

A view on:
The age of sustainable development

J. Sachs - 2015

Some crazy & changing facts from the book
In supplement to the poster

Crazy facts

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- 1/3 of endangered spp = part of **global trading chain**
- US never ratified Convention on Biological Diversity. **Free-market** politicians rejected the idea that world should agree to an equitable & fair sharing of biological products
- US farm population is under 1% of entire **labor force**, even though 95% of the land is classified as rural
- Countries naturally straddle different **agroecological zones** > also social & cultural diversity > potential for clashes > rich countries respond with military approaches ↻ address underlying problems of poverty, climate change and unsustainable population increase
- Main problem is one of scale: the **Gross World Product** ↑ by *ca.* 275x from 1800 > 2015 > world economy has become very large relative to finite planetary resources

Crazy facts

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- Humanity is now taking **40-50% of all PS on the planet** > is eating other spp off the planet!
- **Ozone hole** was discovered by chance! But because of:
 - scientific discoveries
 - technological insights
 - global agreements> ozone depletion ≠ grave threat to humanity anymore
- Agriculture = most important sector from point of view of **human-induced environmental change**
- Per capita **China emissions** are still less than US emissions (6.2 vs. 17.6 ton CO₂/pers)
- Our basic common link: **we all inhabit this planet**

Crazy facts

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- WHO 1948: **good health** = fundamental human right but we have yet to achieve this goal
- Cost of basic **primary health** system = 60\$ / pers*yr > too much for government of very poor country > Official Development Assistance > only 5 countries among donors typically reach the targeted threshold of 0.7% of national income
- 6 million of 7.6 million **deaths** in 2010 were in sub-Sahara Africa & South Asia (communicable diseases & childbirth)
- India = country with largest nr. of **stunted children**

POVERTY TRAP

> country too poor to get on the ladder by itself

Most effective Official Development Assistance:

- * build capital (roads, power grid, clinics, schools)
- * capacity building (salaries & training of teachers & health workers)
- * social investment (health care)

Changing facts

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- Everywhere in the world **urbanisation** is proceeding rapidly (world's population in cities: 10% up to ca. 1800, > 50% in 2008) and is critical part of economic development process
> prosperous, healthy & resilient cities = core challenge of SD

Changing facts

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- **Progressive realisation of human rights:** even under current constraints, the world's governments should continue to take steps toward fully meeting all human rights (political, civil, economic)
- **↓ inequalities across children** requires integrated & very early interventions:
 - safe environment
 - cognitive development
 - pre-school learning
 - proper nutrition
 - health

> consequences for society can be enormous
- 1950, **Life Expectancy at Birth** (LEB) = 47 yr > 2010, LEB = 70 yr thanks to:
 - modern humanity
 - modern science
 - economic development

> technological & social improvements in public health (diagnostics, medicines, mobile phones to call for emergency, lifestyle), literacy & public awareness (enable people to promote own health & survival)

Changing facts

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- **Dead zones** in already > 100 estuaries worldwide
- 70% of **fresh water use** by humanity is for agriculture, 20% for industry, 10% for households
> ground water depletion is a worldwide phenomenon
- Human **land use change** (for farms, pastures, cities)
> massive disruption to ecosystems & spp survival
- All of our civilization is based on a **climate** pattern that is now undergoing enormous & rapid human-driven change > dangerous for food security > both adaptation & mitigation needed:
 - adaptation is essential as climate change is happening & will continue to happen even if mitigation is successful because of inertia in warming, but there is a limit to how much we can adapt
 - mitigation = priority via ↓ in:
 1. energy-related CO₂ emissions
 2. land use change CO₂ emissions
 3. CH₄ & N₂O emissions

CLIMATE CHANGE never been an economic problem as complicated:

1. global crisis
2. huge challenge to get world to take corrective actions
3. problem crosses countries & generations
4. problem of GHG emissions goes to core of modern economy
5. climate change is slow moving crisis (frog in a pot)
6. solutions involve every sector of the economy
7. energy sector home to world's most powerful companies