KEEPING TRACK

of our changing environment

12% biodiversity decline globally

+60% women parliamentarians

numbers

21 megacities

+130% plastics production

Ozone depleting substances -93%

13% = renewable energy sources

300 million ha forest area loss

+ 0.4°C in global mean temperature

Globalization

change

energy efficiency

+75% GDP

Ocean Acidity 8.11 - 8.06 pH

36% increase in CO_2 emissions

technology

Population +26%

sustainability

global warming

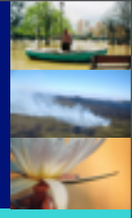
slum dwellers +171 million

drinking water coverage +13 %

UNEP

From Rio to Rio+20 (1992-2012)

What has happened since the Earth Summit 1992?



Forests

Population

Biodiversity

Water

Economy

Agriculture

1992 → **2012**

Climate Change

Technology

Fishery

Energy

Atmosphere

Governance

UNEP

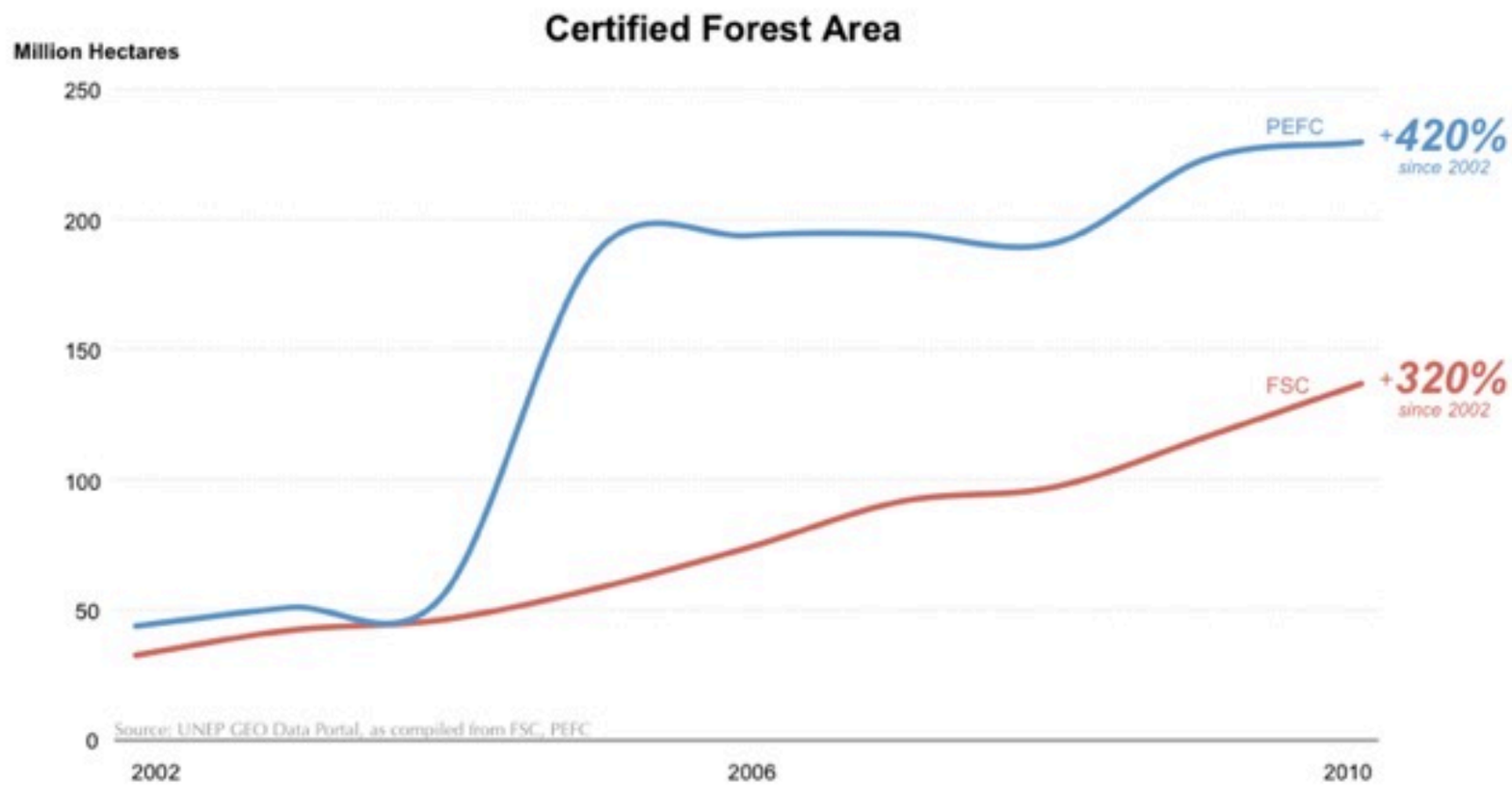
100 data sets

global averages

developing/developed regions

covering 20 years

Only about 10% of global forests are under certified sustainable management



The Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC), the two largest forest certification bodies worldwide with slightly different approaches to management and certification, certify socially and environmentally responsible forestry. An impressive annual 20% growth rate of labeled forests indicates that both producers and consumers are actively influencing timber production. Nevertheless, in 2010 still only about 10% of the total forest extent was managed under FSC and PEFC practices.

Keeping Track of our changing environment

From Rio to Rio+20 (1992-2012)

- The first publication of its kind highlighting major global trends during the last 20 years using time series data in about 100 pages using simple easy to understand graphics.
- The world has significantly changed due to rapid globalization fueled by unforeseen breakthroughs in Information and Communication technologies.
- Since Rio many developments took place which were not foreseen in 1992.

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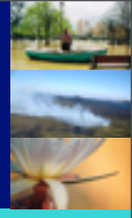

New Multilateral Environmental Agreements and Conventions

Awareness of climate change

The Green Economy

Carbon Trading and other Environmental Market Tools

Markets for organic products and eco-labeling

Genetically Modified Organisms

Recycling

Commercialization of biofuels, solar and wind energy

Chemicals management

Nano materials

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- Our knowledge about the state of environment is relatively poor to promote ‘evidence based policies’ due to lack of adequate monitoring capabilities at the national level.

Overall Situation

Since 1992, the human population has grown

by 1 450 000 000 *people*

GDP per capita has climbed by 39% globally

(33% for developed, 80% for developing region)

Internet users skyrocketed by 29 000% *since 1992*

(and mobile phone subscribers by 23 000%)

Good News


The Montreal Protocol: "Perhaps the single most successful international agreement"
-93%
of Ozone Depleting Substances since 1992


Investment in sustainable energy
has skyrocketed in recent years
+540%
since 2004

Renewable energy sources (including biomass) currently account for 13% of global energy supply

Land area used for organic farming is growing at an annual rate of nearly 13%

+240%

since 1999

The private sector is increasingly adopting environmental management standards

+1500%

since 1999

Bad News


+36%
since 1992
Global CO_2 emissions continue to rise,
with 80% emitted by only 19 countries

The average global citizen consumes 43 kg of meat per year, equalling **18-25%** *of all GHG emissions*


+9%
since 1992
The average amount of CO_2 in the Earth's atmosphere shows a steady rise over the last two decades

The annual minimum extent of Arctic sea ice continues its steady decline

-35%

since 1992


Forest area decreases by 13 million ha every year,
an area as large as Greece or Bangladesh

Only about 10% of global forests are under certified sustainable management, but with steep increases

+400%

since 1992 (estimation)

Drinking water coverage increased to 87%, but the world is far from meeting the sanitation target of 75%

Each year 52 vertebrate species move one Red List category closer to extinction


Plastics decompose very slowly, creating a major long-term environmental impact
+130%
since 1992

Targets and Goals in Environment

- Hardly any quantitative targets in environment
- MDGs 7 indicators are good for monitoring progress
- Nothing like UNDP HDI: outcome based index in environment
- Target setting seems to work, i.e. ODS, 13% Protected Areas
- Scientifically reliable time series data on land degradation, water quality and quantity, groundwater, ecosystem goods and services, chemicals and waste and many more are major missing gaps

Thank you for your attention