Ecological Footprint of California

Global Footprint Network in support of EPA's California Footprint Project

Joy Larson

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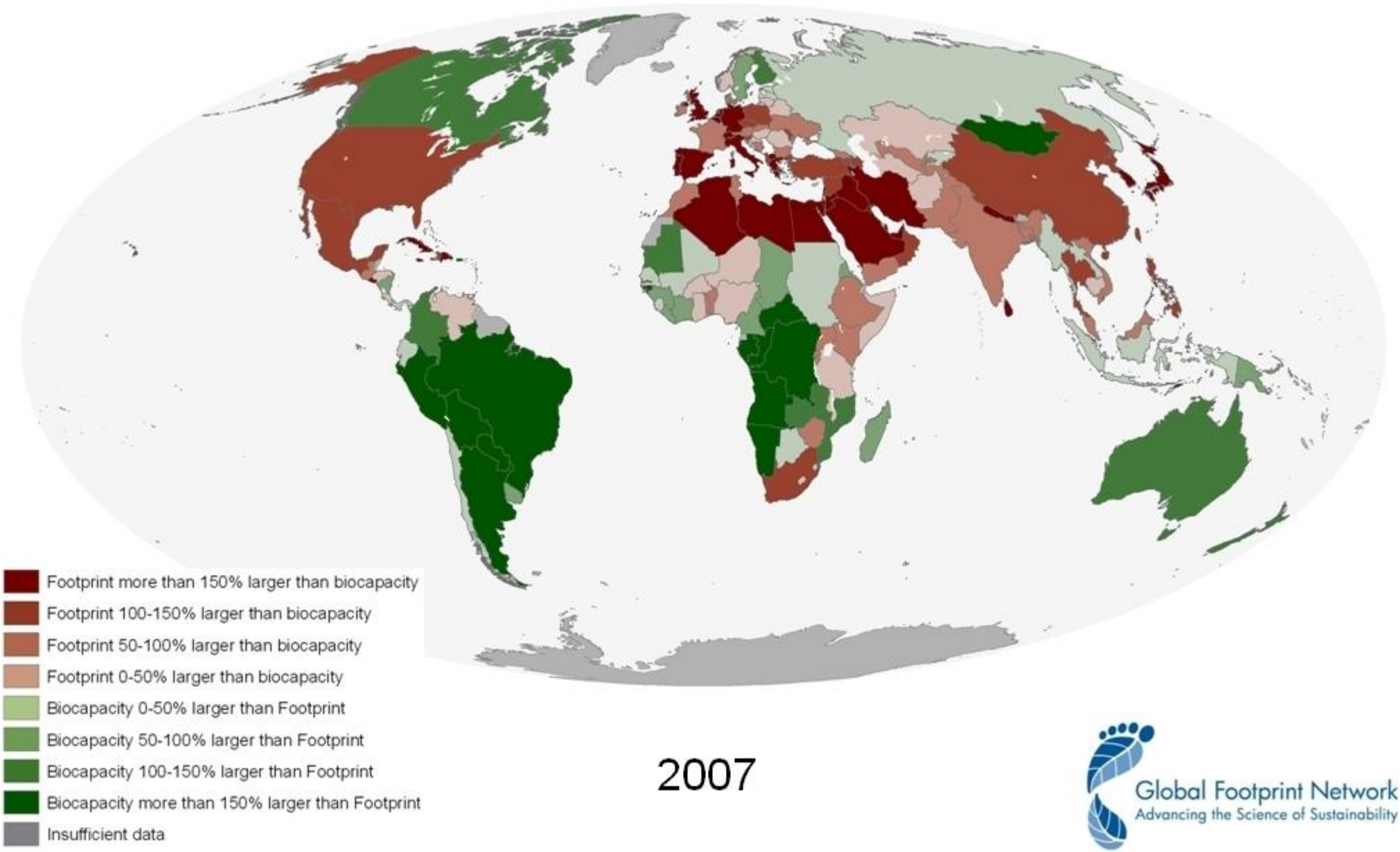
The Ecological Footprint

Accounting Framework

Biocapacity:
How much bioproductive area is **available to us**?

Ecological Footprint:
How much bioproductive area do we **demand**?

Percent of Earth's Biocapacity Used: 151%



2007

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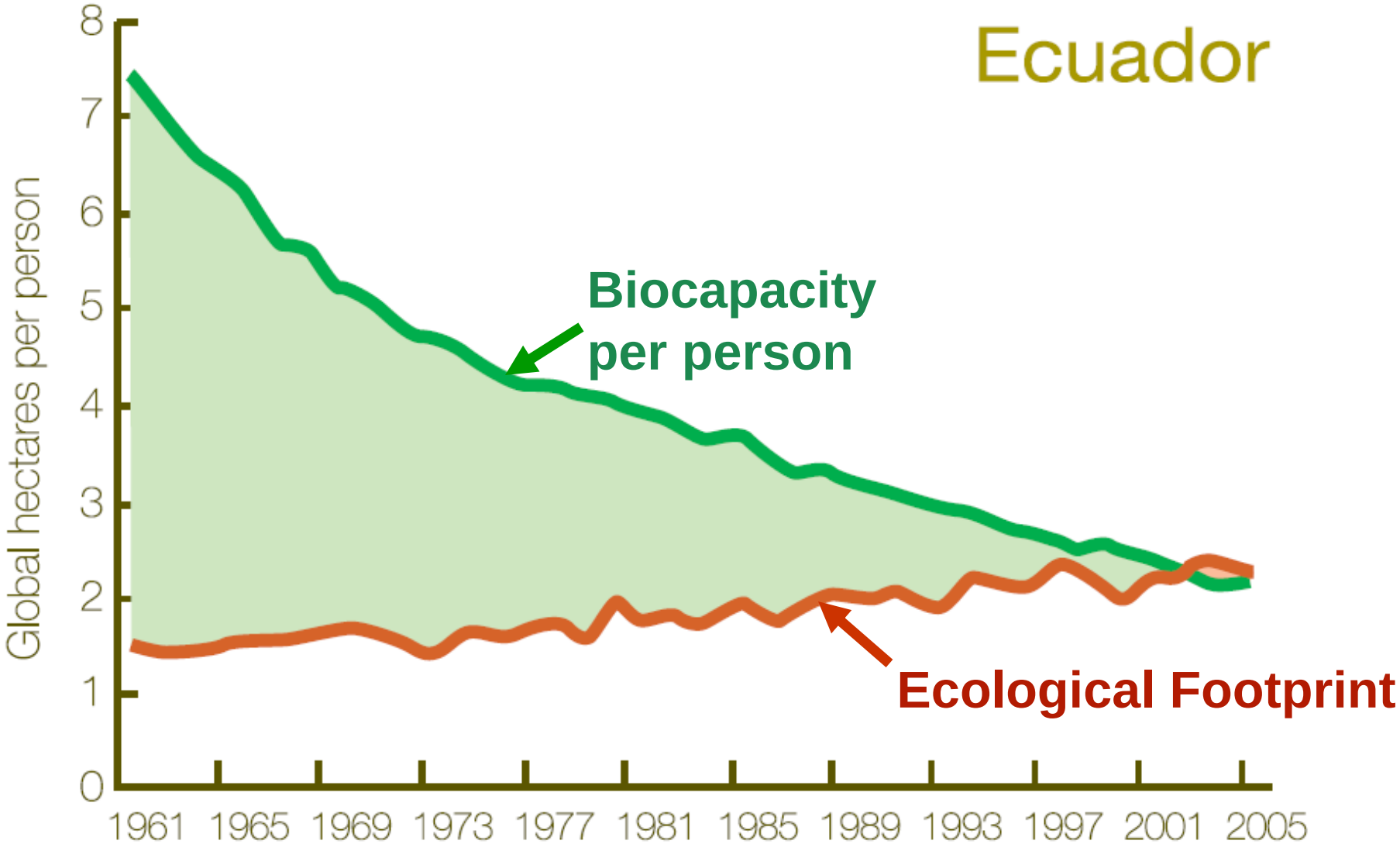
Ecological Creditor/Debtor Countries

Ecuador



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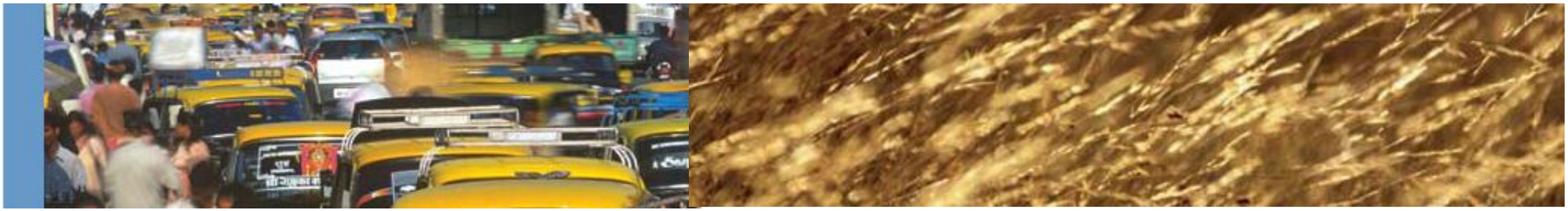
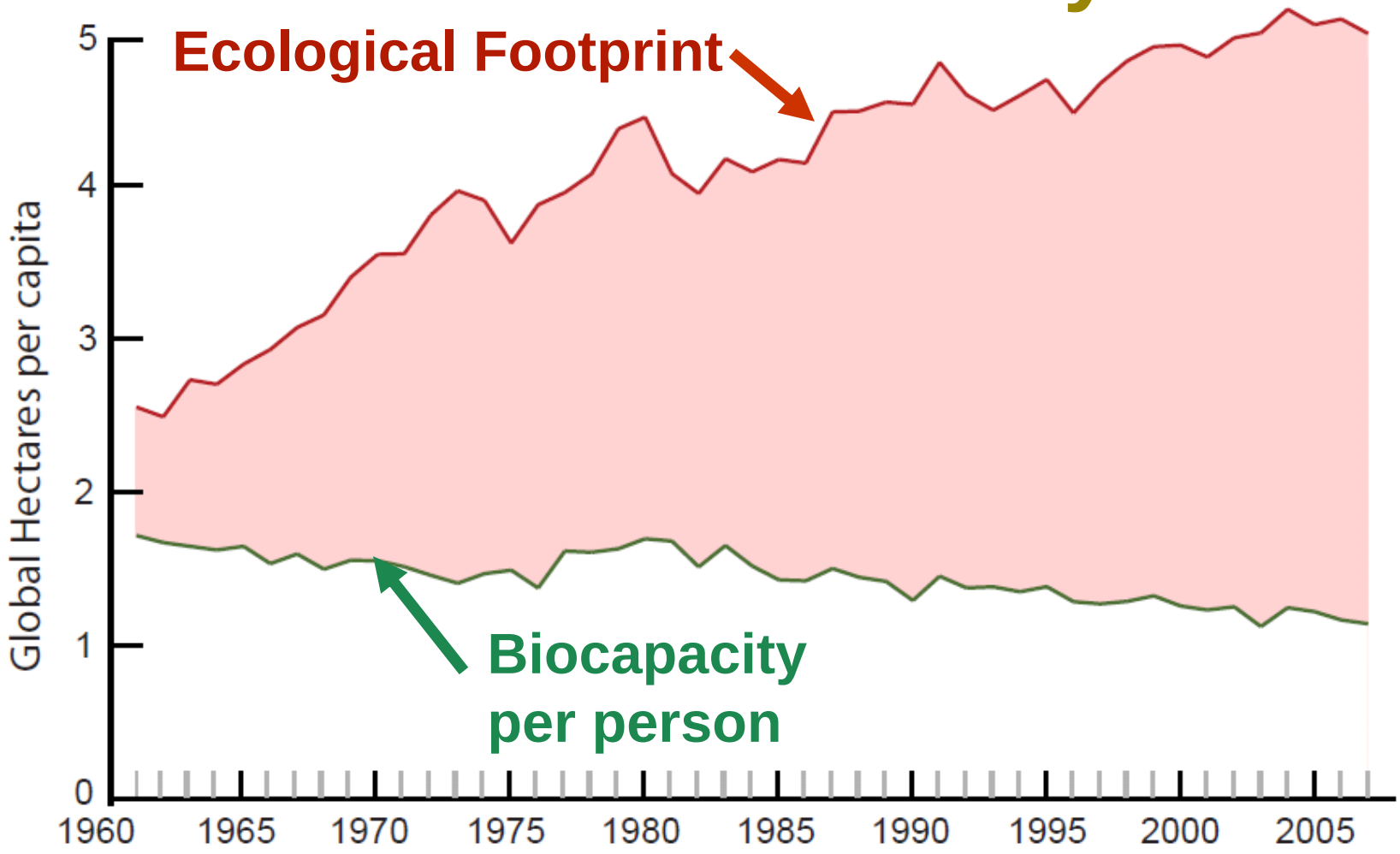


Italy



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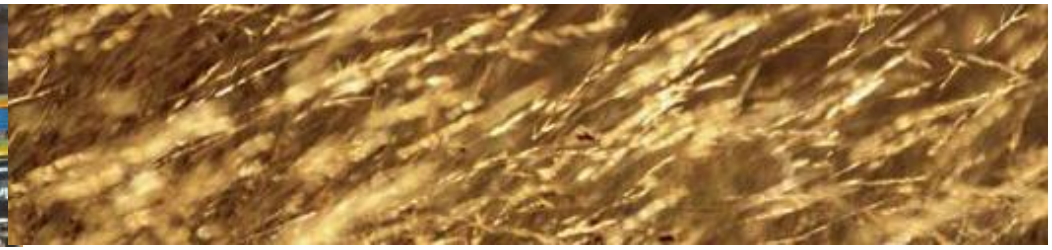
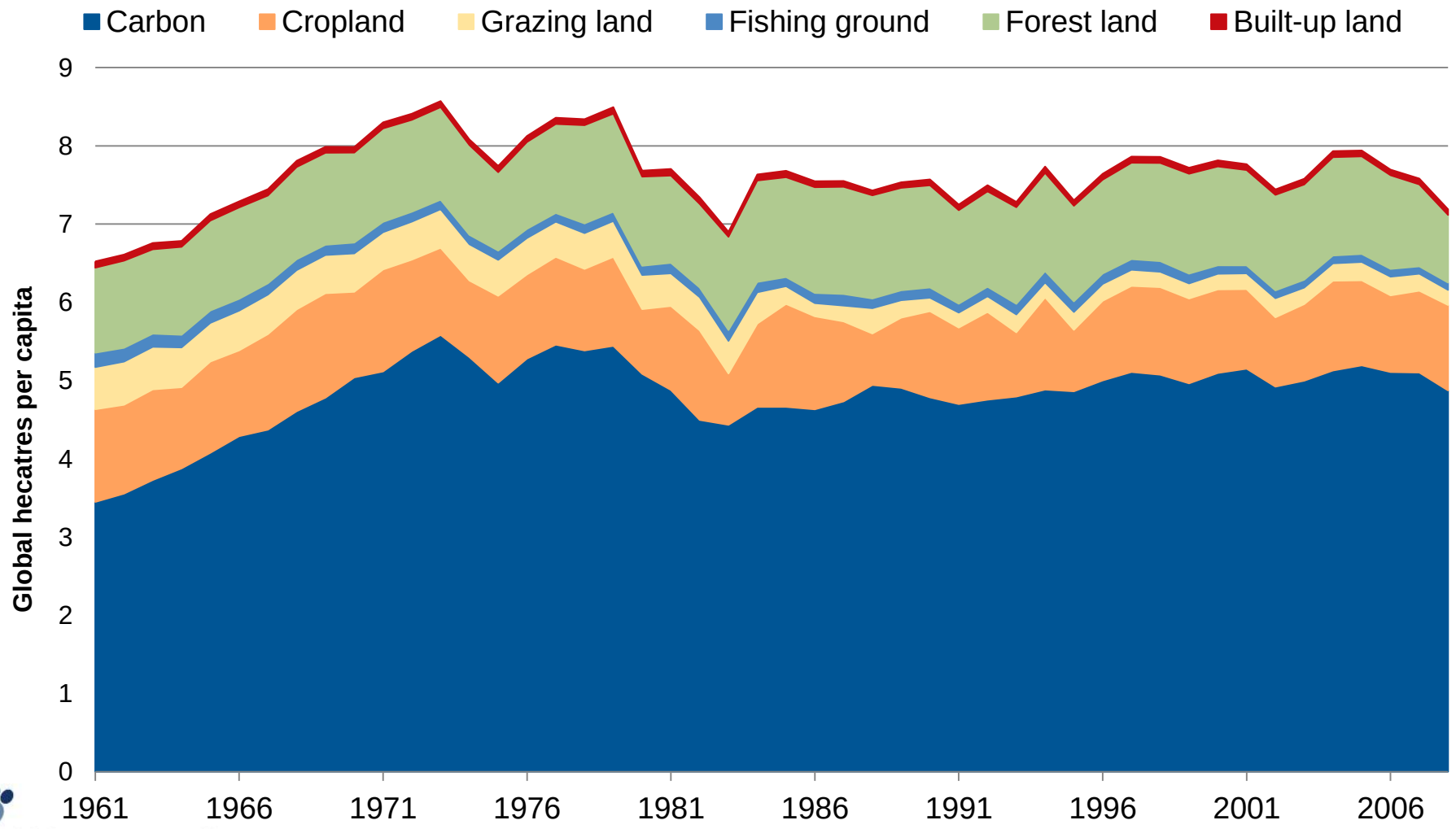


United States of America



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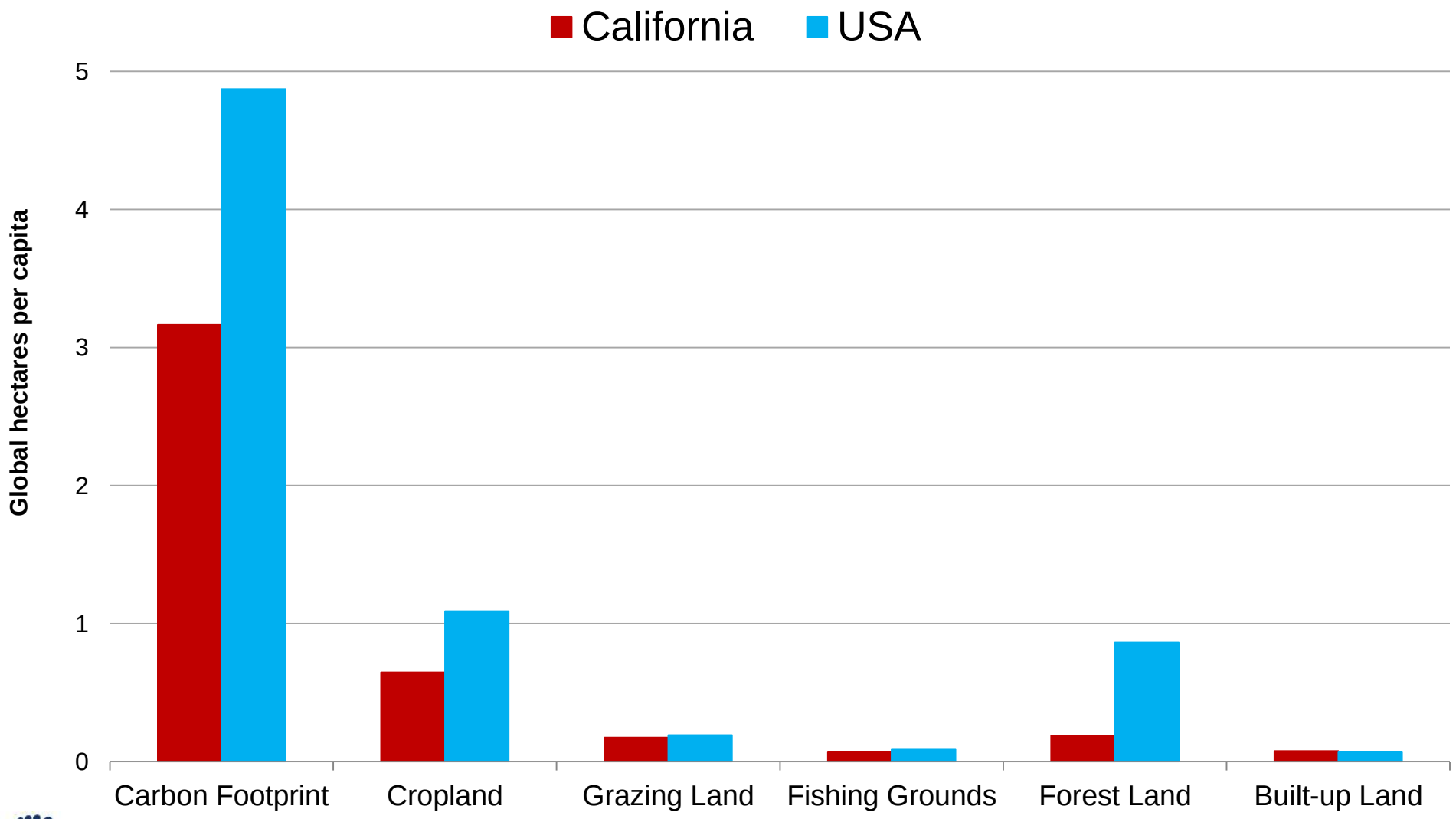

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In total, California was responsible for 7 percent of the total U.S. Ecological Footprint, while comprising 12 percent of the population.

Ecological Footprint from consumption from carbon emissions nearly 2 gha less (36 percent less) than USA. This difference could be due to use of hydroelectric.

Surprising results, such as that California consumes 35 percent less agricultural and fishery products (in gha) may be due to weaknesses in the State level trade data.

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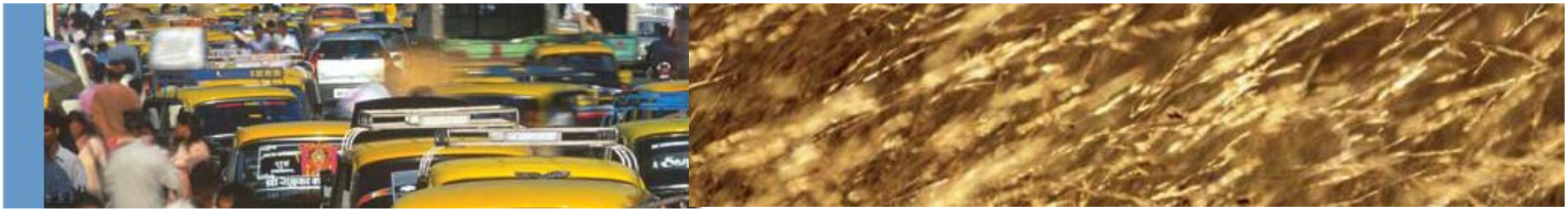
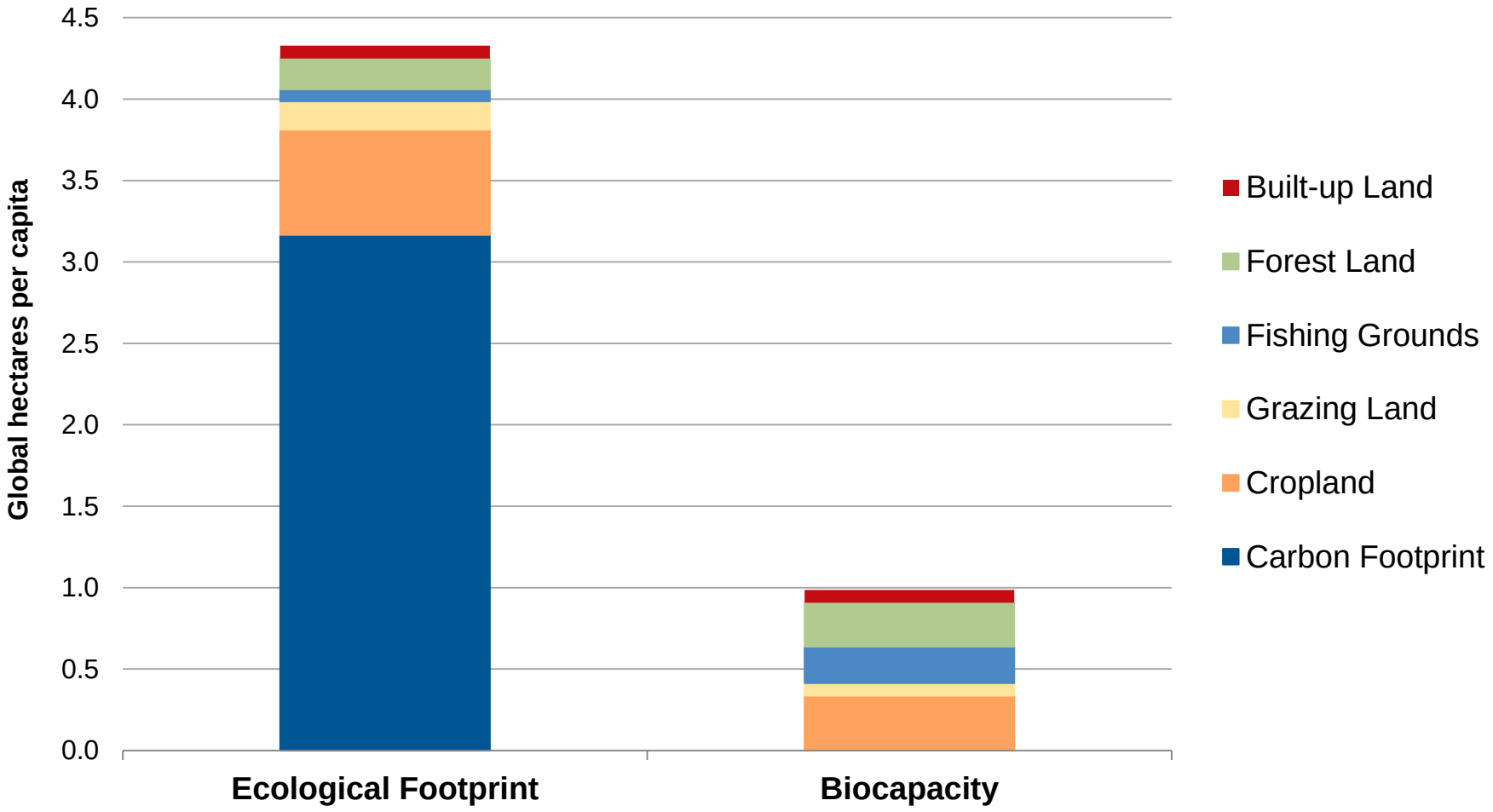


California



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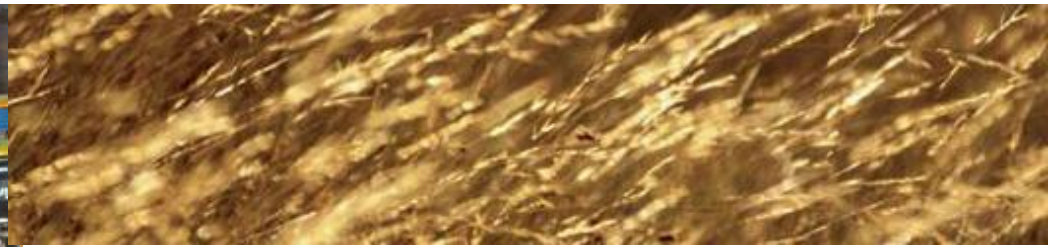

In 2008, the estimated biocapacity of California was 36.2 million global hectares

- This is 23% of the demanded California Ecological Footprint
- Represents only 3% of the biocapacity available in the whole of the U.S. (1.2 billion global hectares)
- At 1.0 gha per person the biocapacity of California is much less than the national average of 3.9 gha per person

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California's Ecological Footprint by Land Use

Net importer of crop, fish, and forest products

- crop production accounts for 52% of consumption
- fish production accounts for 27% of consumption
- Forest production accounts for 32% of consumption

Net exporter of grazing land products, producing more than it consumes.

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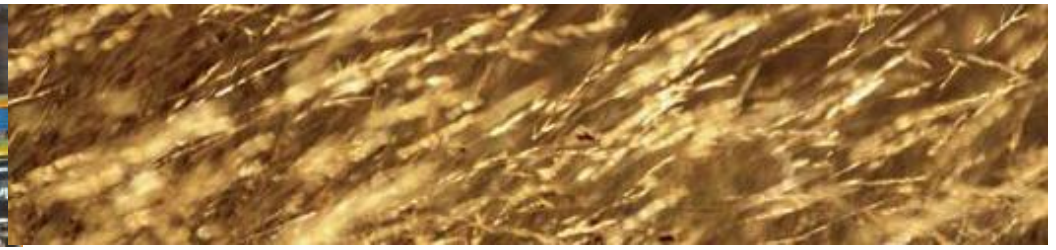
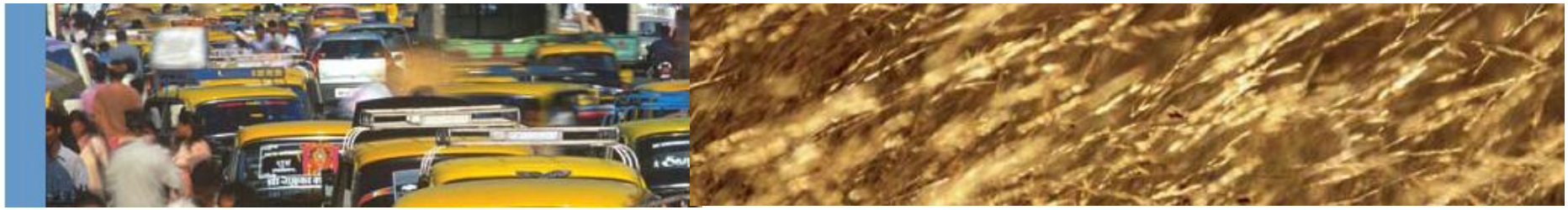


In conclusion…

Although California has a large economy and benefits from increases in crop prices, it is still reliant on imports. This poses a potential risk as global resources prices increase.



Potential next steps for deficit reduction

- Evaluate Footprint of Production vs GDP – how much nature does it take to produce GDP?
- Evaluate the costs of inputs like water and fossil fuel
- To what extent are we losing ecological capital needed to maintain high productivity (ground water, soils, rain)?