

WEDNESDAY AM WORKSHOP #7: ECOLOGICAL FOOTPRINT

Workshop Session	2 (WED morning), no. 7: “Ecological Footprint”
Names of presenters	Mathis Wackernagel
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Name of rapporteur	Johannes Hirata

Hands-on training session

The Ecological Footprint: What’s in it for you?

Goal of workshop: learn about the tool of the EF and know how to use it.

The EF is a measure of (a) how much nature we have (supply) and (b) how much we use (demand). It’s about the question whether we fit on the planet.

Supply side:

“Natural step”: man transforms natural resources into waste and nature turns waste into natural resources (food). Like with finances, we cannot, in the long run, take out more than goes in.

The world’s surface has 51 bn hectares (1 ha = 2.5 acres). Of this, only about a quarter is productive surface. Dividing this surface (12 bn ha) by world population gives about 1.8 ha per person (without putting aside surface for other species).

Demand side:

When we translate our resource use into surface use, how much are we using? You can translate non-surface use into surface by estimating how big an earth would be required to sustain current levels of resource use or waste disposal (e.g., CO₂ emissions).

Calculating the world global footprint gives an average of 2.2 ha per person which compares to a capacity of 1.8 ha. This implies that we are “borrowing” natural capacity from nature’s future. CO₂ accounts for about half of the footprint.

The WWF is using the EF concept to communicate natural limits.

The EF itself says nothing about sustainability or about what people must do. It only say how much space is available on a sustainable basis and how much people in different places are using.

The future will not be divided between developing and developed countries. Rather, it will be divided between ecological creditors and ecological debtors. In this perspective, the US, UK but also Bangladesh and Egypt would be debtors, and Russia, Brazil, Canada would be creditors. A debtor country would be one that is using more than its own space to sustain itself, even if it uses less than 1.8 ha per person. Creditor and debtor countries can “trade” biocapacity among each other, but the Earth cannot trade with a creditor planet.

Like GDP, we need a standardized, precise measurement of natural limits.

People are invited to subscribe to the EF newsletter and to join the network (www.footprintnetwork.org).

Audience question: How is the marine environment included?

M.W.: Marine environment is included, but database is not perfect.

Q: Where do the figures come from? How can you defend them?

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M.W.: We use official U.N. data (FAO etc.), even though these data are far from perfect.

Q: What about the collaboration project with the electric utility you mentioned?

M.W.: The idea is that displacing footprint-intensive electricity (e.g., coal) with footprint-extensive electricity (e.g., hydropower) would mean generating footprint-negative electricity.

Q (Heather Eaton): Concern: EF measures human impact, but it does not measure all kinds of ecological impacts. Thinking in terms of credit and debit only captures a tiny aspect of reality. As a worldview it would be worrying.

M.W.: Yes, the EF is designed to capture only one aspect, but then it is the only way to get attention and it is much less insane than the currently prevailing worldview. It should be a transition view rather than the ultimate view.

Q: How about the space that should be reserved for wildlife?

M.W.: Different people/agencies propose different shares of space for wildlife (Brundtland report: 12%, others: 50%)

Q: How about spiritual values and ethical judgments? Tradeoff between nature and culture?

Q: The EF emphasizes what people have to give up. Shouldn't it show what people stand to gain?

M.W.: Yes, you should not ask what you can do for the footprint, but what the footprint can do for you. It's vital that people recognize that the footprint is a tool for the transition to sustainable ways of good life.

Q: How does the footprint balance related to trade balance between countries?

M.W.: there is no general relationship.