

# GAIA

ÖKOLOGISCHE PERSPEKTIVEN FÜR  
WISSENSCHAFT UND GESELLSCHAFT  
ECOLOGICAL PERSPECTIVES FOR  
SCIENCE AND SOCIETY

4 | 2006



- REIHE: KOLLAPS VON GESELLSCHAFTEN
- REIHE: NATURGEFAHREN
- DEALING WITH NON-KNOWLEDGE

# GAIASKOP

## PROGRAMME, PROJEKTE, INSTITUTIONEN

### UNIVERSITÄT OLDENBURG

#### Neues Forschungszentrum für Nachhaltigkeit

Das Oldenburg Center for Sustainability Economics and Management (CENTOS) bündelt seit Ende Oktober 2006 die Kompetenzen der Universität Oldenburg in der wirtschafts- und sozialwissenschaftlichen Nachhaltigkeitsforschung.

CENTOS erprobt innovative Ansätze nachhaltigen Wirtschaftens und begleitet sie wissenschaftlich. Das neue Zentrum ist Bestandteil des ebenfalls 2006 gegründeten Zentrums für Nachhaltigkeits- und Umweltforschung COAST.

**WEITERE INFORMATIONEN:**  
[www.uni-oldenburg.de/centos](http://www.uni-oldenburg.de/centos)

### INTERNATIONAL UNIVERSITY BREMEN

#### Jacobs Krönung

Die Schweizer Jacobs Foundation investiert 200 Millionen Euro in die International University Bremen (IUB). Mit jährlich 15 Millionen Euro werden in den nächsten fünf Jahren Forschung und Lehre der in Europa einzigartigen Campus-Universität

## DAS GAIASKOP ...

... informiert kurz und prägnant über wichtige überregionale und internationale Innovationen und Ereignisse in der Umwelt- und Nachhaltigkeitsforschung, Technikfolgenabschätzung, Umweltpolitik und Forschungsförderung.

> Haben Sie eine Nachricht für das GAIAskop? Wir freuen uns über Einsendungen an: [gaia@oekom.de](mailto:gaia@oekom.de).



Blick auf den Campus-Center der International University Bremen (IUB).

mitfinanziert. „Nach erfolgreicher Profilierung“ wird die Foundation 2011 zusätzlich 125 Millionen Euro bereitstellen.

Gemeinsames Ziel ist die rasche und konsequente Umsetzung des Zukunftskonzepts des neuen IUB-Präsidenten, Professor Joachim Treusch. Treusch kündigte an, die IUB thematisch stärker zu fokussieren sowie noch mehr wissenschaftlich und wirtschaftlich vernetzen, um größtmögliche Praxisrelevanz zu erzielen. Zu den Leitbildern der IUB-Forschung zählt die Transdisziplinarität.

Zuletzt steckte die IUB in Finanzierungsnot. In Würdigung der früher in Bremen ansässigen Stifter nennt sich die IUB zukünftig Jacobs University Bremen.

**WEITERE INFORMATIONEN:**  
[www.iu-bremen.de](http://www.iu-bremen.de)

### ARTENSTERBEN

#### Abschied von dicken Fischen

Bis 2048 wird die Artenvielfalt in den Weltmeeren aufgrund der industriellen Fischerei so drastisch sinken, daß kaum noch Meeresfrüchte und Speisefische gefangen werden können. Diese Prognose traf ein internationales Team um den kanadischen Biologen Boris Worm. Es hat erstmals globale Fischfang-Daten der Vereinten Nationen seit 1950 sowie Ergebnisse zahlreicher Experimente und Studien ausgewertet. Kritiker(innen) der in *Science* veröffentlichten Studie nennen Schwachpunkte: Viele Daten wurden hochgerechnet, auf Wechselwirkungen wurde wenig geachtet. Heinz-Dieter Franke (Alfred-Wegener-Institut für

Polar- und Meeresforschung) nennt als Beispiel die Streifenbarbe, die aufgrund des Klimawandels nun auch in der Nordsee zu finden ist statt nur in südlichen Gewässern.

**WEITERE INFORMATIONEN:**  
<http://myweb.dal.ca/bworm>

## PERSONALIA



**Achim Bachem** (links), bisher Vorstand im Deutschen Zentrum für Luft- und Raumfahrt (DLR), ist seit Oktober 2006 neuer Vorstandsvorsitzender des Forschungszentrums Jülich. Der Professor für Mathematik trat die Nachfolge von GAIA-Beirat **Joachim Treusch** (rechts) an, der das Forschungszentrum fast 20 Jahre geleitet hat. Treusch ist nun Präsident der International University Bremen, zukünftig Jacobs University Bremen (siehe Meldung links).



**Stefanie Engel** ist seit April dieses Jahres außerordentliche Professorin für Umweltpolitik und Umweltökonomie am Departement Umweltwissenschaften der ETH Zürich. Die promovierte Agrar- und Ressourcenökonomin war seit 2000 wissenschaftliche Mitarbeiterin am Zentrum für Entwicklungsforschung der Universität Bonn, wo sie ab 2001 eine Nachwuchs-

gruppe zum Thema Institutionen für das Management natürlicher Ressourcen in Entwicklungsländern leitete und ab 2002 Leiterin der Arbeitsgruppe Natürliche Ressourcen war. 2005 habilitierte sie dort an der Agrarwissenschaftlichen Fakultät.



Der mit 500 000 Euro dotierte Deutsche Umweltpreis der Deutschen Bundesstiftung Umwelt ging 2006 an den Unternehmer **Hans G. Huber** und den Ökosystemforscher **Prof. Dr. Ernst-Detlef Schulze** (Foto) aus Jena. Als Direktor des dortigen Max-Planck-Instituts für Biogeochemie erforscht Schulze die Ursachen der globalen Klimaerwärmung. Er startete das weltweit größte Projekt zur genaueren Berechnung der Kohlenstoffbilanz Europas.

Der promovierte Chemiker **Josef Studinka** hat am 18. November 2006 die Ehrendoktorwürde der ETH Zürich erhalten. Mit dieser Auszeichnung werden seine Verdienste bei der Etablierung der PVA-Faser als gesundheitlich unbedenkliches Asbestsubstitut gewürdigt. Studinka war zunächst als Direktor der zentralen Forschungs- und Entwicklungsstelle der Eternit-Gruppe tätig, später war er technischer Leiter der Firma Polyfiber SA.

## VERMISCHTES

### KINO-DOKUMENTATION

#### Klimaforscher finden Al Gores Film korrekt

Al Gores Dokumentarfilm *Eine unbequeme Wahrheit* (*An Inconvenient Truth*) über die globale Erwärmung ist nicht nur an den Kinokassen erfolgreich, er findet sogar Gnade in den Augen kritischer Klimaforscher: Sie schätzen das Werk des ehemaligen US-Vizepräsidenten laut einer Umfrage von Associated Press als „erstaunlich korrekt“ ein.

„Er hat das wichtigste Material und stellt es richtig dar“, lobte William Schlesinger, Dekan für Geowissenschaften an der Duke University. Robert Corell, Vorsitzender der internationalen Arctic Impact Assessment Group, „saß da und war begeistert, wie gründlich und präzise es war.“

„Gore macht das sehr gut“, sagte Stefan Rahmstorf gegenüber der *Zeit* – sonst beklagt er, daß die Klimaproblematik in den Medien entweder gewaltig über- oder untertrieben werde. „Die meisten der in dem Film vorkommenden Grafiken verwende ich auch in meinen Vorträgen“, bemerkte Rahmstorf.

Nach Ansicht Tom Wigleys, einem ehemaligen Forscher des National Center for Atmospheric Research, ist Gore zu optimistisch. Der Ex-Vizepräsident suggeriere in dem Film, vorhandene Technologien und die Macht umweltbewußten Verhaltens könnten den Klimawandel abschwächen oder gar aufhalten.

Zudem sei es unnötig, Bilder von New Orleans nach dem Hurrikan Katrina zu zeigen. Für die verheerenden Folgen der globalen Erwärmung gebe es bessere und viel weniger umstrittene Beispiele, kritisierte der Meteorologe und Meeresforscher Brian Soden von der University of Miami.

### WEITERE INFORMATIONEN:

[www.climatecrisis.net](http://www.climatecrisis.net)



Plakat des im Herbst 2006 auch in europäischen Kinos gestarteten Dokumentarfilms von Al Gore.

# Sustainability

# A-Z

## K for Knowledge

In times of global change and a dramatic loss of sustainability from local to global scales, science has to shoulder ever greater responsibilities. So the question of how to move from knowledge to action becomes more and more crucial. Peter Moll and Ute Zander look at the design of the interface between theory and praxis. An analysis with examples, action proposals and lists of resources available to actors in science and development.

P. Moll, U. Zander  
**Managing the Interface**  
 From Knowledge to Action in Global Change and Sustainability Science  
 oekom verlag, Munich 2006, 157 Pages, english, 24,80 EUR  
 ISBN 10: 3-86581-052-7, ISBN 13: 978-3-86581-052-6

Available at  
[www.oekom.de](http://www.oekom.de)  
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# 12 FRAGEN AN ... 12 QUESTIONS TO ...

... ELINOR OSTROM

## 1. From your point of view, what are the most pressing environmental problems?

The melting of the glaciers, rising sea levels, extreme storms, and the many other impacts of global warming are grave and need to be considered among the major environmental problems of our era. We should not, however, ignore environmental problems facing local communities and regions throughout the world.

Further, we need to be aware that overly simplistic policy responses to the diversity of problems facing us can frequently make things worse rather than better. Reliance on panaceas is itself a major environmental problem! No single cure-all is sufficient to solve the complex, multi-level, interactive problems that constitute the human environment.

## 2. When looking at potential improvements in our environment, what gives you hope?

One positive sign is that many people are now serious about the need for alternative sources of energy. Recent investments in solar energy and wind power are very encouraging.

## 3. Is there a particular environmental policy reform you admire the most?

Recent efforts by governmental entities in Southern California to subsidize part of the costs involved in retrofitting private homes and gardens so as to reduce water and energy consumption are encouraging. It makes more sense to find reasonable ways of reducing water and energy *consumption* than to continue to focus huge investment on water and energy *production*.

## 4. Which trend in environmental policy and politics do you consider an aberration?

The US Government's denial that global climate change is occurring and the refusal to participate in negotiations regarding ways to reduce carbon emission in the world.

## 5. Imagine you would be Global Minister of the Environment for one day: What would you do?

I would never serve in such a capacity for a single day. There is nothing one can do in such a position for a single day that would contribute toward an improved global environment.

## 6. Why environmental research?

Environmental research and teaching are essential now that urbanization is so dominant. As more and more kids grow up in cities, recognizing that we are dependent on the earth to provide the essentials of life is no longer learned early from daily life.

A real challenge is to encourage interdisciplinary work. One can't make much difference in improving the environment without recognizing the long-term interrelationships between humans, their cultures, their political and economic institutions, and how these impact ecological systems.

## 7. What field of research in environmental sciences – besides the one you are working in – do you consider most exciting?

The *Resilience Alliance* is, in my opinion, producing some of the most exciting contemporary research by bringing together centers throughout the world to study the resilience of ecological systems to natural- and human-induced disturbances.

## 8. Can you name any person or event that has had a particular influence on your commitment to environmental issues?

Before reading the work of Robert Netting in the early 1980s, I had no inkling it would ever be efficient to allocate land for human use using common property. I understood that water and fish existed in common-pool resources and required a variety of property-rights systems, but I thought land was a private good and needed private ownership to be allocated efficiently.

Netting's analysis was unnerving. He asked why Alpine farmers used private ownership to manage their valley farmlands, but the same farmers used forms of common property to manage Alpine meadows. His analysis demonstrated that forms of common property were more effective than private ownership when land had low productivity, when rainfall and other nutrients were spatially and temporally patchy, and when substantial economies of scale in building infrastructure existed. His in-depth evidence was substantial and the theoretical argument broadened my horizon tremendously. It blew my mind!

## 9. How do you explain to kids why you are doing what you are doing?

I indicate my concern that they may not have water to drink in 20 years. By trying to solve water and related resource problems, we may be able to enable them and their children to have water to drink.

## 10. What knowledge about the environment would you like to pass on to young people?

Young people need to learn about the diversity of ecosystems and the diversity of institutional arrangements that humans have crafted to cope effectively with different settings and problems.

Humans have used a large set of rules in various combinations in the effort to match the specific characteristics of particular resource systems. Rules related to who can access, harvest from, manage, exclude others, and sell aspects of a resource system are the building blocks of resource use and protection situations. When systems fail, we need to use empirically warrantable diagnostic theories to analyze the sources of failure and which rules need to be changed (and how) to create a more sustainable future.

### 11. What are you reading at the moment?

I am enjoying reading Frans de Waal's *Primates and Philosophers: How Morality Evolved*. Since I have studied reciprocity and fairness among humans in the experimental lab and in field settings, it is fascinating to read his discussion of these processes among chimpanzees and capuchin monkeys.

### 12. Which question – apart from the ones we raised – is the most important one?

What can each one of us do every day to improve our environment? If we think that the only answers to environmental problems are what “the” government undertakes, we face a real tragedy.



**Elinor Ostrom,**

Arthur F. Bentley Professor of Political Science and Co-Director of the Workshop in Political Theory and Policy Analysis, Indiana University (IU), Bloomington, USA. Professor, part-time, School of Public and Environmental Affairs, IU.

**Main research areas:** Collective action, trust, the commons.

Born in 1933 in Los Angeles, California, USA. 1954 AB, 1962 MA, 1965 PhD, all in Political Science from the University of California, Los Angeles (UCLA). 1955 to 1957 Godfrey L. Cabot, Inc., Boston, MA. 1957 to 1961 Personnel Analyst III, UCLA. 1965 to 1966 Visiting Assistant Professor, Department of Government, IU. 1966 to 1969 Assistant Professor, Department of Government, IU. 1969 to 1974 Associate Professor, Department of Political Science, IU. 1974 to 1991 Professor, Department of Political Science, IU. 1980 to 1984 Chair, Department of Political Science, IU, 1989 to 1990 Acting Chair. 1996 to 2006 Co-Director, Center for the Study of Institutions, Population, and Environmental Change, IU.

**Select memberships:** Since 1991 American Academy of Arts and Sciences. Since 2001 National Academy of Sciences. Since 2006 American Philosophical Society.

**Select awards:** 2005 Sustainability Science Award, Ecological Society of America (USA) | 2004 John J. Carty Award for the Advancement of Science, National Academy of Sciences (USA) | 2003 Lifetime Achievement Award, Atlas Economic Research Foundation | 1999 Johan Skytte Prize in Political Science, Uppsala University (Sweden) | 1997 Frank E. Seidman Distinguished Award in Political Economy (USA).

**Select publications:** Author of *Governing the Commons* (Cambridge University Press, 1990) | co-editor of *Rules, Games, and Common-Pool Resources* (University of Michigan Press, 1994), *Local Commons and Global Interdependence: Heterogeneity and Cooperation in Two Domains* (Sage, 1995), *Trust and Reciprocity: Interdisciplinary Lessons from Experimental Research* (Sage, 2003), *The Commons in the New Millennium: Challenges and Adaptations* (MIT Press, 2003) | author of *Understanding Institutional Diversity* (Princeton University Press, 2005) | co-editor of *Understanding Knowledge as a Commons* (MIT Press, 2007).

#### MORE INFORMATION:

[www.indiana.edu/~workshop/people/lostromcv.htm](http://www.indiana.edu/~workshop/people/lostromcv.htm)

### ELINOR OSTROM ...

... is that all too rare person who is not only the leader in her profession and field of research, but also stunningly human in the relationships she fosters. Few social scientists can lay claim to the kind of achievements for which Lin is famous: inventing and consolidating the commons as a whole new field of investigation, launching new institutions that shape the research careers of hundreds of social scientists, *and* influencing public policy in an entirely new direction in relation to natural resource governance. Fewer still can combine that with the warmth and energy that imbue Lin's interactions with students, colleagues, associates, and friends alike. Indeed, those who are merely brilliant can only *try* to understand her capacity to mix cutting-edge thinking with unremitting generosity, a razor sharp intelligence with an utterly unassuming demeanor, and an astonishing productivity with ample time for casual acquaintances.

I met Lin for the first time in 1987, when she was already well known. But in the two decades since she has earned the kind of fame to which most academics aspire, few attain, and most do not handle well. The work that has brought her the acclaim and admiration of peers and the adulation of younger scholars has effectively countered widely accepted orthodoxies about the ineffectiveness of common property. Lin's scholarly contributions are founded upon the bedrock of evidence from literally tens of thousands of studies, refutable propositions based in fundamental social science, and rock-solid, theoretically informed, rigorous empirical and experimental research. It would be no exaggeration to say that there is scarcely a political scientist better known within and outside the discipline.

However, Lin's achievements are less to be gauged by the multitude of original ideas she has generated, the scores of books she has authored, the scholarly careers she has nurtured and launched, the hundreds of articles she has published, or the thousands of lectures she has delivered. These are impressive achievements. Any scholar who can point in their direction upon completing three-quarters of a century can feel justifiably vindicated in having made much of what was bestowed upon her at birth. To recount them, however, will be to prove no more than boring, no different from what one can do about hundreds of scholars. To my mind what endows Lin and her remarkable achievements with beauty is the humility that underscores her conversations, the casualness with which she wears her accomplishments, and the willingness to learn and be surprised in everyday engagements with those who can point to little if anything as their formal accomplishments. It is her fame together with her generosity, her knowledge together with her openness, her intellect together with her heart that sets her apart from any other academic I know.

Power corrupts and so can fame. But the supposedly inevitable toll fame extracts has been absolutely absent in Lin's case. In few other individuals, could one expect to witness the power to advise presidents and high-ranking civil servants on the best ways to run the environmental policy of their countries *and* the ability to act as the willing assistant of a graduate student helping cook in her kitchen. Lin does both with elan, and the range of things in between. In opening her home and mind to generations of students and scholars at Indiana University, she has helped make Bloomington the intellectual destination of Nobel laureates, renowned diplomats, politicians, and beginning graduate students alike. May she always continue to do so!

*Prof. Dr. Arun Agrawal, School of Natural Resources and Environment, University of Michigan, Ann Arbor.*

DIE ZUKUNFT  
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3  
2006

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## SCHWERPUNKT

### Bologna-Prozess und Nachhaltigkeit

Akademische Freiräume – gewonnen  
oder zerronnen?

#### WEITERE THEMEN

- Die unsichtbare Reform der EU-Nachhaltigkeitsstrategie
- Die überarbeiteten Leitlinien der Global Reporting Initiative
- Die überfällige Integration kommunaler Umweltmanagementsysteme

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[www.oekologisches-wirtschaften.de](http://www.oekologisches-wirtschaften.de)

**oekom**  
verlag

## TERMINE

### TAGUNGEN

#### 19.–21.01.2007, LOCCUM (D)

##### Energie und Sicherheit in und für Europa

Veranstalter: Evangelische Akademie Loccum,  
Heinrich-Böll-Stiftung und E.ON Ruhrgas AG  
Kontakt: Dr. Andreas Dally  
Tel.: +49 5766 81108 | Fax: +49 5766 81900  
E-Mail: andreas.dally@evlka.de  
[www.loccum.de](http://www.loccum.de)

#### 22.–24.01.2007, NEW DELHI (IND)

##### Delhi Sustainable Development Summit 2007

Veranstalter: The Energy and Resources Institute  
(TERI)  
Kontakt: The Summit Secretariat, TERI  
Tel.: +91 11 24682100 | Fax: +91 11 24682144  
E-Mail: dsds@teri.res.in  
<http://static.teriin.org/dsds/2007/about.htm>

#### 16.–18.02.2007, TUTZING (D)

##### Holz: Eine Energiequelle der Zukunft?

Veranstalter: Evangelische Akademie Tutzing  
Kontakt: Dr. Jochen Wagner  
E-Mail: wolff@ev-akademie-tutzing.de  
[www.ev-akademie-tutzing.de](http://www.ev-akademie-tutzing.de)

#### 19.–20.03.2007, GRAZ (A)

##### Climate Change in South-Eastern European Countries: Causes, Impacts, Solutions

Veranstalter: Joanneum Research  
Kontakt: Dr. Bernhard Schlamadinger  
Tel.: +43 316 8761340 | Fax: +43 316 87691340  
E-Mail: bernhard.schlamadinger@joanneum.at  
[www.joanneum.at/climate](http://www.joanneum.at/climate)

#### 26.–27.03.2007, LEOBEN (A)

##### Unternehmenspraxis und Nachhaltigkeit: Herausforderungen, Konzepte und Erfahrungen

Veranstalter: Montanuniversität Leoben  
Kontakt: Dr. Rupert Baumgartner  
Tel.: +43 3842 4026004  
E-Mail: rupert.baumgartner@wbw.unileoben.ac.at  
[http://wbw.unileoben.ac.at/nw/smi07/smi07\\_start.html](http://wbw.unileoben.ac.at/nw/smi07/smi07_start.html)

#### 28.03.–01.04.2007, HAMBURG/LÜNEBURG (D)

##### New Frontiers in Arts Sociology: Creativity, Support and Sustainability

Veranstalter: European Sociological Association  
(ESA)  
Kontakt: Prof. Dr. Volker Kirchberg  
Tel.: +49 4131 6772627 | Fax: +49 4131 6772689  
[www.new-arts-frontiers.eu](http://www.new-arts-frontiers.eu)

#### 04.–06.05.2007, BERLIN (D)

##### 3. Kongreß McPlanet.com:

##### Klima der Gerechtigkeit

Veranstalter: ATTAC, BUND, EED, Greenpeace,  
Heinrich-Böll-Stiftung und Wuppertal Institut für  
Klima, Umwelt, Energie  
[www.mcplanet.com](http://www.mcplanet.com)

#### 10.–12.05.2007, SOMMERHAUSEN AM MAIN (D)

##### Hochschulbildung für nachhaltige Entwicklung:

##### Spezifische Beiträge der Humanökologie

Veranstalter: Deutsche Gesellschaft für  
Humanökologie und Universität Lüneburg  
[www.dg-humanoeekologie.de](http://www.dg-humanoeekologie.de)

#### 24.–26.05.2007, AMSTERDAM (NL)

##### 2007 Amsterdam Conference on the Human Dimensions of Global Environmental Change

Veranstalter: Institute for Environmental Studies,  
Vrije Universiteit Amsterdam  
E-Mail: ac2007@ivm.vu.nl  
[www.2007amsterdamconference.org](http://www.2007amsterdamconference.org)

#### 05.–08.06.2007, LEIPZIG (D)

##### ESEE 2007: Integrating Natural and Social Sciences for Sustainability

Veranstalter: European Society for Ecological  
Economics (ESEE)  
Kontakt: F&U confirm  
Tel.: +49 341 2352264 | Fax: +49 341 2352782  
E-Mail: esee2007@fu-confirm.de  
[www.esee2007.ufz.de](http://www.esee2007.ufz.de)

#### 18.–20.06.2007, VESTERÅS (S)

##### 3<sup>rd</sup> International Green Energy Conference

Veranstalter: Mälardalen University  
Kontakt: Prof. J. Yan  
Tel.: +46 21 101367 | Fax: +46 21 101370  
E-Mail: yanjy@ket.kth.se  
[www.igec.info](http://www.igec.info)

#### 03.–05.09.2007, DAVOS (CH)

##### R '07 World Congress: Recovery of Materials and Energy for Resource Efficiency

Veranstalter: EMPA, Swiss Academy of Engineering  
Sciences  
Kontakt: Therese Bracher  
Tel.: +41 71 2747500 | Fax: +41 71 2747862  
E-Mail: r07@empa.ch  
[www.r07.org](http://www.r07.org)

## CALL FOR PAPERS

#### EINSENDESCHLUSS: 22.12.2006

#### 08.–10.05.2007, LEIPZIG (D)

##### 4. BMBF-Forum für Nachhaltigkeit: Sustainable Neighbourhood – from Lisbon to Leipzig through Research (L2L). A Conference on Research for

Sustainable Development in Europe  
Veranstalter: Bundesministerium für Bildung und  
Forschung (BMBF) und Partner  
E-Mail: L2L-call@fona.de  
[www.fona.de/L2L](http://www.fona.de/L2L)