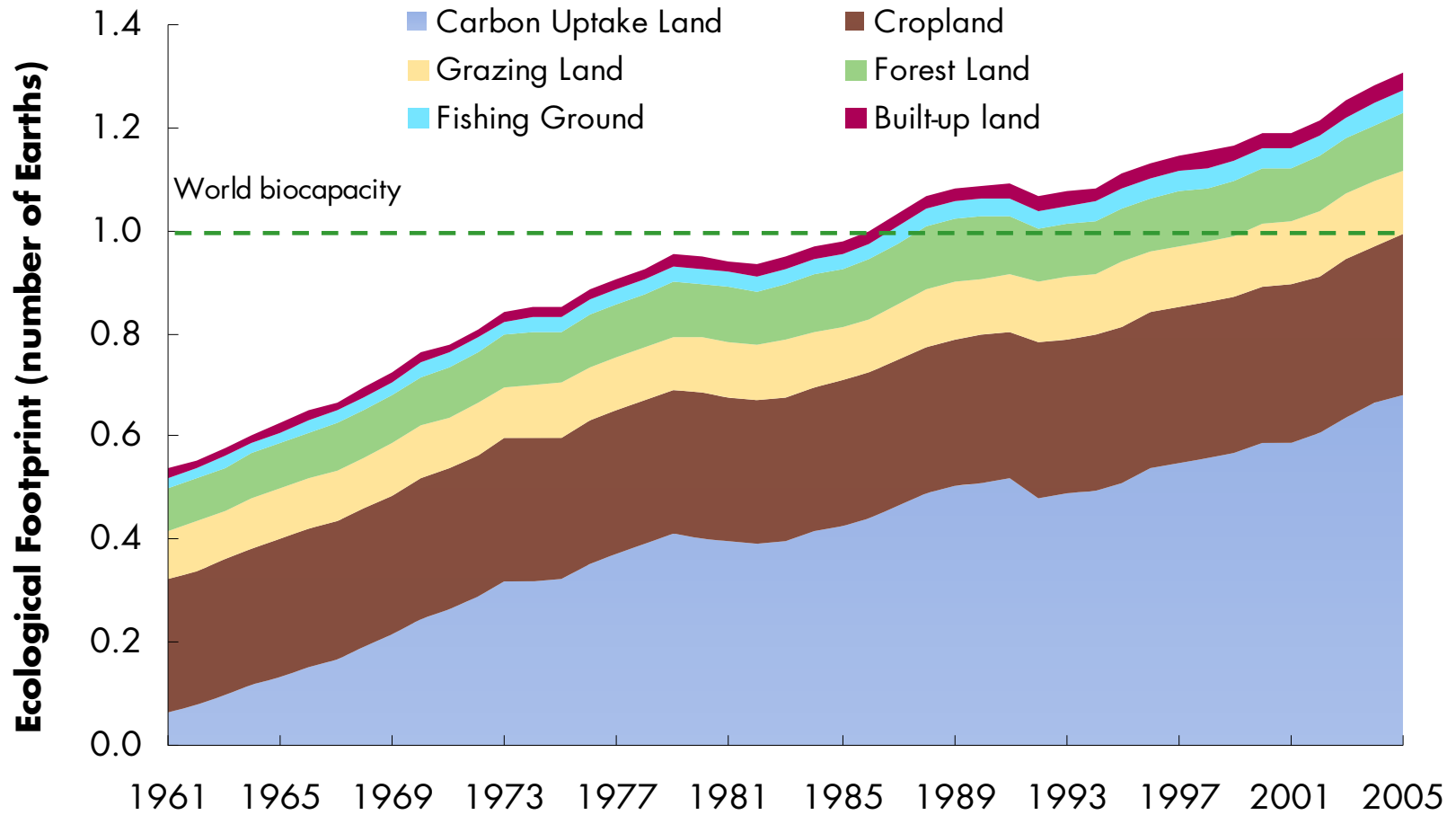
Yield factor

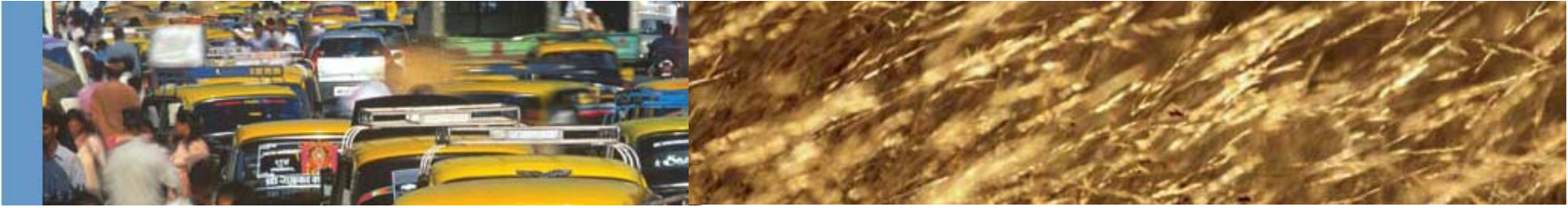
Equivalence Factor

Ecological Footprint



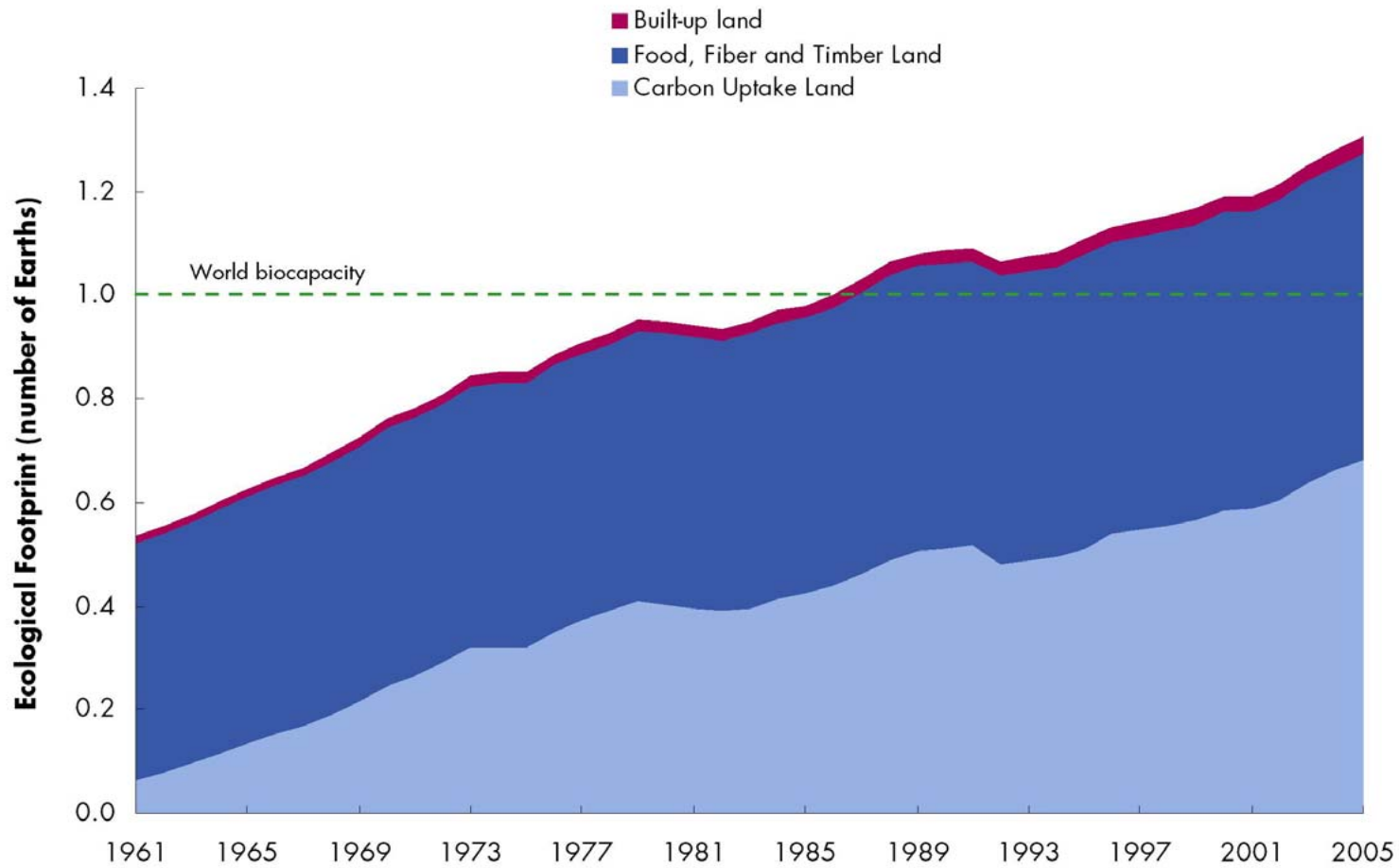
Humanity's Ecological Footprint

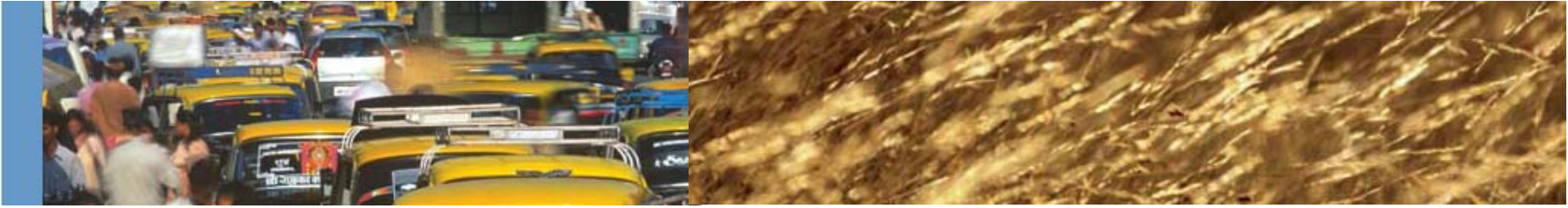




Sustainability or Overshoot?

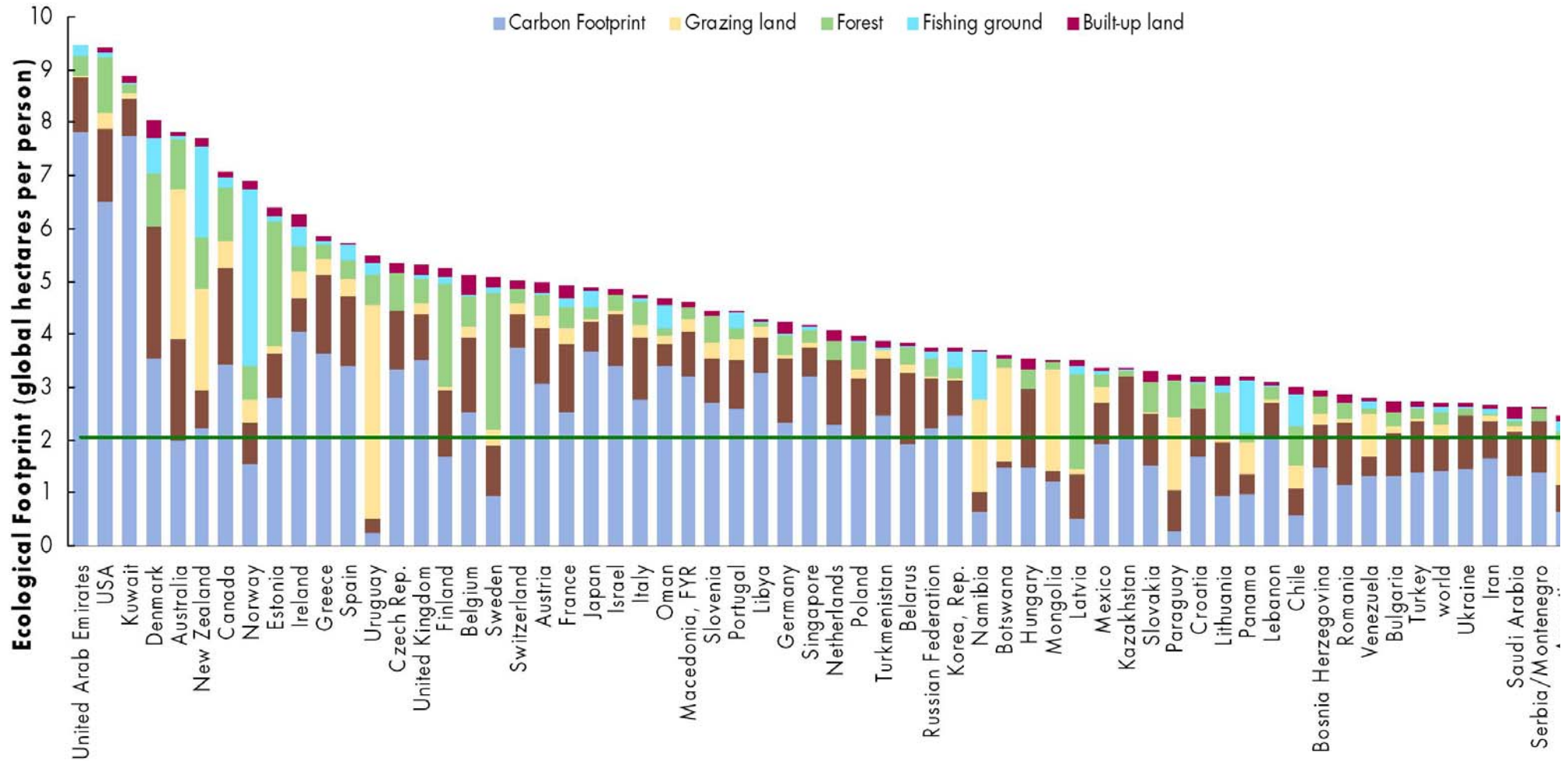
Humanity's Ecological Footprint, 2005

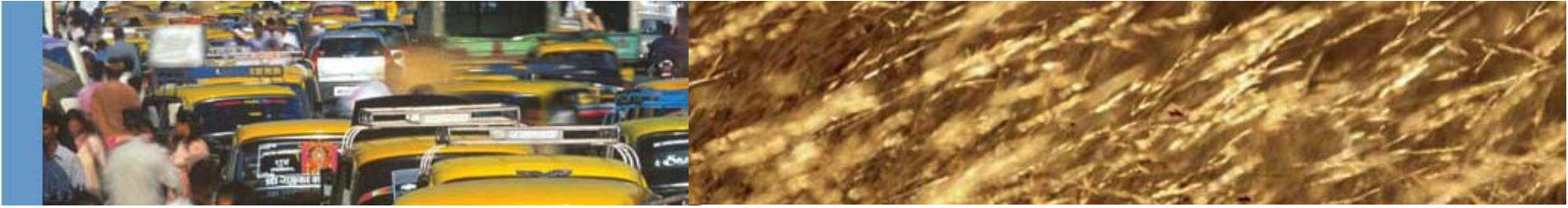




National Footprints

The Footprint of Nations, 2005





National Footprints

United States (9.42 gha per person)



Tanzania (1.14 gha per person)

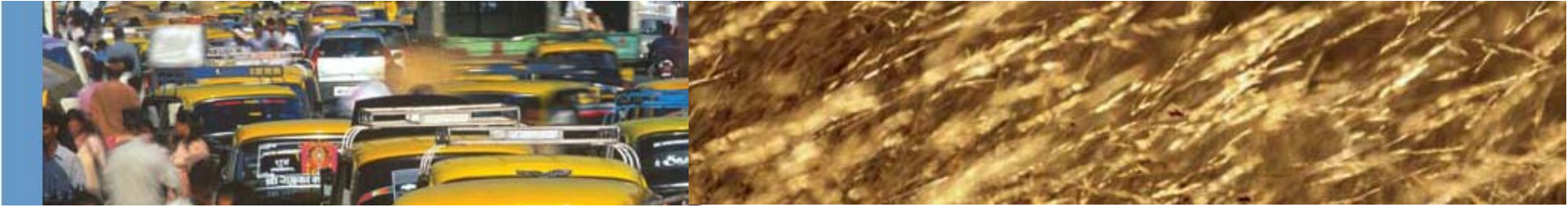


France (4.93 gha per person)

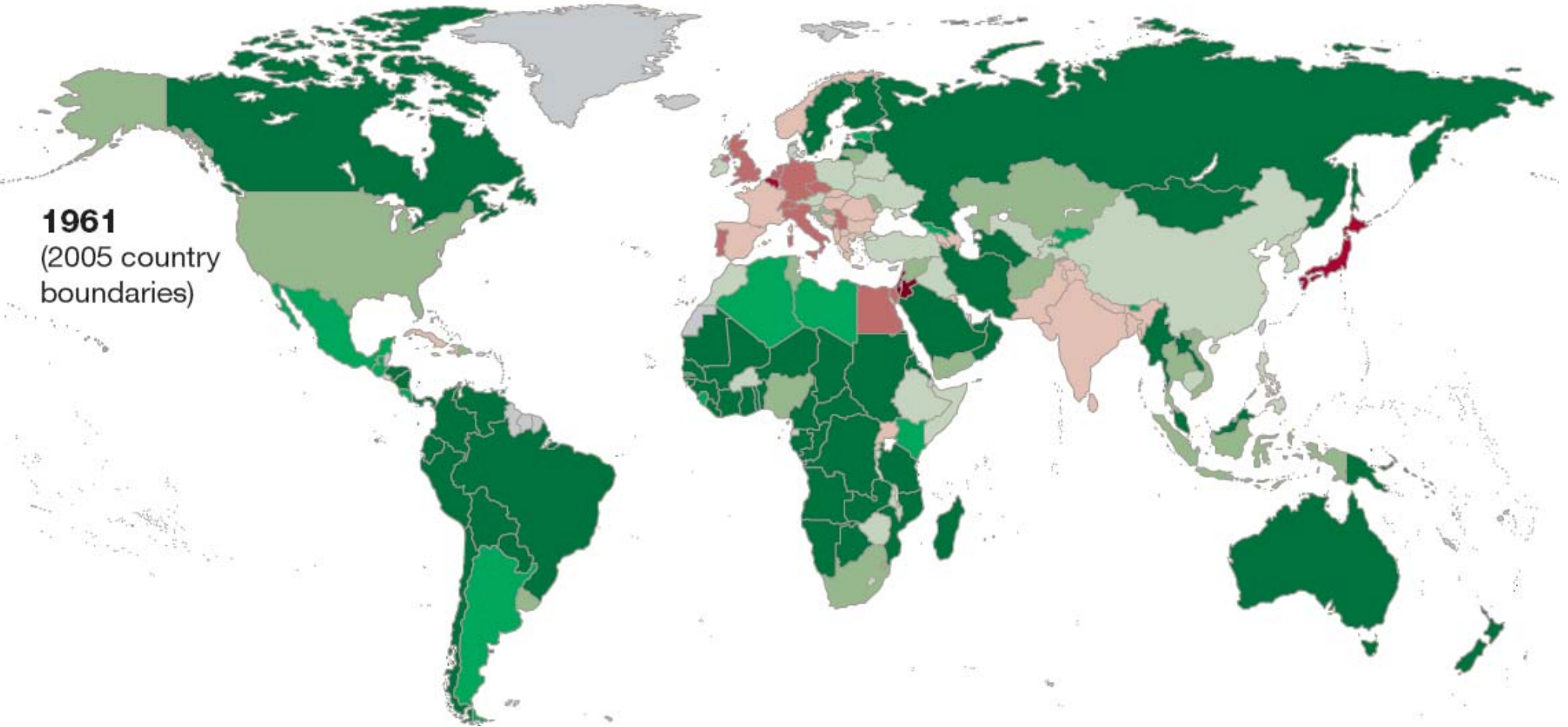


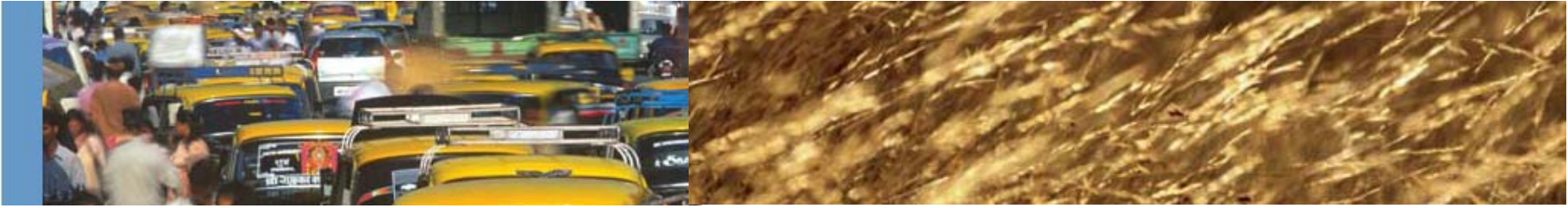
Philippines (0.87 gha per person)



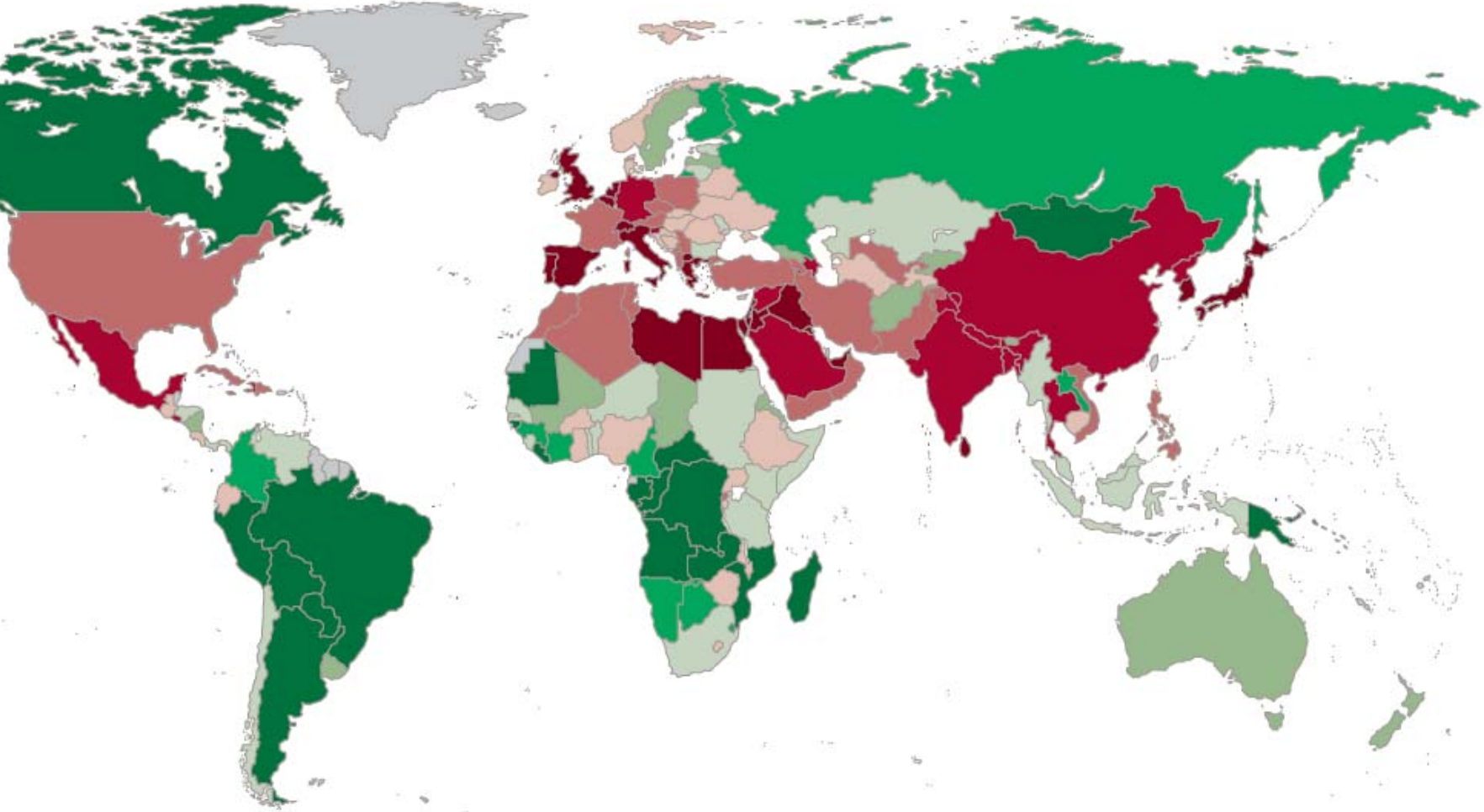


1961
(2005 country
boundaries)



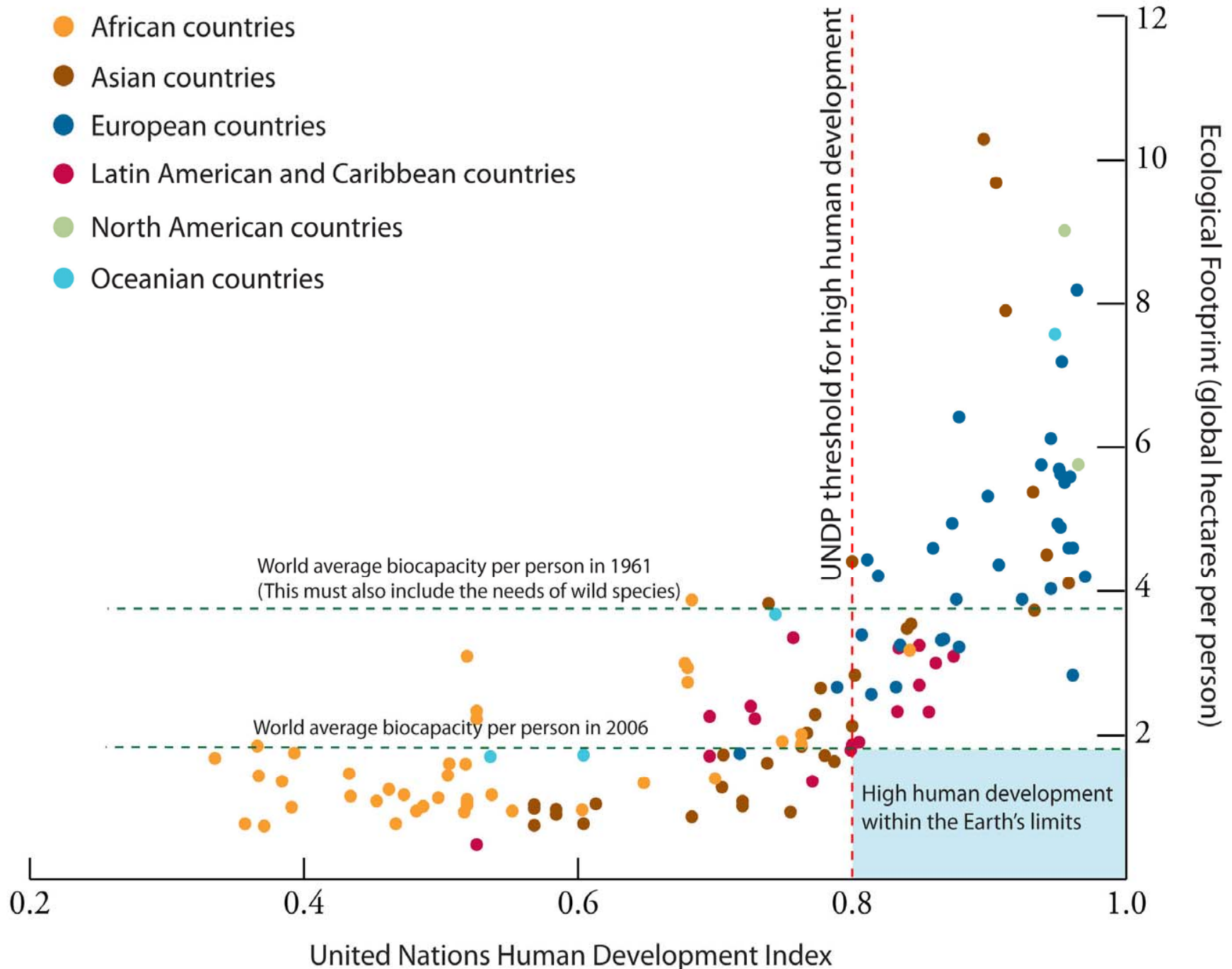


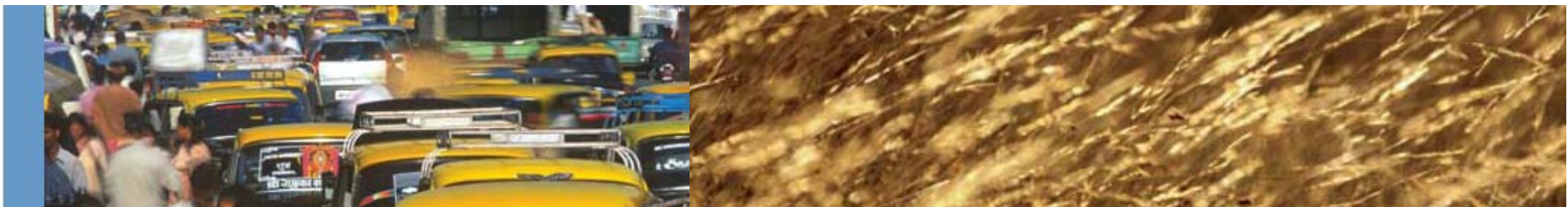
2005



SUSTAINABLE DEVELOPMENT: WHERE ARE WE TODAY?

Human Development Index and Ecological Footprint of Nations





VOTRE EMPREINTE ÉCOLOGIQUE

De nombreux facteurs influencent notre empreinte écologique. Si tout le monde vivait comme vous, les ressources nécessaires seraient équivalentes à **2.5** fois celles de la Terre.

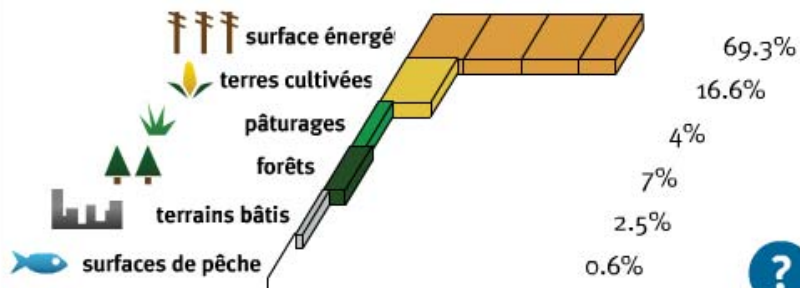


Une personne ordinaire en Suisse a besoin de 2,4 planètes.

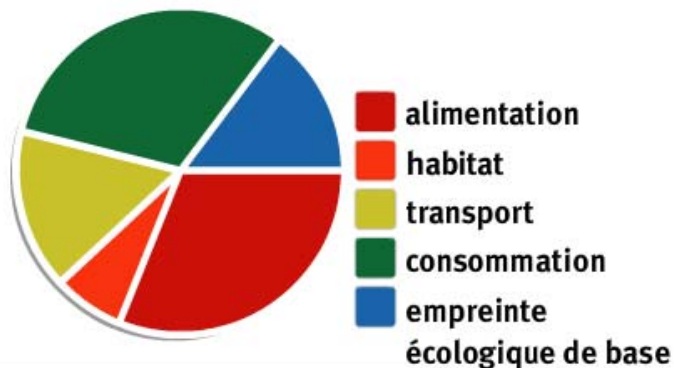


Pour satisfaire votre train de vie, il faut **5.2** hectares globaux de surface productive

(13.4 tonnes de CO₂)



Votre empreinte écologique en détail



Pouvez-vous réduire votre empreinte écologique?

Modifier son empreinte

Recommencer un ou plusieurs chapitres.

Conseils pour le quotidien

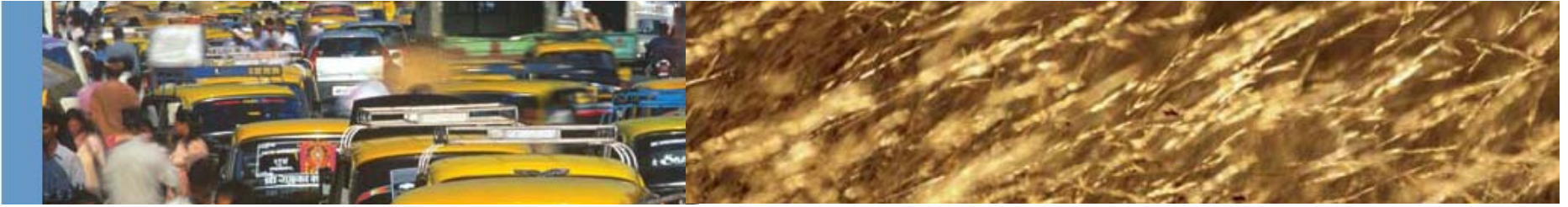
Des gestes simples pour réduire son empreinte

Enregistrer l'empreinte

Poursuivre vers les conseils et liens

100% termine





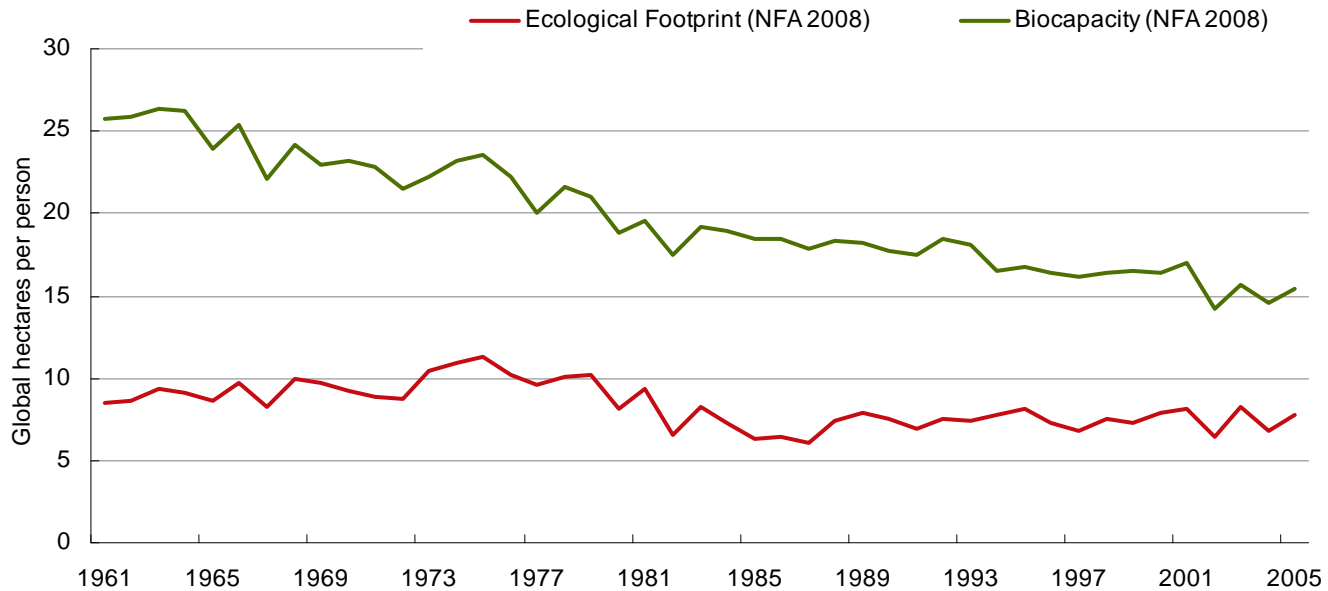
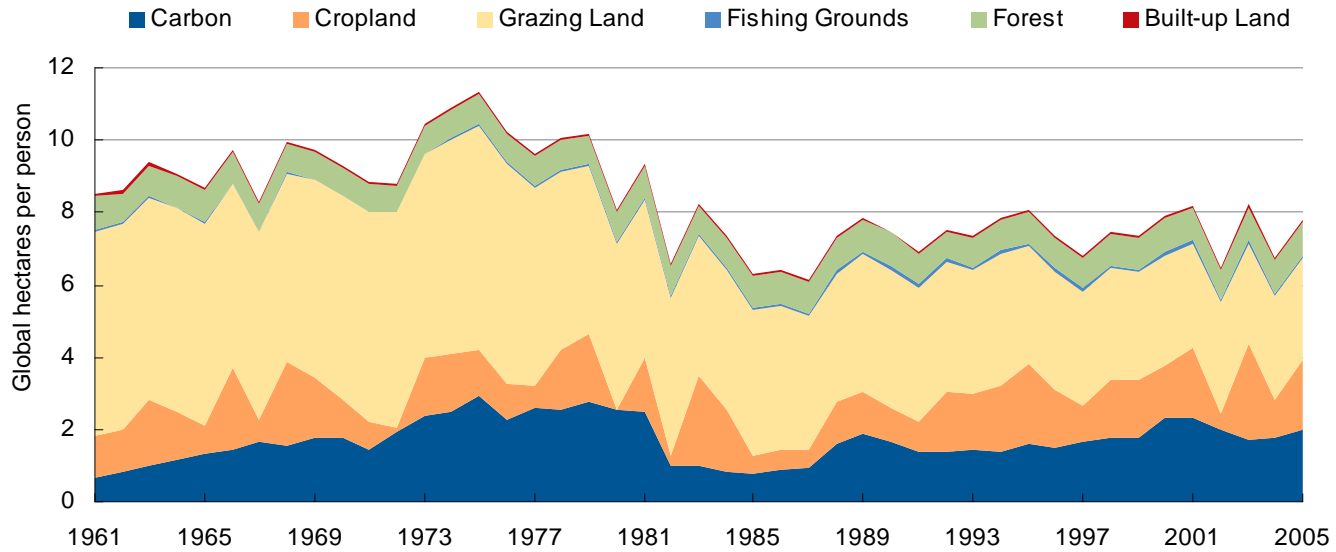
Limitations of the Footprint

Doesn't take into account persistent pollution with no established biocapacity

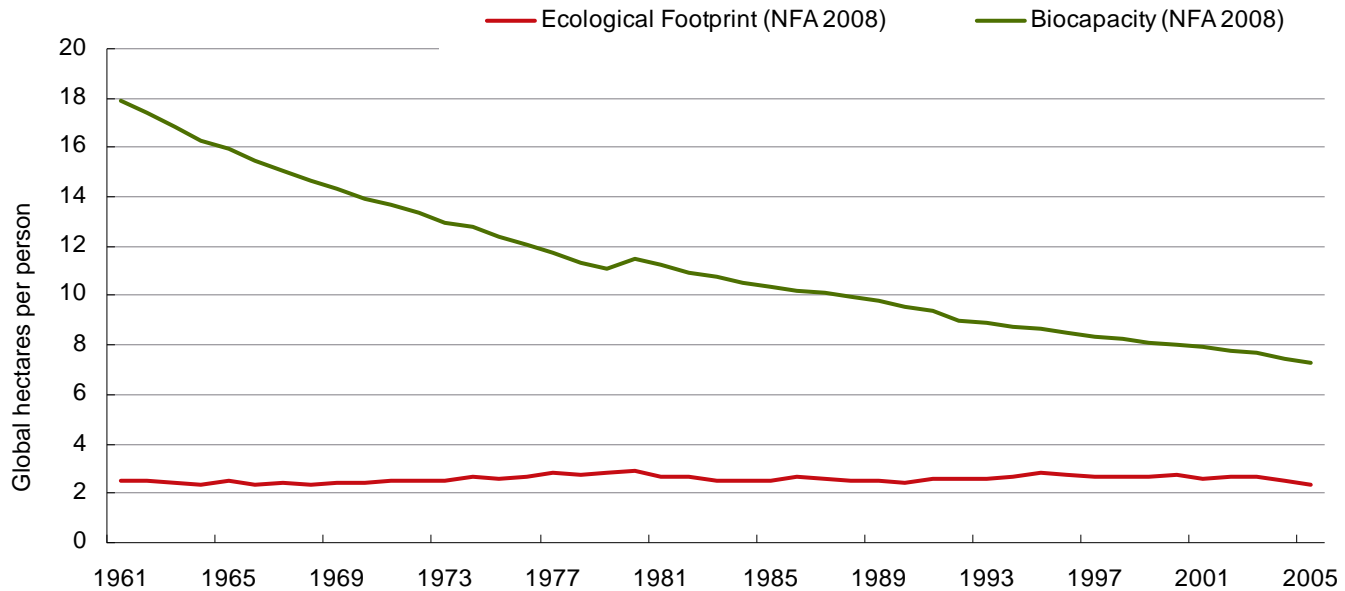
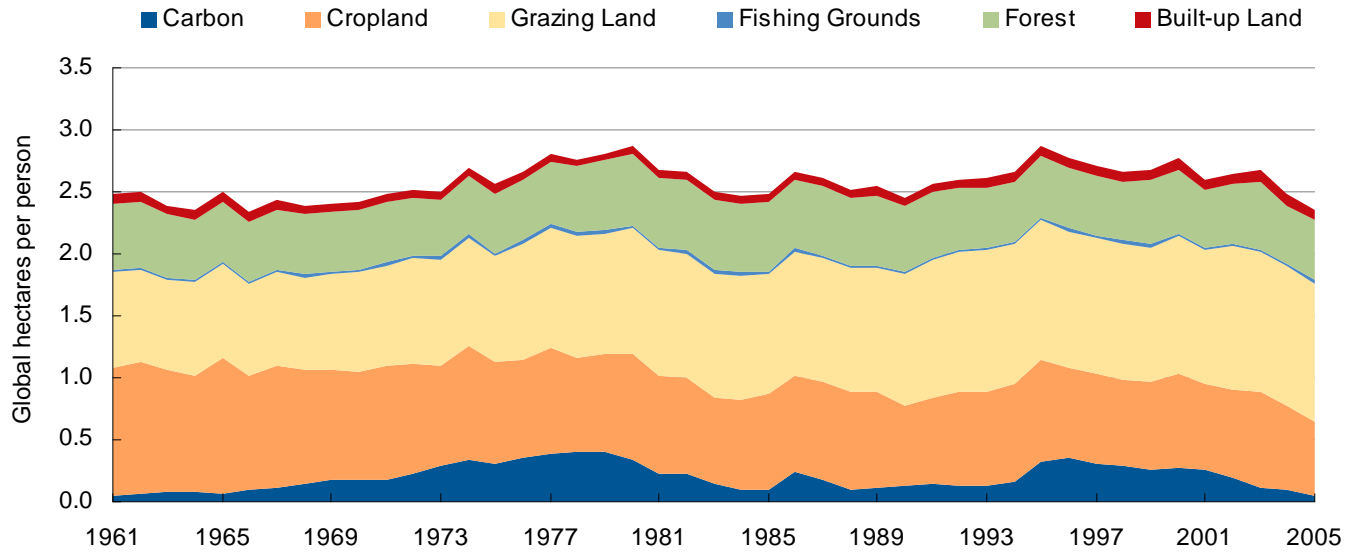
Only a set of proxy values for personal Footprints

Assumes identical consumption patterns nationwide

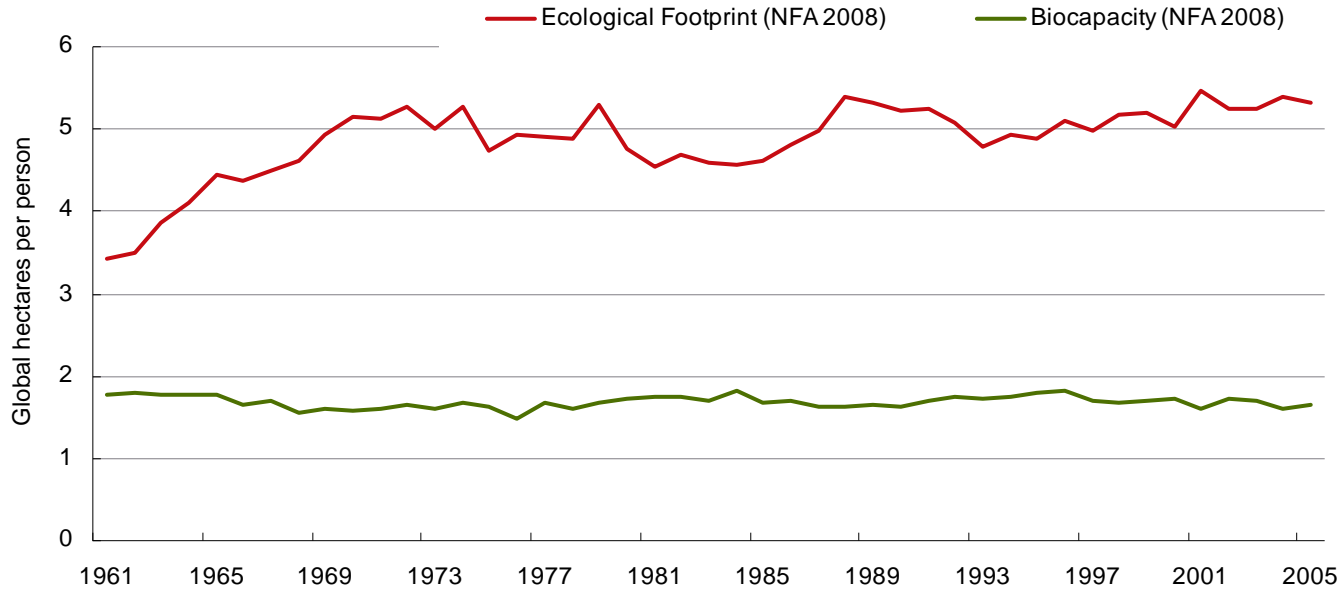
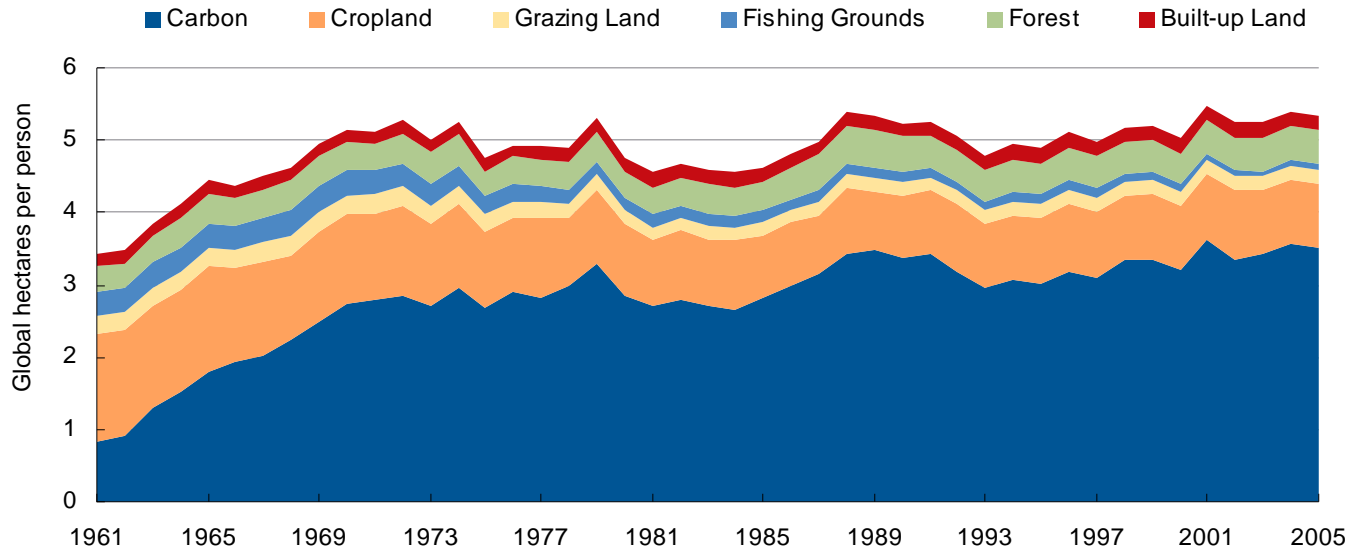
Australia



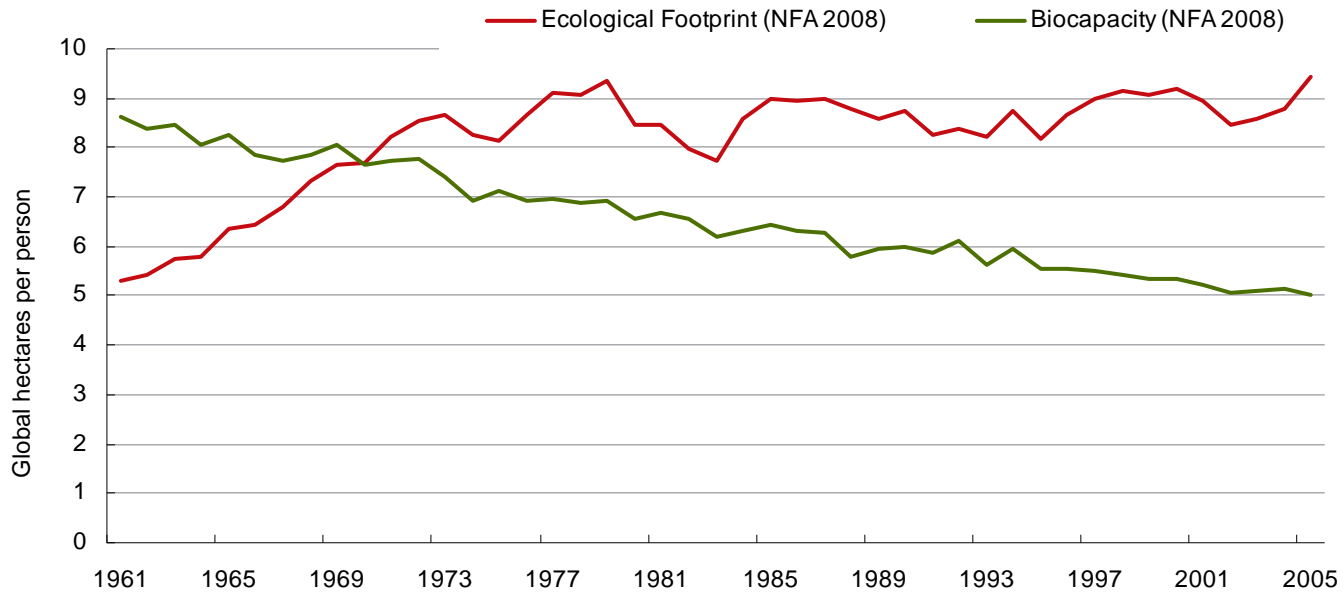
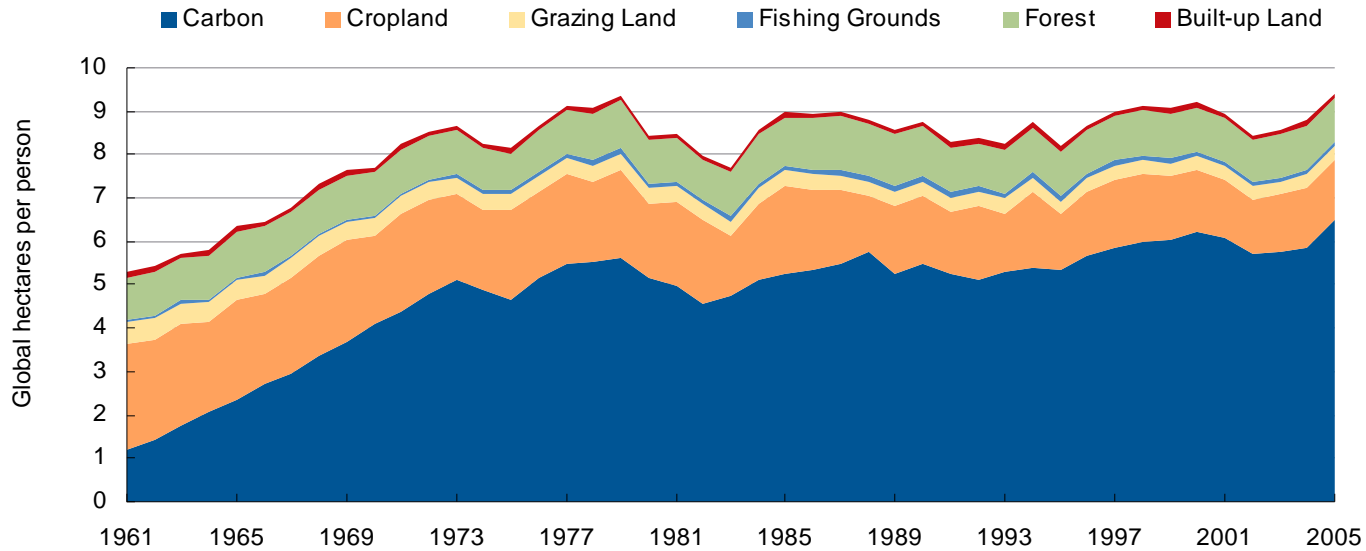
Brazil



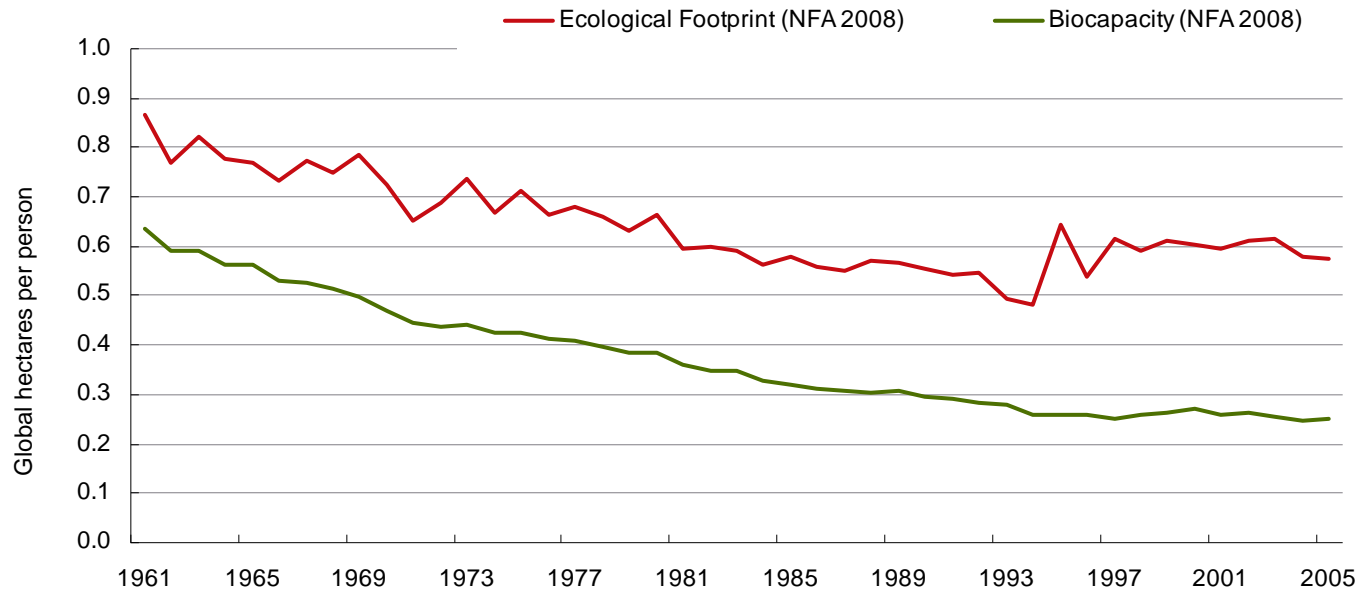
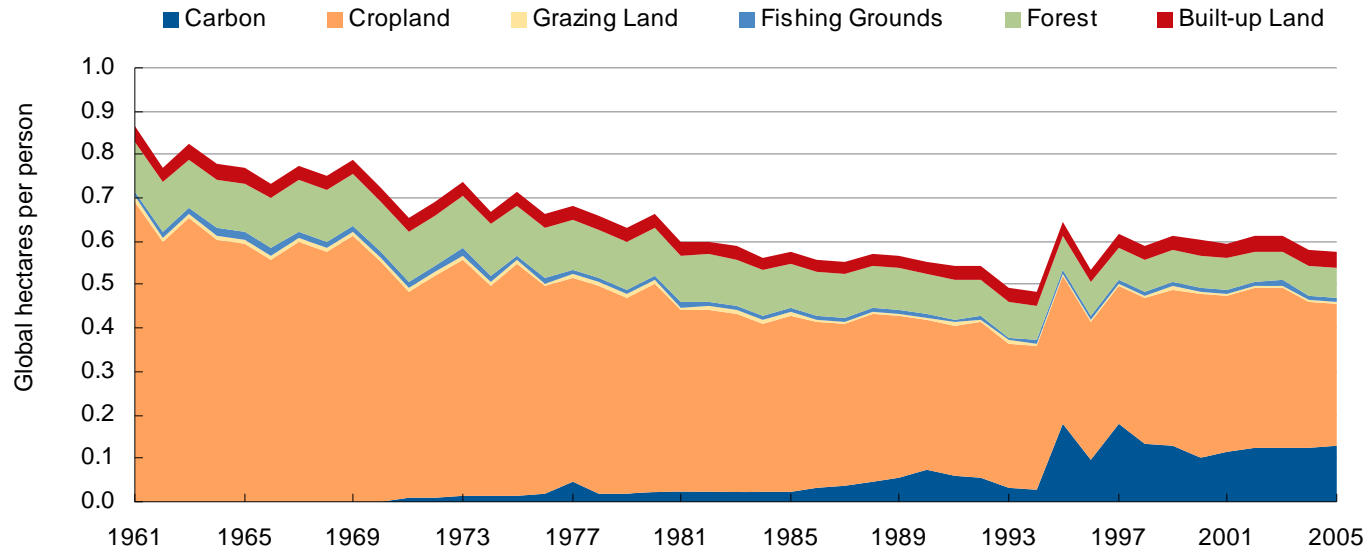
United Kingdom



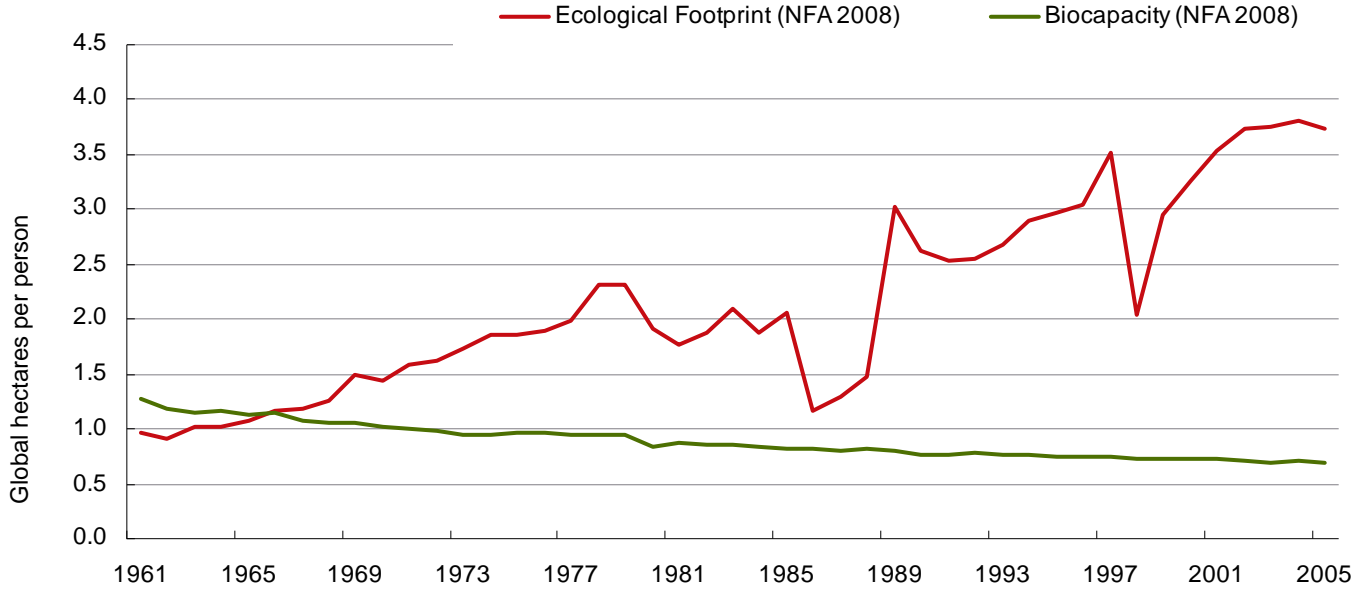
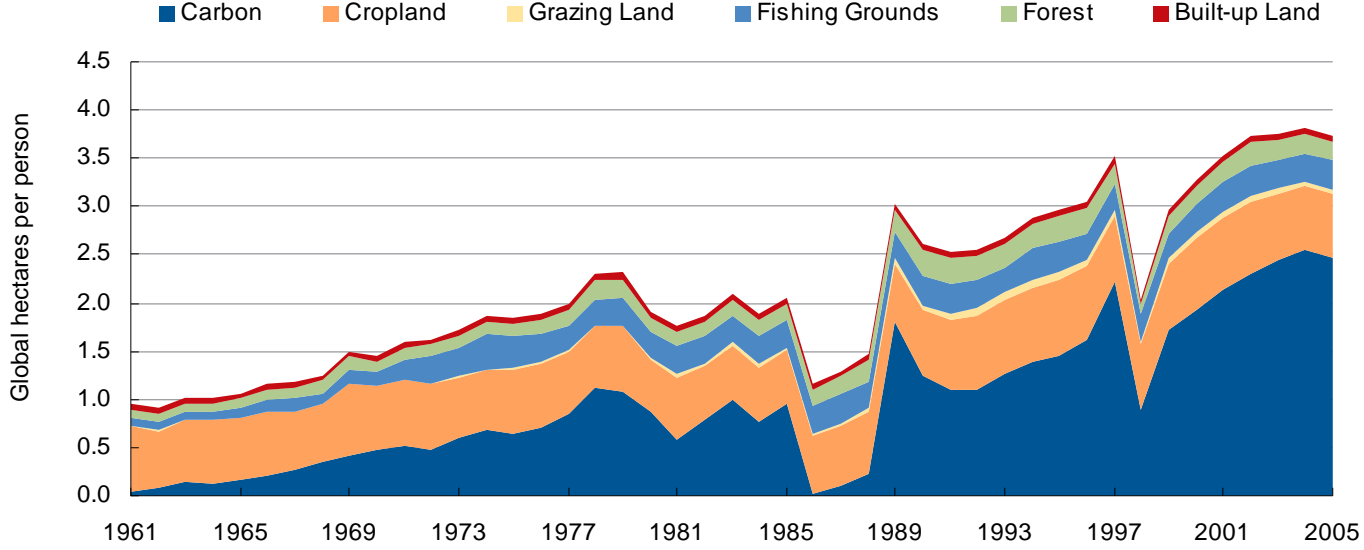
United States of America



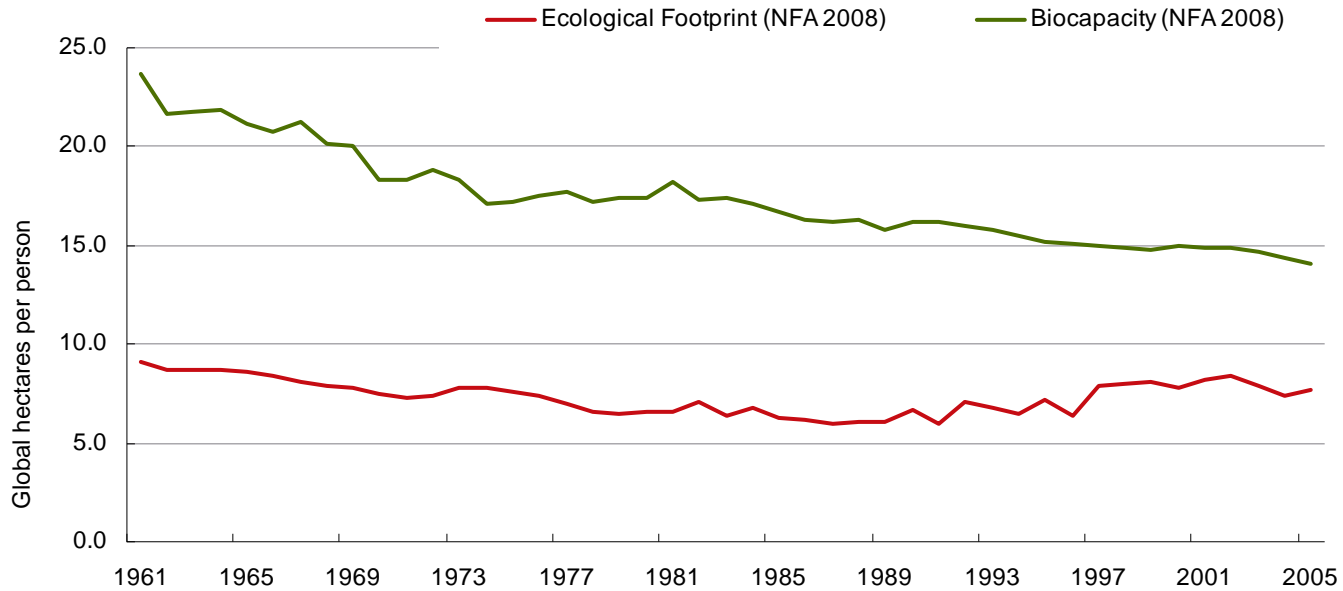
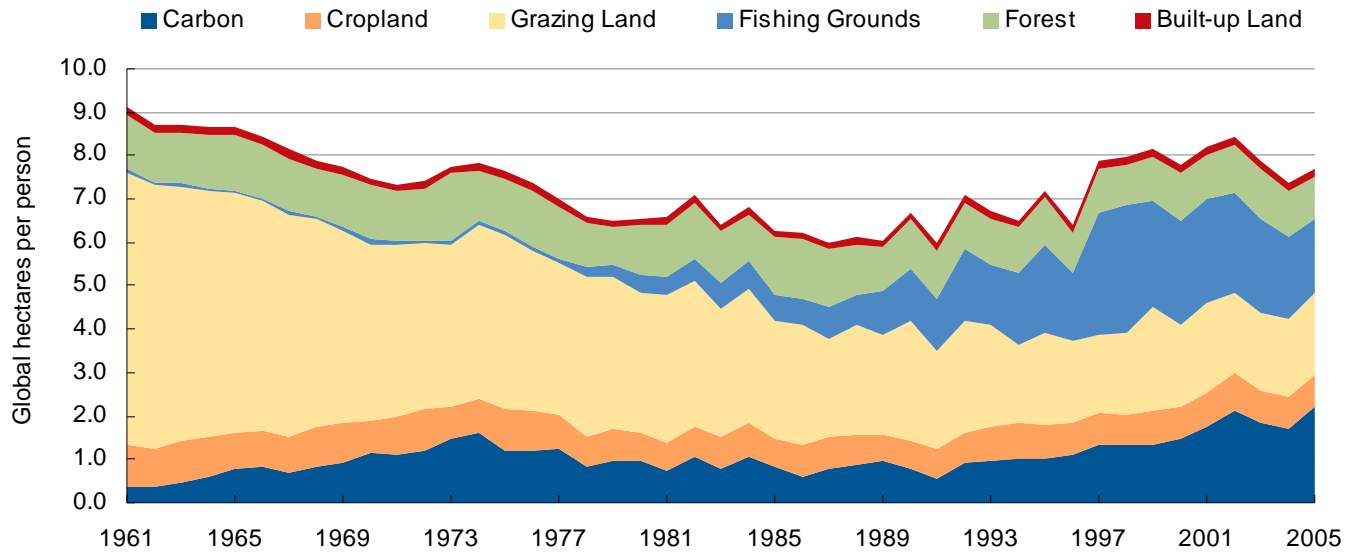
Bangladesh



South Korea



New Zealand



Pakistan

