The CEECEC project

www.ceecec.net

and the new EJOLT project

Teaching and learning ecological economics and political ecology with environmental justice organizations
From activism to science and from science to activism: CEECEC and EJOLT

- Environmental NGOs and networks can use concepts from Ecological Economics, Political Ecology – this we could call “capacity building”.
- More importantly, NGOs and networks develop sometimes new concepts (ecological debt, food sovereignty…) that are then subject to academic scrutiny.

Work by K.W. Kapp on social costs (1950), and by Kneese and Ayres (1969) on the pervasiveness of externalities, was also influential.
SUSTAINABILITY SCIENCES

• They did not exist 30 years ago, at least with that name. They study the conflicts between economic growth (and population growth), and environmental sustainability.

• A better name would be Human Ecology, the ecology of humans, but this is a field which was difficult to fit into the Departments of Universities – natural sciences, social sciences?
The main sustainability social sciences

- **Social Metabolism** means the flows of energy and materials in the economy, and the human appropriation of net primary production of biomass. A central concept is “socio-ecological transitions”. The study of social metabolism overlaps with Industrial Ecology. It discusses the absolute and relative dematerialization of the economy (i.e. relative to GDP).

- **Ecological Economics** encompasses the physical study of the economy (social metabolism), the study of property rights on the environment and their relation to environmental management, the study of the environmental sustainability of the economy (can manufactured capital substitute for so-called “natural capital”?), the economic valuation of positive environmental services and of negative “externalities” (loss of biodiversity, climate change), and also multi-criteria evaluation to rank alternatives in the presence of incommensurable values.
Main sustainability social sciences

• Environmental Health addresses physical, chemical, biological factors impinging on the health of humans. For instance, the effects of arsenic in water from natural factors is part of the study of environmental health, as also water pollution with pesticides. Similar natural causes produce different social effects, because of the “social amplification of risk”.

• Environmental Law considers the constitutional provisions (the Rights of Nature – as in the Constitution of Ecuador, 2008), the administrative law, the laws on corporate liability and accountability. It comprises international private and public law related to the environment, including e.g. the Basel Treaty on toxic waste exports.

• Political Ecology focuses on the use of power to explain the access to environmental resources and services, or the burdens of pollution according to caste or social class or gender. It focuses both on local and international ecological distribution conflicts, and studies the use of power to decide procedures for decision-making in environmental issues. Together with environmental sociology, it studies also the environmental movements.

• Also, Ecological Anthropology, Ethno-ecology, Urban Ecology, Agroecology, Environmental History...
CEECEC, ecological economics with NGOs

The European FP7 SiS CEECEC project (2008-2010) developed out of dissatisfaction from the distance between academic ecological economics, and the "activist knowledge" and the needs of environmental Non-Governmental Organizations.

CEECEC means Civil Society Engagement with Ecological Economics.

We asked NGOs to write reports on case studies of their own choice, and then collaborate with university institutes in turning these reports into chapters of an on-line Handbook of ecological economics. It is a 750,000€ project involving 13 institutions.

This is indeed what we did for two years. The NGOs chose the case studies, most of them of immediate relevance.
From science to activism, and from activism to science: CEECEC 14 case studies with their keywords

- **Payments for Ecosystem Services (PES) in India from the Bottom-Up CSE**
  - willingness to pay, opportunity cost, Coasian bargaining, environmental services, transaction costs, community property rights, CDM

- **Participatory Forest Management in Mendha Lekha, India CSE**
  - biomass economy, GDP of the poor, joint forest management, watershed management, social capital, consensual democracy, community rights, non-monetary economy, livelihood security, rights-based approach

- **Mineral Extraction and Conflicts in Cordillera del Cóndor, Ecuador, Acción Ecológica**
  - copper mining, Shuar communities, environmentalism of the poor, biodiversity hot spot, water rights, ILO Convention 169, Social Multicriteria Methods, languages of valuation, incommensurability of values.
CEECEC Case studies

• Manta-Manaos Multi-modal Transport Infrastructure in Ecuador: Nature, Capital and Plunder - Acción Ecológica

  social metabolism, material flows, transport infrastructure, local knowledge, resource extraction, Chinese export markets, free trade, IIRSA

• Waste Crisis in Campania, Italy A SUD - CDCA

  hazardous waste, Ecomafia, cost shifting, uncertain risks, post-normal science, “Zero waste”, incinerators, Lawrence Summers principle, DPSIR (Driving forces, Pressures, States, Impacts, Responses), corruption, EROI

Environmental Investments in Hiware Bazar, India CSE

  environmental investments, grazing rights, community resource management, water harvesting, National rural employment guarantee Act (NREGA), institutional innovations, property rights, virtual water, livelihood security.
CEECEC Case studies

• High Speed Transport Infrastructure (TAV) in Italy (Turin-Lyon) ASUD-CDCA
  transport and energy, material flows, participatory democracy, Cost-Benefit Analysis, Multi Criteria Evaluation, High speed, NIMBY (Not In My Back Yard), activist knowledge, Local Governance

• Nautical Tourism in the Lastovo Islands Nature Park, Croatia SUNCE
  nautical tourism, marine biodiversity, depopulation, landscape value, property rights, protected area management, carrying capacity, resilience, public participation, willingness to pay, eco-tourism management.

• Local Communities and Management of Protected Areas in Serbia (Djerdap) - Endemit
  protected areas, dams and hydroelectricity, depopulation, co-management, eco-tourism, forest economics, local livelihood opportunities, ecosystem services, Krutilla’s rule, cost-benefit analysis, trans-boundary cooperation
CEECEC Case studies

- **Mechanisms in Support of the Creation and Consolidation of Protected Areas in Mato Grosso, Brazil: The Potential of Redd and Legal Reserve Compensation - REBRAF**
  
biodiversity valuation, ecological economic zoning, avoided deforestation, carbon trade, payment for environmental services, opportunity cost, institutional innovations, public policy formulation

- **Forestry and Communities in Cameroon. CED-FoE**
  
  industrial logging, property rights, community forests, commodity chains, ecologically unequal exchange, cost shifting, corporate accountability, corruption, wood certification, consumer blindness, languages of valuation, FLEGIT

- **Environmental Justice and Ecological Debt in Belgium: The UMICORE case. VODO**
  
  lead pollution, manufacturing of uncertainty, environmental justice, popular epidemiology, post-normal science, environmental externalities, corporate accountability/ liability, value of human life, discount rate, greenwashing
CEECEC case studies

• Aid, Social Metabolism and Social Conflict in the Nicobar Islands. IFF-UKL
  humanitarian aid, material and energy flows, working time, property rights, community ownership, subsistence economy, natural disasters

• Land use and water disputes in the Tana Delta, Kenya. UAB and Nature Kenya
  wetlands, land-grabbing, irrigation, pastoralists, property rights, biofuels, EROI, HANPP, virtual water, biodiversity
New themes:
From activism to science: the Ecological Debt
From activism to science

• Srinivasan et al. (from Berkeley), including the ecological economist R.B. Norgaard, in *Proceedings of the National Academy of Sciences* (Srinivasan et al, 2008) quantified (at over USD 2 trillion) the Ecological Debt from North to South. A large part is the Climate Debt.

• This was published in *PNAS*, signalling the scientific credibility of the concept of “ecological debt”.
From activism to science: the Ecological Debt

• Other recent academic publications:


From science to activism: the EROI of agriculture

• Since 2007, the international network of peasant movements, Via Campesina, published reports stating that agriculture has changed from being a producer of energy to being a consumer of energy.

• Actually, agriculture transforms solar energy into food, it does not “produce” energy. The efficiency of photosynthesis is around one per cent, much of the solar energy input is not incorporated into the food energy.

• But the meaning of Via Campesina’s statement is clear: the inputs of energy into agriculture (not counting solar energy) have increased more than the outputs, and in “developed” economies more energy is put into the agricultural and food system than we get out from the system. (Pimentel et al, Science, 1973).

• The EROI is decreasing.
From science to activism: Sustainable peasant agriculture cools down the earth
From Activism to Science

Further examples:

- Environmental Justice (USA, 1982 – Bullard etc.), Popular Epidemiology.
- Food Sovereignty (Via Campesina, c. 2003)
- “Décroissance”, c. 2002
CEECEC
Handbook and on-line course

• The on-line Handbook is ready (and freely available at www.ceecec.net), together with a Glossary, and videos and lectures.
• A trial on-line course of “bottom-up” ecological economics based on case studies has been run from April to July 2010.
• Students taking the course are members of NGOs but also university students, public administrators.
• In August 2010 at the ISEE conference in Bremen and Oldenburg (www.ecoeco.org) we discuss the final results of the CEECEC project, and the prospects for teaching and learning ecological economics and other sustainability sciences with civil society organizations in the new EJOLT project.
The Yasuni ITT initiative: from activism to policy to science

• From activism (Oilwatch 1997 in Kyoto, “leave oil in the ground”: oil extraction connected to climate change) to policy (2007-2010 – Alberto Acosta, the Trust Fund with UNDP, M. F. Espinosa’s role, etc.)

• From policy to science: several academic articles and books already published on the Yasuni ITT initiative (by Matt Finer, Pamela Martin, Joe Vogel, Laura Rival, Carlos Larrea & Lavinia Warnars…).
New project: EJOLT (2010-13)

After CEECEC, another FP7 Science-in-Society project (over 3.5 M €) has been approved recently. It involves 23 organizations. It will also be coordinated by ICTA-UAB.

EJOLT is built on the partnership between research organizations, think-tanks, independent laboratories and EJOs, with the participation also of government and corporate actors, and media organizations.

EJOLT means Environmental Justice Organizations, Liabilities and Trade.
EJOLT partners

- Institut de Ciència i Tecnologia Ambientals, Universitat Autònoma de Barcelona, Spain
- Centre for Civil Society (CCS) Durban, South Africa
- A Sud CDCA, Italy
- ToxicsWatch Alliance - India
- Sozial Ökologie Institut - University of Klagenfurt (IFF) Austria
- Focus Association for Sustainable Development (FOCUS) Slovenia
- Fundação Oswaldo Cruz (FIOCRUZ) Brazil
- World Rainforest Movement (WRM) Uruguay
- Acción Ecológica & OCMAL - Ecuador
- Citizens for Justice (CFJ) Malawi
- Earthlife Namibia (ELN) Namibia
EJOLT partners, cont.

- Environmental Rights Action - Oilwatch (ERA) Nigeria
- Northern Alliance for Sustainability (ANPED) Belgium
- Nature Kenya (NK) Kenya
- Lund University, Sweden
- Universitat Rovira i Virgili, Tarragona, Spain
- Boğaziçi University, Turkey
- Business and Human Rights. London, United Kingdom
- Za Zemiata (ZZ) Bulgaria
- Sustainable Europe Research Institute (SERI) Germany
- Université de Versailles Saint-Quentin-en-Yvelines (UVSQ) France
- Genetic Resources Action International (GRAIN) Spain
- Commission de Recherche et d'Information Indépendantes sur la Radioactivité (CRIIRAD) France
The EJOLT project

- Conflicts arising in mining, oil and gas extraction, nuclear energy, ship and e-waste disposal, tree plantations, biomass exports and land grabbing will be studied across the world.

- The EJOs’ “activist knowledge” will be combined with the research methodologies of the academic partners to show the policy relevance of concepts such as “ecologically unequal exchange” and “ecological debt”.

- This will be done through a process of two-way knowledge transfer.
The EJOLT project

- Environmental Justice Organizations (EJOs) are locally, nationally or globally involved in conflicts over the unequal distribution of environmental entitlements, burdens of pollution and uneven access to natural resources and services.

- This is a type of environmentalism different from “wilderness conservationism”. It is the “environmentalism of the poor”, meaning the defence of the environment to ensure the livelihood of those directly involved in resource extraction and waste disposal conflicts.
The EJOLT project

• The Action Plan of EJOLT comprises the production of databases and maps of environmental injustices, networking platforms, mutual case study development, policy papers, dissemination of best practices, scientific articles, videos and other training materials. It includes workshops on economic valuation of health risks, liability law and legal actions to enforce corporate accountability.

• The project is geared to two key issues of immediate interest to society:

  - Which are the underlying causes of the increasing ecological distribution conflicts at different scales?
  - How to turn such conflicts into forces for environmental sustainability?
Inventories and Maps of Environmental Conflicts

• E.g., one partner of EJOLT is the WRM (led by Ricardo Carrere, doing activist research on tree plantations conflicts worldwide).

• J.F. Gerber of ICTA UAB did a first inventory of tree plantation conflicts in the world, listing the relevant variables that would explain such conflicts, using his own sources but also in collaboration with the WRM (Gerber, 2010, in press).

• EJOLT will do this kind of statistical work, extending it to other biomass conflicts, also to oil and gas extraction and to mining, and to some waste disposal conflicts.
The structure of EJOLT

• 4 vertical work packages, different kinds of conflicts: the nuclear energy chain from uranium mining to waste disposal; oil and gas extraction and climate change injustices; biomass and land grabbing conflicts; and mining conflicts and other waste disposal conflicts.

• 7 horizontal work packages: an inventory and map of ecological distribution conflicts; workshops on risks to environmental health; on economic valuation of environmental liabilities; on court cases and other procedures to obtain environmental justice locally and internationally; on unequal trade and the ecological debt; and finally, one more work package on bottom-up training (on the CEECEC model), plus a dissemination work package that includes video productions.
Still another new topic: Economic Degrowth, from activism to science

- There is a social movement in Italy and France for the décroissance…
- This movement claims different ancestors, among whom N. Georgescu-Roegen (1906-94), founding father of ecological economics, author of *The entropy law and the economic process* (1971).
Aujourd’hui la décroissance

• A selection of writings by Georgescu-Roegen was published in 1979 in French (trans. J. Grinevald and I. Rens) with the title Démain la décroissance.

• Another well-known ecological economist, Herman Daly, has written since 1973 on the steady-state economy.

• Degrowth in rich economies should lead to a steady state economy. This movement is helped by the Environmental Justice movements of the South.
1st International Conference on Degrowth, Paris, April 2008

(http://www.degrowth.net/)

Economic De-Growth for Ecological Sustainability and Social Equity

Paris, 18-19 April 2008
Publication from Paris April 2008 conference

Special Issue, *Journal of Cleaner Production* (a journal of industrial ecology) 2010

Crisis or Opportunity? Economic Degrowth for Social Equity and Ecological Sustainability
*Edited by F. Schneider, G. Kallis, J. Martinez-Alier*

- Editorial - **Serge Latouche**
- Why environmental sustainability can most probably not be attained with growing production, **Roefie Hueting**
- Energy transition towards economic and environmental sustainability: feasible paths and policy implications, **Simone D’Alessandro Tommaso Luzzati Mario Morroni**
- Relax about GDP growth: implications for climate and crisis, **Jeroen van den Bergh**
- Impact caps: why population, affluence and technology strategies should be abandoned, **Blake Alcott**…

- 12 articles and book reviews (incl. Tim Jackson, Peter Victor….)
Conference in European Parliament,
April 2009
Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm

(Ecological Economics, 69(9), 2010)

Joan Martínez-Alier, Unai Pascual, Franck-Dominique Vivien, Edwin Zaccai

Abstract

“Sustainable de-growth" is both a concept and a social-grassroots (Northern) movement with its origins in the fields of ecological economics, social ecology, economic anthropology and environmental and social activist groups. This paper introduces the concept of sustainable de-growth by mapping some of the main intellectual influences from these fields, with special focus on both the Francophone and Anglophone thinking about this emergent notion. We explain the reasons for the appeal of sustainable de-growth, and compare it to the messages enclosed within the dominant sustainable development paradigm.
Degrowth Events

London 12 Jan 2010: towards an international degrowth network

Background information

Faced with widespread ecological, social and political crisis, with injustice, inequality and possible collapse of the economic system itself, and society, academia, government and the general public, are searching for new and fair sustainable economic models. In many parts of Europe, a strong movement has emerged around the concept of DegrowShrinking (Degrowth). Sustainable economic degrowth has been defined as “a smooth, voluntary and equitable decromacy of production and consumption to ensure human well-being and ecological sustainability locally as well as globally in the short and long term” (Hall, Schneider and Martinez-Alier, 2006).

Serge Latour et al. define economic and financial crisis of Decadence movement, emphasizing that a Degrowth is above all a choice, and that there are no “ready-made political solutions.” Indeed, overcoming today’s model of developing a truly sustainable social system begins on Degrowth scores vast, complex problems that cannot be solved by simplistic solutions. However, with considerable academic progress in recent years, Sustainable Degrowth is far more than just a critique of neo-classical economics.

The concept of Degrowth shares many features with approaches better known in the US such as steady-state economics, and prosperity without growth. The goal of this event is to bring together these voices and contribute to the establishment and consolidation of an international network, one that values the complementarity and diversity of the many emerging European movements, and encourages and enables collaboration between researchers, CSOs and policymakers in order to move toward realizing a Degrowth society.

Speakers

Mauro Bonaiuti was one of the first scholars to focus on the field of bioregionalism and sustainable Degrowth. President of the Italian National Research Council’s Program “Bioregional-Quantitative Analyses for Sustainable Development,” he has also published renowned works on topics such as bioregions and the possibility of sustainable electric energy. He is also a professor at the University of Florence and at the University of Bergamo. He is the co-founder of the Italian bioregional movement. He is also a professor at the University of Florence and at the University of Bergamo. He is the co-founder of the Italian bioregional movement.

Leila Rihani has collaborated extensively with researchers on issues of sustainable policy and ecological economy. She is a PhD student at the University of St. Gallen and is currently involved in a research project on sustainable development in the Global North. Early work in the area of agro-ecology and bioregions for agriculture and sustainable development has been the focus of her research. She is also a researcher in the Sustainability and Environment Programme at the University of St. Gallen.

Stephen Spratt is a researcher at the Research Group “Geography and Planning” at the University of St. Gallen. His work focuses on the integration of nature and environmental education within urban planning and regional development. He is also a researcher in the Sustainability and Environment Programme at the University of St. Gallen.

André Reichel has a PhD in Economics and Law at the University of Stuttgart. He has research interests in management and economics of cultural and creative industries, as well as in the organization of cultural policy at the local and regional level. He is a consultant for cultural and creative industries, and a member of the board of the University of Stuttgart. He is also a member of the Stuttgart region’s advisory council for cultural policy and is a member of the German Research Council.

Tim Jackson is Professor of Economics (Development) at the University of Sydney and Director of the newly-launched CSIR Sustainable Development Research Centre (SDRC). REOSE, REOSEC were to develop an understanding of the links between climate, economic and social welfare, and to develop new and innovative financial mechanisms. He is the author of "The Future of Capitalism" (Penguin Press), and a co-editor of "The Resource Transition: From Decline to Growth" (Zero Books, 2009) and an advisor to the Commonwealth Business Council.

Map

In association with

GROWTH TRANSITION

26th January 2010, Venice
www.growthtransitions.eu/venice

26th March 2010, Barcelona
www.growthtransitions.eu/barcelona

7.00 pm, Tuesday 12 January 2010
at Hub King’s Cross
34b York Way, London, N1 9AB
Book your free ticket at www.degrowth.eventbrite.com
• Degrowth conference in Barcelona 26-29 March 2010 (400 activists and academics).
• From activism to a research programme on the environmental, technological, demographic, social, socio-psychological aspects of “socially sustainable economic degrowth leading to a steady-state economy”. This largely overlaps with research on “socio-ecological transitions”
• Forthcoming special issues in *Ecological Economics, Journal of Cleaner Production*...