1. The 2050 horizon: the real timing is 2022/23

Dogmas and hidden issues 2012

2. Save Nature & the environment protect resources rush & over-consumption life-styles

3. Lack of focus on primary resources and vital needs soil / water, farmers' condition, future generations, in



liberation

Interdisciplinarity for the short- & the long-term: targetting natural resources at regional scale

Ioan Negrutiu

Institut Michel Serres

for resources and public goods

The founders:

Olivier Faron Wendy Leeds-Hurwitz Michel Morvan Violette Rey Ioan Negrutiu

The ENS consortium RDP / EVS / IXXI / IAO

The logo

The ENS team: 4

Institut Michel Serres

Founding partners, institute w/out walls

CEES, Oslo

ISS, PortlandU, Oregon

VIB, Ghent

CIcD, WisconsinU (WUP)

Borlaug Institute, Roth-ingham

ERC program Lascaux, Nantes

LAMETA, Montpellier

EPFL, Lausanne

USAMV, Transylvania

ENS de Lyon

⇒ United state of resources: deep interdisciplinarity

- all disciplines & education common denominator



temps MANIFESTES ! LE POMMIER !

After the age of maths, physics, chemistry ... The age of Natural Sciences inter-disciplinarity Ecology & human / social sciences Where philosophy meets science, society, politics

?? Societal & experimental translation: *The integrated resource-approach to development*



The M Serres Institute launching conference, Sept. 2012

Issue:

What if the real problem is our perception / relationship to resources?

=> the economy is part of the biosphere (not vice-versa).

Hypothesis:

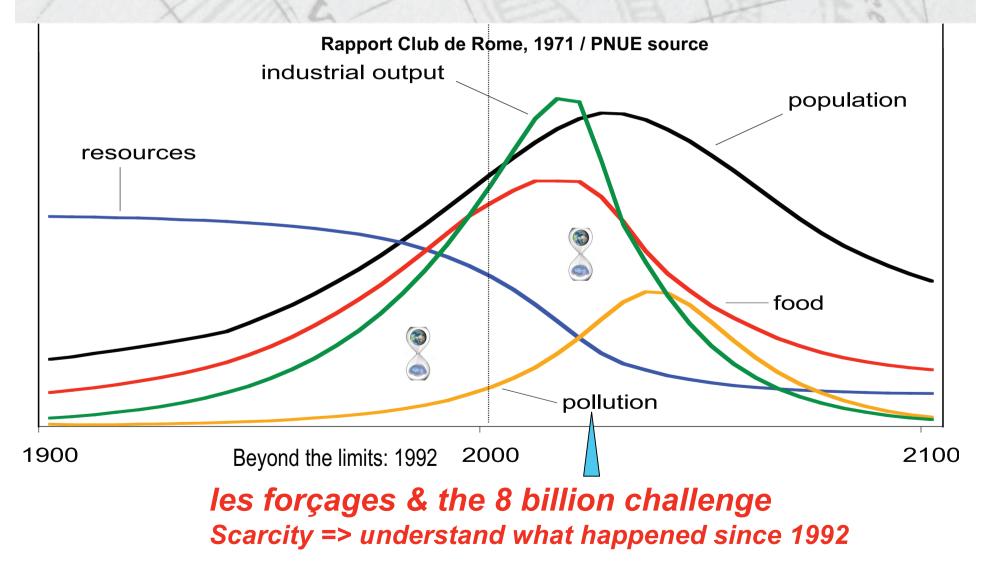
The pertinent approach to economy, climate change, biodiversity....

& ecological transition

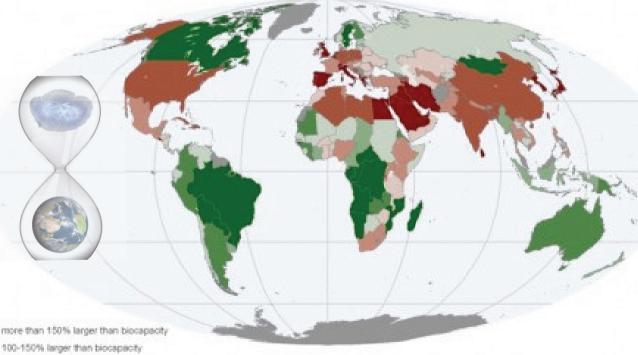
is through an integrated study, monitoring & management of resources.

Why resources & public goods?





Percent of Earth's Biocapacity Used: 144%



Eco-debt timing 1987: Dec19 2000: Nov 1st 2011: Sept 27

Footprint more than 150% larger than biocapacity Footprint 100-150% larger than biocapacity Footprint 50-100% larger than biocapacity Footprint 0-50% larger than biocapacity Biocapacity 0-50% larger than Footprint Biocapacity 50-100% larger than Footprint Biocapacity 100-150% larger than Footprint Biocapacity more than 150% larger than Footprint Insufficient data

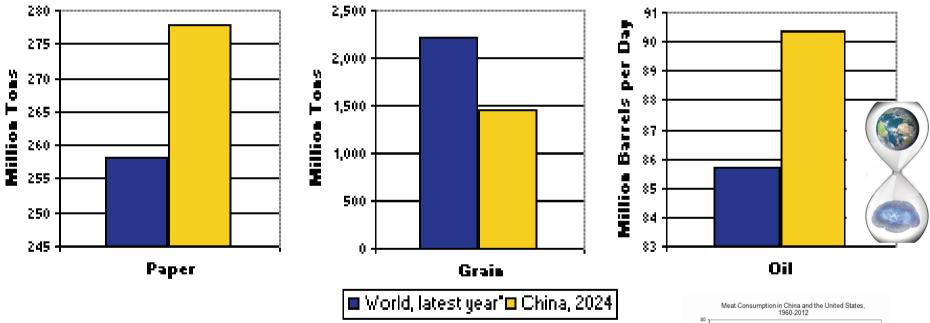
Natural Resources erosion : « forçage » & eco-deficit

2006

Gap between eco-footprint and biocapacity



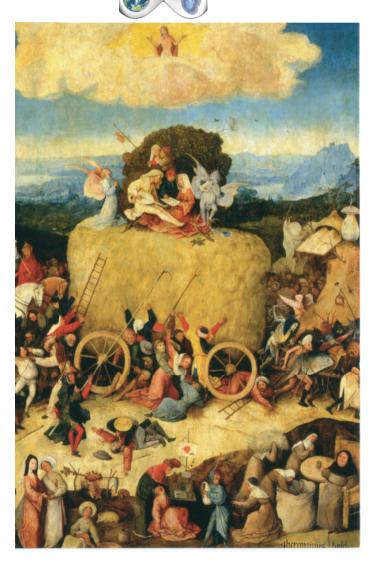
Current Vorld Consumption of Key Resources Compared with 2024 Projections for China



"Latest year: 2007 for paper; 2008 for grain and oil.

Source: compiled by EPI, full citations available upon request.





Why bio / agro-resources?



- Space, Time, demography, conflicts
- 2. The public goods challenge & taboo: WTO / WB Resources: SCAR, UK forsight, JRC / IES, Big10, ...
- 3. Rush / scarcity / inequity & primary resources the poor and future generations

Michel MOREAUX, Lerna Toulouse

The economy of resources at the cross-road of several paradimes

Bob COSTANZA, ISS Portland

...unlimitted increase in resource and energy throughputs, of material production and consumption, do not seem to continue to increase well-being.

We are all, individually & collectively,

Resources – centered, - minded, - wrongly framed (vs climate, biodiv., ...) no coherent agency system, no vision, codified & conflictual

Survey => our ambiguous perception / resources issues, problems, solutions

Missions: resources and public goods

 Challenge the conceptual frames on which nowadays agendas are set => a coherent architecture and priority picture towards a more global / integrated resources security for basic needs.

2. Generate *tools for the real-time metrics of regional resources (bundles* and dynamics), in tight connection with evolving legal, normative, and financial contexts and instruments.

3. Offer alternatives to the binary WTO – WEO *governance system* in discussion for the Rio+20 session, based on the absolute necessity to integrate the economy and other human activities within the cycles / functions of the biosphere.



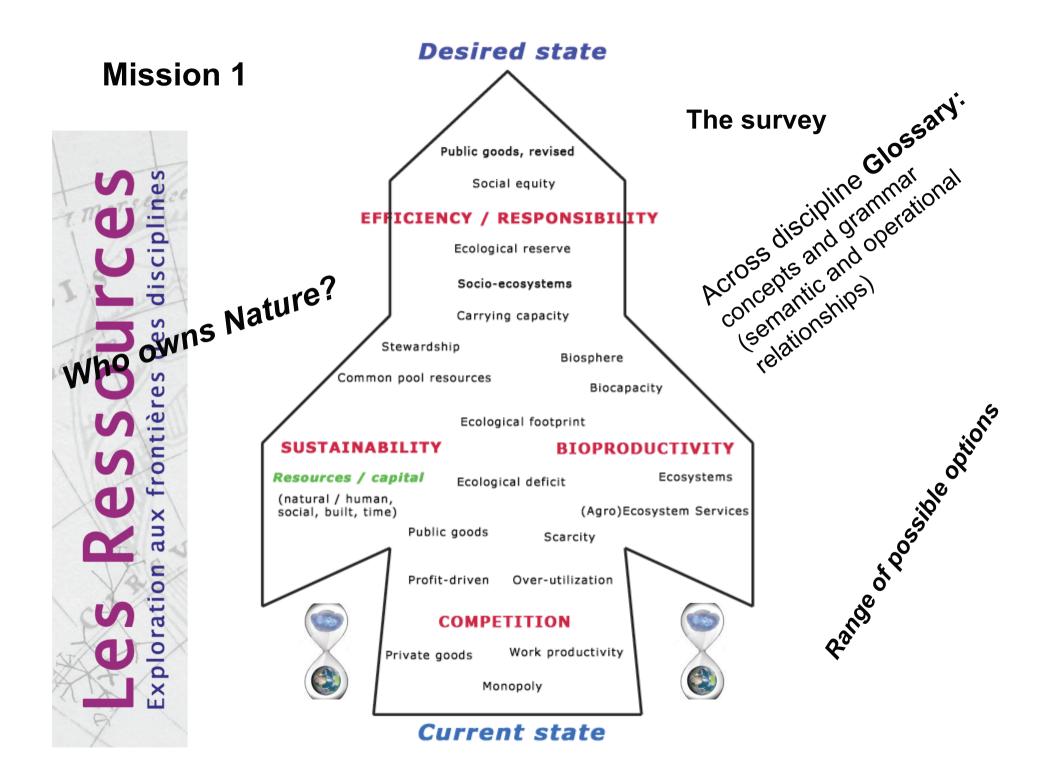
How it works?

M1. Conceptual - rethink the concept Scarcity and competition (resources, environment, ...) - interconnected, phased optimization.

M2. Resources and scale: regional Permanent, real-time; tools and good practices become the norm

M2. Resources, demography & institutions Regional capacity / specificities, Carrying capacity,... as a funcion of context and instruments (institutions, organizational skills, tech-knowlogy)





How it works?

M1. Conceptual - rethink the concept Scarcity and competition (resources, environment, ...) - interconnected, phased optimization.

M2. Resources and scale: regional Permanent, real-time; tools and good practices become the norm

=> Adaptive management, all resources & all regions

M2. Resources, demography & institutions: ecological truth Regional capacity / specificities, Carrying capacity,... as a funcion of context and instruments (institutions, organizational skills, tech-knowlogy)

Mission 2 - why regional level is important?

world statistics updated in real time

е

 \Rightarrow The **regional scale**, resources specificities and CAP 2020 issues

 \Rightarrow Regional early, « real-time » monitoring, dynamics / evolution & viability

Bottom-up approach - build regional academic and public service capacities

Facts

Mission 1: concepts & education

< <u>http://biologie.ens-lyon.fr/masterbiosciences/presentation-des-ue-1</u>

/presentation-des-ue/presentation-des-ue/les-ue-europe/biodiversity/ > (since 2008)

- www.ens-lyon.eu/etudes/systemes-territoriaux-aide-a-la-decision-environnement => send in students

- www.iuf20ans.org -2011 and proceedings: concept testing => get the book

Mission 2: real-time tools & good practices

ANR « agrobiosphère » Rhône-Alpes, 2012 – test region => join the project deep quantitative understanding of the dynamics of natural systems / resources

Michel Serres Institute launching day – Sept 27, 2012: join the conference

What next? to be discussed

- 1. The natural resources and public goods initiative / network
 - join for education and research
 - evaluate and adapt the RA project to your region / network project
- 2. The survey help the operation
- 3. Regional monitoring and management is important and urgent
- \Rightarrow the regional agro-priority on resources is your power
- ⇒ interdisciplinarity as alternative to lobbying
- 4. The challenge: who owns Nature, i.e. natural resources?



Confusion on resources terminology / framing

Centre d'analyse stratégique, rapport oct 2011:

- « de nombreuses aides publics accélèrent la dégradation des sols, des eaux, des ressources, des habitats naturels... »
- ⇒ Les ressources sont traitées par tranche, pas comme un ensemble

- Mesures fiscales incitatives: « loi de financement supprimant l'ensemble des subventions défavorables à la biodiversité »

- (1) Biodiv remarquable vs biodiv ordinaire?
- (2) Implique une bonne partie de l'agriculture conventionnelle!
- (3) Biodiversité est une composante des ressources naturelles