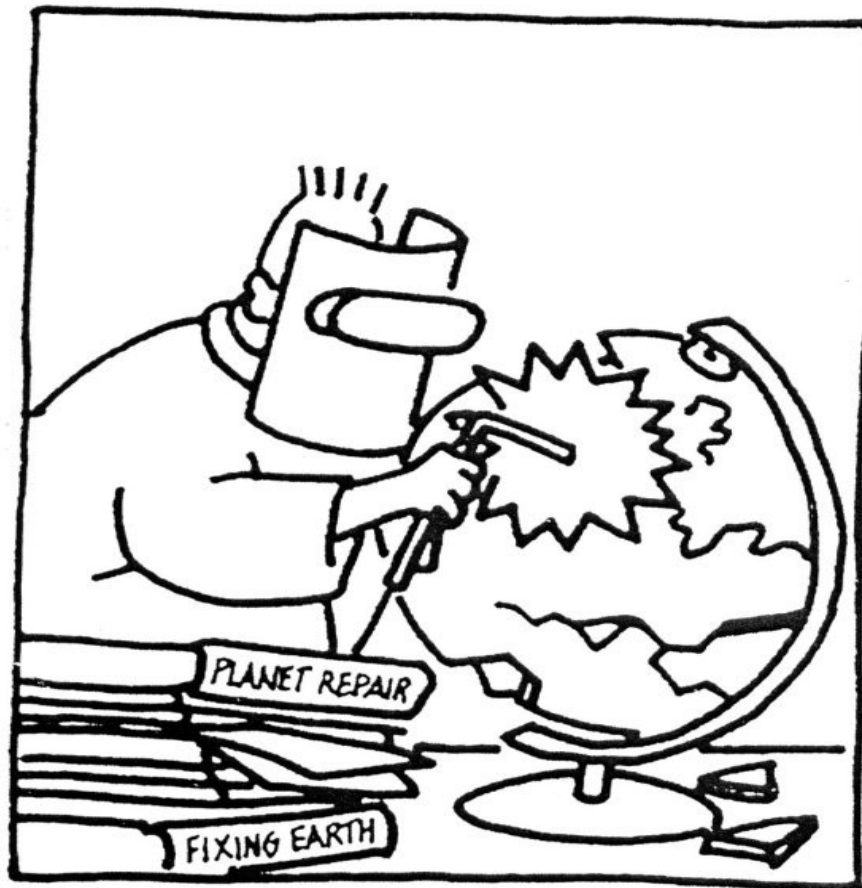


# Environmental Management: More of the Same or Time for Change?

Confronting the Manageability Paradigm



11 – 13<sup>th</sup> January 2008

Brandenburg University of Technology,  
Cottbus, Germany

Friday, 11<sup>th</sup> January 4pm until  
Sunday, 13<sup>th</sup> January 5pm

### **Suggested Donations**

Waged: 40-100 EUR; Students: 20 EUR; Unwaged: free

### **More Information**

check the website: [research.erm.tu-cottbus.de](http://research.erm.tu-cottbus.de) or contact [lippert@sts.tugraz.at](mailto:lippert@sts.tugraz.at)

### **Sessions**

The Workshop will have six sessions:

- 1) A facilitated introduction,
- 2) Example: `Climate Change`,
- 3) Example: `Cities`,
- 4) Actors,
- 5) Control and Manageability and
- 6) a facilitated end

### **Example: `Climate Change`**

#### **Climate Change – A Major Failure of Environmental Management**

Ian McGregor, Lecturer, School of Management, Faculty of Business, University of Technology, Sydney (UTS), NSW, Australia

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Ian McGregor commenced his PhD research at UTS' Institute for Sustainable Futures in relation to Australia and Ecologically Sustainable Development in 2002. In 2003, he was appointed to the position of Lecturer in the School of Management in the Faculty of Business at UTS. His areas of expertise include strategy, marketing, feasibility studies, cost-benefit analysis and ecological economics. His doctoral research aims to identify the societal barriers to Ecologically Sustainable Development, with a particular focus on the role of civil society on national and international climate change policy.

In 1988, the International Conference on the Global Atmosphere, hosted by the Canadian Government concluded "humanity is conducting an unintended, uncontrolled and globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war". It also concluded that developed countries should "reduce CO<sub>2</sub> emissions by approximately 20% of 1988 levels by 2005 as an initial goal".

Despite the efforts of global Precautionary Policy Coalitions (which have included the EU, small island and other states and Environmental Organisations), the international climate change policy developed so far has been ineffective. Global greenhouse gas emissions have continued to increase steadily since 1988 as almost all countries continue to invest in high carbon infrastructure. Increasing demand for energy and transport around the world continues to be met mainly by burning fossil fuels.

A major reason for this failure has been the success of a competing Economic Growth Policy Coalition. This Coalition has undermined any substantive policy or commitments to reduce greenhouse gas emissions in the international and many national policy development processes through arguing that there may be reductions in economic growth by moving to reduce fossil fuel use. It has also used climate science skeptics to try to undermine the increasingly strong scientific consensus on climate change.

This Economic Growth Policy Coalition has been led by US fossil fuel corporations. These corporations have, through their influence on the US Government and legislators, ensured that no effective action has been taken by the US or internationally. This coalition has also included other national governments, such as Australia, Kuwait and Saudi Arabia and has been supported by the Australian and other international coal and oil corporations.

The Kyoto Protocol is only likely to reduce global greenhouse gas emissions in the 2008-2012 period by 1% from business as usual levels and there is no international agreement in place to ensure any reductions in the post-2012 period. In December this year at the International Climate Meeting in Bali, there may finally be an agreement on a mandate for negotiations on the post-2012 international approach to reducing greenhouse gases.

In 2006, the UK Government's Stern Review concluded that climate change "could create risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century. And it will be difficult or impossible to reverse these changes." Climate change presents an enormous challenge for humanity and "it is the greatest and widest-ranging market failure ever seen."

Markets cannot ensure that the scale of the economy operates with the ecological carrying capacity of ecosystems. These matters are beyond the capacity of markets and must be addressed politically, through environmental education, community cooperation and negotiation, international and national regulation, and international cooperation.

Most experts agree that it is critical that we limit average global warming to less than 2°C above pre-industrial levels. This will require a

comprehensive international agreement, which ensures that global greenhouse gas emissions start reducing by 2015 and are then reduced by 75% of 2000 levels by 2050, so it is an enormous challenge. This challenge, however, needs to be urgently addressed, as the risks to the future of humanity of allowing warming to exceed 2°C are potentially enormous and disastrous.

We can power our current and future global economy using renewable energy; we need to put in place the national and international governance mechanisms to achieve this. Reducing greenhouse gas emissions to stabilise earth's climate along with ensuring that we provide adequate food, water and shelter for all people in all nations are the major global challenges that humanity needs to urgently address now.

### **Climate change as a discursive frame for environmental management: How social movement organisations frame the debate in Finland**

Hannah Strauss, Thule Institute, University of Oulu, Finland; MA Sociology, MSc Science and Technology Policy and Management

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My project investigates how Northern energy systems are negotiated. It refers to a lack of social scientific research in explaining the evolution of energy systems and indicates the importance of taking not only policy-makers, experts and industry, but also social and environmental movement organisations and citizens into account. It addresses the process of negotiation on a national and an international level, and in regard to local communities.

The popularity of the climate change concept throughout society is considered as a chance by environmental movements to get their messages across. They make use of everybody's popular knowledge on the issue as much as industry and policy making do to justify their means. The blurry concept is easily instrumentalised regarding the questions: Who claims to have true, reliable, certain knowledge about appropriate environmental practices? Who is accused of having miscalculated, built on wrong assumptions, of having vested interests? There are political stalemates in environmental management, as each party accuses the other of being on the wrong track.

But the question here is not if and how these could be resolved. Moreover, we should ask what function these conflicts have for decision making on environmental practices. Definitions of sustainable management of energy resources are highly contested, and through discussing related issues publicly, the understanding of environmental concepts become a common good. But although the concept of climate change enables one to assess all kinds of local problems, the risk is that these cannot be resolved in congruency with supralocal targets.

In this context of discursive struggles for hegemony on environmental questions, the usefulness of Environmental Impact Assessments (EIAs) for a sustainable use of energy resources is being widely discussed in Finland's public. Generally, EIAs are an increasingly important tool of local decision making in Western countries. The narrow definition of responsibilities and scope of these procedures is usually confronted with complaints, since many connected issues are kept out.

Whereas local administration, politics, business, citizens and local groups of environmental NGOs dedicate much time and effort to these procedures, EIAs are assigned only a marginal role on the regional and national level. Whereas local groups regard them as a useful tool to engage in local decision making and to shape local energy systems, the structure of EIAs does not allow global aims; and the application of the climate change concept is not without trouble. This contradiction is regularly a source of conflict inside environmental movement organisations, resulting from the organisation's set up: Whereas the national group of environmental NGOs establishes climate and energy strategies for national practices, local groups keep a high degree of independency in their definition of practical necessities. If conflicts cannot be resolved between local and national groups, contradicting views are presented to the public. Despite these conflicts, "climate change" functions as a framework to integrate all different kinds of issues and allows different environmental NGOs to act with a common voice. This again, is only desired to a certain degree, and environmental NGOs still differ heavily in the forms of protest and cooperation.

These and other implications of social positioning concerning environmental management questions will be discussed, building upon interviews with Finnish environmental activists, local politicians and industrialists.

## Example: 'Cities'

### **ARABTEC Construction in Dubai and Concerns about Environment**

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My name is Fawzi Nehme. I was born in Budapest, Hungary on February 13, 1981. I own the Hungarian and Lebanese nationality. I have lived in Hungary, Lebanon, Germany and Dubai, experiencing all the cultures and heritages.

Currently, I am working as a Project Engineer in Arabtec Construction, one of the biggest construction companies in the world and no. 1 in the Arab Gulf constructing the biggest projects in the world located in Dubai.

My previous researches and master thesis was about saving energy in buildings. My paper will mention the concerns of the construction companies about the environment. The presentation will also show the carelessness about saving energy in buildings and the unconcern of people and the abandonment of renewable energies in the region and how this amazing construction development is affecting the climate change.

### I. Introduction:

Arabtec Co. is the biggest and most successful construction engineering company in the Arab Gulf handling the biggest projects in the world. The Arab Gulf area has been the biggest development area in construction among which Dubai is the biggest “boom” in construction development for the last decade. Well, the big question is how much the government, the construction companies and the community are caring about environmental issues which consume a huge amount of energy and natural resources. Those aspects are highly affecting climate change and environment pollution.

### II. Work Context and Scope

Construction companies in Dubai are the major consumers of energy and natural resources. Dubai is one of the best examples of this topic of the workshop due to the comfort of living together with cheap fossil fuels and inhabitants of a wide international community living here. Due to the warm weather all year round, the high recommendation of fossil fuels is required due to the “24hrs” air conditioning in living places and transportations.

Arabtec is a highly qualified company with multiple ISO awards and has priority for safety and quality materials and equipments. The company has future plans for taking more care of the environment. Solid disposal and wastewater treatment must be taken care of. Moreover, the energy saving equipments and recycling materials are intended to be used; such as disposing construction materials safely, separating the solid waste, using saving energy and recycling office equipments and materials.

The bigger problem faced by the environment is by the smaller construction companies that have no budget for environment friendly aspects and holding back those issues for their benefit.

Another major factor affecting the environment is the community in Dubai. Due to the huge projects and development, Dubai is the meeting point of international people from all around the world with different cultures and backgrounds where the majority of the employees are coming from the third world country who have ignorance about the protection of environment. On the top of that, the government of Dubai has no strict legislations in environmental fields.

There are many concerns and doubts how to improve the environment aspects in construction companies in Dubai. How the leading company ARABTEC can effect the improvement of environment and force the competitions with other companies? How the government should take the action for improving the situation. Educating people about the importance of saving the environment. The act of worldwide organizations for improving the situation.

### III. Conclusion:

ARABTEC are having the biggest and most construction projects in Dubai. Dubai has a future project to transfer the desert to living areas of huge construction project with fabulous looking nature. It's a region which cares more about looking than saving of environment. There are plans and targets for improving environmental aspects company and personal wise. Our goal is to have a better environment for a better atmosphere.

## Actors

### **The Reality of Environmental Management Practices with Emphasis on West Africa**

Christian A. Okwaraoha, Bsc., Green Life International. The Gambia West Africa

greenlifeinter@hotmail.com

My name is Mr. Christian A. Okwaraoha. I was born in 1972. I attended Imo State University in Nigeria and i have been involved on issues pertaining to environment since then. I have had the privileges of being instrumental to institutionalization of environmental Science Clubs in some Secondary schools here in The Gambia where i have been sojourning for the past five years. My research Interest is in area of climate change as it is only when the environment is stable climate wise it is then that all of us will be happy to live on this surface EARTH.

Good management entails ability to mobilise physical, human and material resources to achieve the objective of making things work normally without recourse to any form of regret. The issue of the environment and its management has generated a lot of argument both in the past and present. Environmental management is a complex phenomenon that does not have a precise method of control rather; the management practices one employs will be subject to particular human and environmental conditions.

Numerous African states and external aid agencies have adopted sustainable development and regional integration as systematic points of reference. It is, therefore, surprising to find how little recognition has been given to the interplay between these two issue areas, and how reluctant the major international bodies are to address them in an integrated fashion. However, the interdependence of environmental and socioeconomic issues and the need for harmonization of efforts at the regional level are becoming increasingly clear.

Environmental problems affect most West African countries, which share the same ecosystems and are subject to similar phenomena: the extension of agriculture to new lands, reduced fallowing, demographic pressures, migration, water management problems, conflicts between farmers and pastoralists, etc. Arresting the degradation of renewable

resources has become an important goal in redefining agricultural and rural development policies and designing rural development projects and programs. However, the effectiveness of such efforts is severely handicapped by the narrowness of the national framework within which they are being applied.

To the extent that regional harmonization of environmental action is desirable, the challenge is to define the kinds of regional integration and cooperation best suited to the promotion of effective responses to the environmental problems facing West Africa, with regard to the types and levels of cooperation and the resources to be invested.

As defined by the Brundtland Report (1989), sustainable development involves the satisfaction of basic human needs and the opportunity for everyone to aspire to a better life. It must therefore meet the needs of today without compromising the ability of future generations to meet their own needs. This involves avoiding certain types of debt capable of foreclosing the prospects of future generations. Such "debts" can take several forms, including: financial debts, resulting from the build-up of long-term borrowing, abroad or at home; social debts, incurred by failure to invest in human development; demographic debts, arising from the effects of uncontrolled population growth; and ecological debts, resulting from the overexploitation of natural resources or pollution of the soil, water, and atmosphere.

The concept of sustainable development argues in favour of greater integration of both economic and environmental policies at the national level and that of ecological zones, irrespective of political boundaries. It seems to us important, in dealing with regional aspects of the environmental challenge in West Africa, to highlight a few of the relations between the environment and development, the economy, demographics, human behaviour, and political structures, across the dimensions of space and time, from the local to the international level, and linking past actions to their future implications over the long term.

The political dimension is of special importance, because geographic and political areas seldom correspond to ecological ones. Yet all activity involving regional integration or cooperation runs into obstacles of a technical, financial, or human sort, stemming from competing political interests. The integration process is thus marked by conflict and contradiction, due to the multiplicity of players, the range of relationships involved, and the overlapping of spatial jurisdictions. To apply the frequently used notion of political will to issues of environmental integration thus requires that we understand the motivations of a whole range of actors, at the subregional and international levels, acting in concert with national leaders, all of whom have a role to play in restoring and protecting the environment. This calls for an understanding of the constraints faced by these various actors, and an appreciation of sociopolitical realities in West African countries.

Environmental initiatives have suffered in a serious way from lack of regional coordination, and this leads to the proposition of a geopolitical model intended to lend a degree of coherence to the many facets of environmental degradation in West Africa. This also leads to the illustration of the applicability of the geopolitical model to environmental

issues on a regional scale through a discussion of remote sensing, which is highlighted as an ideal instrument for demonstrating the many layers involved in an understanding of the desertification issue.

The practitioners as a matter of fact have learnt that the human factor as a means to solving environmental problems cannot be divorced from the fact that massive campaigns are needed for awareness so that humans can reduce or eliminate their activities that inundate the environments with serious problems.

### **fishing for social realities – problems faced by artisanal crab fishers in reacting to an overfishing crisis**

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For the last years, artisanal crab fishers at the Cape Horn region in southern Chile are facing a strong decrease in catch, resulting in numerous economic and social problems. By combining an analysis of the fishers' perspectives with a context analysis, this paper aims at analyzing the factors which are influencing the fishers in making decisions about resource use and their reactions to the crisis. It shows that the market dynamics as well as the governance system not only favor the overexploitation of crabs but also limit the fishers' possibilities to react to the crisis other than increasing effort or searching for alternatives to crab fishing.

## **Control and Manageability**

### **River management: Technological challenge or conceptual illusion?**

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After studies in Berlin, Leiden and Manchester, I am now working on my PhD for the University of Aberdeen, UK. Currently, I am engaged in ethnographic fieldwork along the Kemi River in Northern Finland. My research interests include ecological and economic anthropology, political ecology, common-pool resource management, and water issues.

The histories of humans and rivers are closely connected. To this day, rivers and humans affect each other all over our planet. Along the Kemi River in Finnish Lapland, historical and recent developments highlight the reciprocal dynamics of such relations, and simultaneously point to essential problems within ideas of river management.

A popular way of grasping the relations between humans and their environments is summarised in the concept of natural resource management: In order to make a living, humans appropriate nature. And the way this appropriation is executed, is the particular management model. Rivers, however, can clearly illustrate the problematic nature of such models, both practically and conceptually. First of all, the basic aspect of a river is to flow. This simple reality has serious repercussions on attempts to manage a river: It never stays put, it varies seasonally, it floods and changes its course periodically, and it erodes and sediments material along its way. Furthermore, the flow of a river links places, people and their activities with each other and with further elements of the hydrological cycle, such as the groundwater, the sea, and the weather. All these characteristics are inimical to the necessities of resource management. Management presupposes control of a resource in a physical and in a conceptual manner. The former asks for structures like channels, dykes, and adjustable dams, the latter for representations like maps, data tables and impact assessments. Shortcomings in river management have frequently led to the augmentation of both: dykes have been heightened and data tables enlarged.

The argument put forth here is that problems in river management are not necessarily due to a lack of structures and data. The very concept of managing a river might be misleading. This is not to say that human involvement with rivers must cease. Rather, the attitude and ontological basis that govern the particular set of relations called management are not apt for dealing with an environmental phenomenon like a river.

The example of the Kemi River will be used to illustrate what a particular management approach can imply in practice, how it differs from other interactions with the river, and what these differences tell about ways of perceiving and dealing with one's environment. Today, the river is being used primarily for hydroelectricity generation, which allows for a certain degree of fishing and recreational uses. In recent history, however, the river has been a central element in the region's forest industry, an exceptionally rich salmon fishery, a basic ingredient for farming, and a major artery for travel and transportation. Only fairly recently has management become a prevalent way of dealing with the river. By contrasting hydroelectricity generation to the former practice of salmon fishing with long weirs, two such ways of dealing with the Kemi River will be used to illuminate the theoretical discussion with an ethnographic example.

## Questioning the Social Technology "Recycling"

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Ingmar Lippert is research fellow at the Institute for Advanced Studies on Science, Technology and Society (IAS-STs), Graz (Austria). Before, he studied Environment, Culture and Society at Lancaster University (UK) and Environmental and Resource Management at Brandenburg University of Technology (Cottbus, Germany) and Bosphorus University (Istanbul, Turkey). His main research interests are agents of ecological modernisation in corporations and autonomist struggles.

Recycling is a taken-for-granted concept within academic approaches to environmental management. The science of recycling usually addresses recycling as an activity which needs optimising, rather than questioning. The optimisation of recycling starts off with materials which are not used any more (i.e. waste). These materials can be put to use again under some conditions. The recycling manager's task is to render the material such that it becomes a resource for other processes.

My take on recycling differs from this: By taking a sociological perspective, I am focussing on the person, agent, who was responsible for implementing a recycling scheme (of glass) for her organisation.

By drawing on sociological theories (especially Bourdieu's theory of practice and Actor-Network-Theory) I am pointing to significant problems in approaching sustainability. The empirical data consists of ethnographic field work which I use to illustrate the implications for thinking about transforming organisations towards sustainable conduct. Thus, the paper is theoretically oriented.

My basic argument is this: By constructing a recycling scheme (for glass waste of pubs) the waste manager of the organisation ensures that the organisation does not move towards reducing or altering resource consumption. Rather, she stabilises an unsustainable trajectory and inhibits societal transformation even beyond her organisation.

Thus, with this case I am pointing towards the societal implications of drawing up a recycling scheme. This, I think, provides "food for thought" for both academics who research how to make systems more sustainable as well as respective practitioners.

I use this paper to exemplify that a theoretical framing of practices of environmental management is apt to question the manageability of the taken-for-granted objects which are supposedly managed.