”EU as a Global Actor”
- comments by Anders Wijkman at the European Conference on Education for Sustainable Development in Lund on september 28, 2009

To discuss the role of Education in SD we have to critically analyze the concept as such, its interpretation as well as implementation.

SDS requires a lot of rethinking

- SD = bringing harmony between economic dev:t, social dev:t and environment. Notion is given there are simple trade-offs between them, i e that they are subsitutable to a large degree
- But Natural Capital and Financial Capital are not substitutable and when Social Capital is seriously lost, Society is at risk
- The conventional growth concept – GDP – is serious barrier to change; sends the wrong signals + provides wrong objectives
- The whole economic policy framework is flawed

  - it does not take Nature into account

  - it makes no distinction between different types of growth

  - income distribution, equity and social inclusion not at center stage
- If Natural Capital is degraded, there can be no Bail-outs

- Just as a few lonely economists warned us we were living beyond our financial means and overdrawing our financial assets, scientists are warning us that we're living beyond our ecological means and overdrawing our natural assets," argues Glenn Prickett, senior vice president at Conservation International. But, he cautioned, as environmentalists have pointed out: "Mother Nature doesn't do bailouts."

  Thomas Friedman in New York Times, march 2009.

- We created a way of raising standards of living that we can't possibly pass on to our children," said Joe Romm, a physicist and climate expert who writes the indispensable blog climateprogress.org <http://climateprogress.org/> . We have been getting rich by depleting all our natural stocks — water, hydrocarbons, forests, rivers, fish and arable land — and not by generating renewable flows

  Thomas Friedman in New York Times, march 2009

Rethink conventional growth

- Our ecological footprint increases all the time:

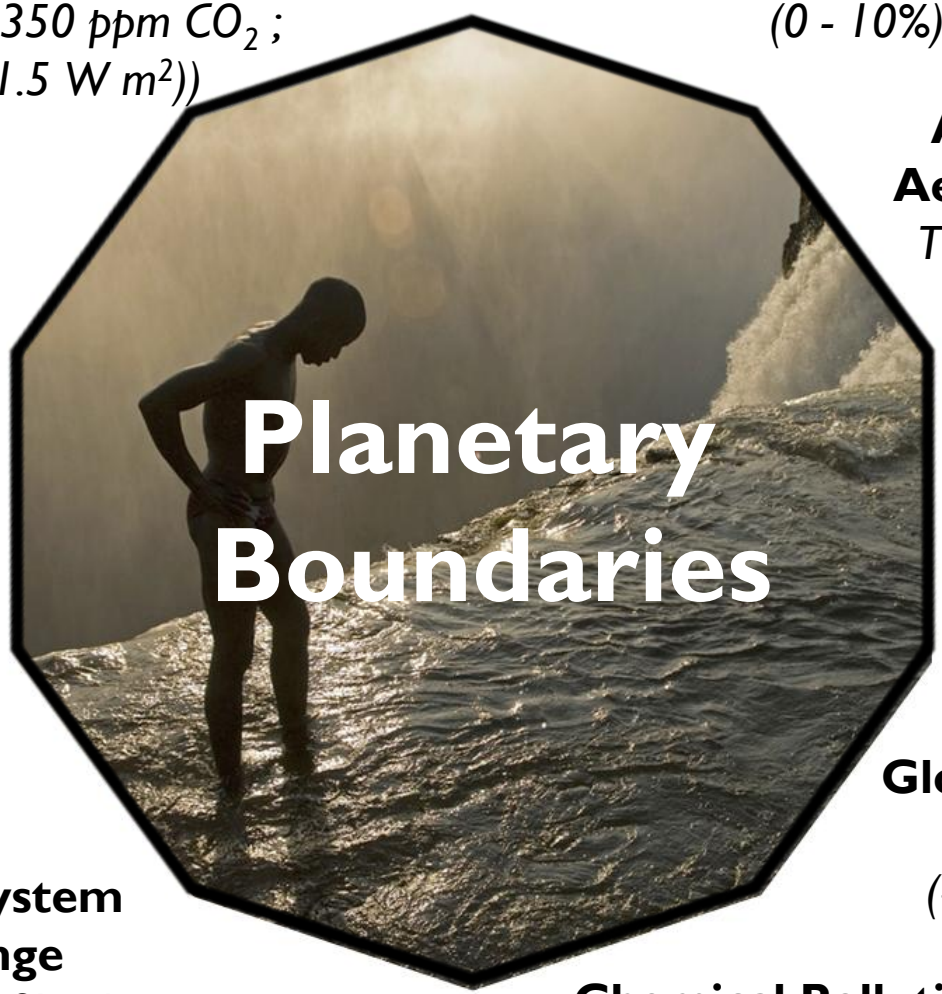
  - GHG increase in most MS, - Transport emissions on the increase, - Countdown 2010 a failure, - Fisheries Policies a failure, - Resource use increasing, - Waste volumes as well,
- 2/3 of major ecosystems on the planet are overused
- Today´s economic model is based on assumption that there are limitless resources in Nature and that Nature has infinite capacity to absorb waste products.
- The inverted Kusnetz curve – i e the assumption that environmental pressure automatically goes down when economies grow - can not be taken for granted
- As presently organised the economic system will destroy the life-supporting systems and ultimately bring down the whole economy
- Respect the boundary conditions – see Nature sept 23

Climate Change
325 ppm CO_2 < 1W m^2
(300 – 350 ppm CO_2 ;
1-1.5 W m^2))

Ozone depletion
< 5 % of Pre-Industrial 290 DU
(0 - 10%)

Biogeochemical loading: Global N & P Cycles
Limit industrial fixation of N_2 to 35 Tg N yr^{-1}
P < 20 % inflow to Oceans

Atmospheric Aerosol Loading
To be determined



Ocean acidification
Aragonite saturation ratio
< 20 % below pre-industrial levels

Biodiversity Loss
< 10 E/MSY

Global Freshwater Use
<4000 km^3/yr
(4000 – 6000 km^3/yr)

Land System Change
≤15 % of land under crops

Chemical Pollution
Plastics, Endocrine Desruptors, Nuclear Waste Emitted globally
To be determined

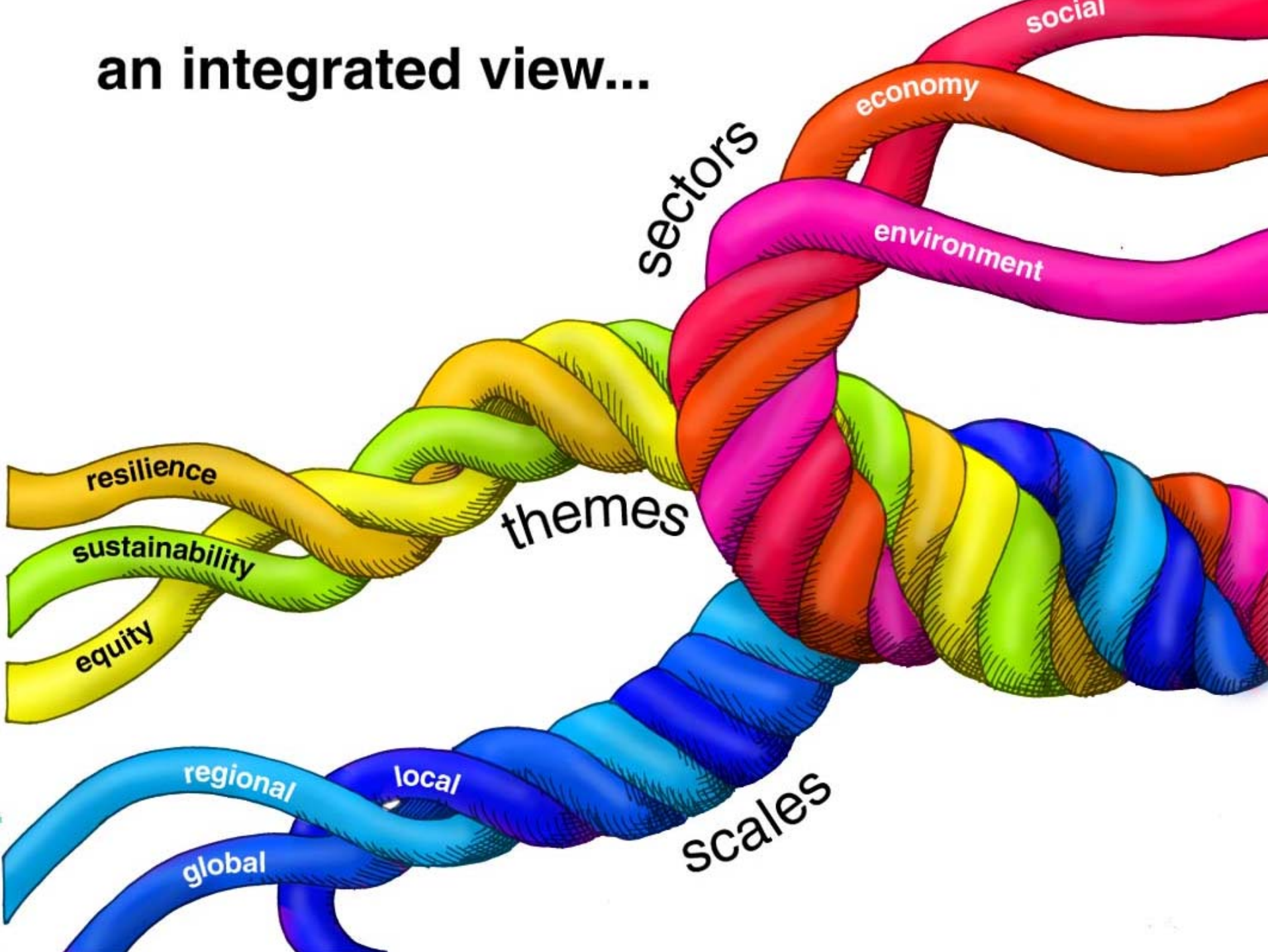
Some key proposals for economic reform

- ”Beyond GDP” - measure welfare in a more intelligent way
- Define ”boundary conditions” for human development and design economic policy framework consequently
- Take Nature into account; Financial Capital cannot substitute for Natural Capital – TEEB leads the way
- PPP - let the polluter pay
- Remove all environmentally harmful subsidies
- Resource efficiency key objective: ”From cradle to cradle”
- Biomimicry
- Use discounting of future values with caution
- Reform Business models; from products to services,

Major implications for EU policymaking

- Merge Lisbon and SDS – tension today between short term and long term - and around the concept of economic growth
- Develop new indicator for welfare and progress
- Implement PPP and remove envi. harmful subsidies
- Use EU Budget to support SDS
- Structural/Cohesion Funds – major shortcomings today
- CAP must be reformed to support SDS
- Resource efficiency new target: +4-5% p a – part of Eco-design
- Transport Policy Reform
- More ambitious climate policy

an integrated view...



How do we bridge conventional thinking with sustainable development thinking?

- Some of the resistance against sustainability is due to vested interests and/or cynicism
- But much is due to lack of real understanding; The vertical organisation of society, incl education, and lack of systems thinking is a serious problem
- Neo-classical economics particular problem
- Current lifestyles and culture major barrier to change

Suggestions for Education

- The organisation of science and education must go from ”verticalitis” and reductionism to working in the ”interest of the whole”
- We need specialists but, as well, people who understand interconnections and linkages.
- Review curricula at all levels and promote a world view that fully appreciates the role of ecosystems, biodiversity and the atmosphere
- Integrate the boundary conditions as a concept and the notion that there are limits

Suggestions for Education c - d

- Help raise competences among teachers
- Special efforts in professions within construction, energy, transport, food production, textiles
- Focus on the potential of ICT for sustainability
- EU Reference Framework of Key Competences for Life-Long Learning – add a ninth, focussing on sustainability
- Encourage the EU to organise regular conferences on ESD for practitioners

What is the Young Masters Programme (YMP)?

- World leading distance education on Sustainable Development managed by the IIIEE at Lund University
- Designed for students age 16-18 years, 18 weeks, plus project work
- Scientific base of knowledge
- Distributed via internet; promoting local activities and international networks
- Empowering young people
- Aiming for an overall effect to drive towards sustainability

The International Institute for Industrial Environmental Economics
Lund University, Sweden

Features

- International education on sustainable development focused on solutions
- Utilises the internet so that students, teachers and tutors in different parts of the world can connect, interact and exchange experiences in “global classrooms”
- On-line learning and disseminations alternating with real-life research and local project work

Features

- Pioneering distance course on Sustainable Development 1999
- Participation from more than 109 countries
- Since start ≈ 10 000 students (by end of 2008)
- 1500 teachers in network at present
- YMP in China since 2003; Partnership with CEEC and SEPA, Teacher Training Courses, students from 18 Chinese provinces at present

Young Masters Programme
Teacher training in Beidahe, China 2007