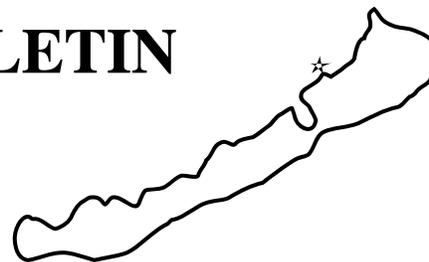


# THE BALATON BULLETIN



Newsletter of The Balaton Group

DECEMBER 2001

## TABLE OF CONTENTS

From the Editors: 20 <sup>th</sup> Balaton Group Meeting & September 11th .....	2
Overview of the 20 <sup>th</sup> Balaton Meeting Programme, by G. Martin Mehers .....	2
Consequences of Economic Globalization, by N. Meyer .....	3
Food and Land in the Future, by H. Hamilton, D. Seville, A. van den Brand.....	4
Globalization and Biodiversity Conservation: The Role of Ecotourism, by G. Budowski .....	8
The Aachen Foundation, by S. Weis-Gerhardt .....	8
The Community Foundation: Working with Local Resources to Preserve Diversity, by P. Lamb .....	9
Liberalisation of Energy Markets an its Consequences for Renewables: The Case of Denmark, by N. Meyer .....	10
Globalization of the Energy Sector (How Global Corporations Get Control Over the Energy Sector): The case of Hungary, by Z. Lontay .....	11
Workshop Reports	
Adult Training in Systems Thinking Principles .....	13
The Skeptical Environmentalist.....	15
“Fish Bowl” Exercise .....	15
Vulnerability and Future Trajectories of Lake Balaton .....	16
Lesson Learned from Organic Agriculture Project in Indonesia .....	17
World Summit on Sustainable Development.....	18
The Pyramid: a Game Session About Indicators .....	19
Thoughts on the Balaton Meeting 2001	
The Impression of a First Time Participant, by M. Omondi .....	20
Reflections on the 20 <sup>th</sup> Balaton Group Meeting, by B. de Vries .....	20
Dana Meadows Fellowships .....	22
The Impact of 11 <sup>th</sup> September on a Sustainable World, by the Editors .....	24
The New Manhattan Project, by A. AtKisson .....	26
Declare War on Escalation, by A. Jones and E. Sawin .....	27
Shaping Our Response: Refugee Camps as a Model for Sustainable Settlement, by E. Rasmussen .....	28
Four Good Reasons for More Equity in the World, by J. Nørgard .....	30
Community Farms in the 21st Century: Outside the Box, But Inside the Hoop, by S. McFadden .....	33
Announcements .....	34
News from the Members .....	35
Balaton Meeting 2001 - Participant List.....	38

## FROM THE EDITORS: 20<sup>TH</sup> BALATON GROUP MEETING & SEPTEMBER 11<sup>TH</sup>

The annual meeting of the Balaton Group finished on September 5<sup>th</sup>, six days before the terrorist attacks on New York and Washington. This issue of the Balaton Bulletin includes contributions related to the constructive and peaceful meeting at lake Balaton as well as to the shocking events in New York and Washington on September 11<sup>th</sup> and the subsequent global actions. The link is that the visions of a sustainable world and the efforts of the Balaton Group to achieve that, will be even more important after September 11<sup>th</sup>.

The overall subject of this years meeting at lake Balaton was *Globalization and Sustainability*. Although the precise definition of both concepts can still be discussed, few will argue against the statement that sustainable development requires global equity, social justice and environmental concern. Thus, globalization has a decisive influence on sustainable development.

The first part of the Bulletin is dedicated to the 20<sup>th</sup> meeting of the Balaton Group. We planned to include summaries of the papers presented at lake Balaton in this issue of the Balaton Bulletin and most speakers have been kind enough to follow up on our request. The same applies to summaries of the working group discussions.

Apart from the theme, this years meeting was very special because it was also commemorating Dana Meadows.

Discussions at the meeting contributed in a constructive way to the future strategy of the Balaton Group. In the next Bulletin we are planning to report on these discussions, including the follow-up discussion to be held during the Steering Committee meeting in Zurich on 25-28 January 2002.

This section ends with the description of experiences and thoughts of two participants.

The second part of the Bulletin includes contributions related to the events on September 11<sup>th</sup>. Many things have happened since then. Right from the beginning, different opinions existed with respect to how to react to these terrorist attacks on US civilians, or the reason why such attacks took place. In our call for contributions to this edition of the Balaton Bulletin, we asked for your opinion and thoughts on the implications of these events for each of us and for a sustainable world. The contributions received so far are published in this Bulletin.

We realize that, as time has been short since our call and as the chain of events has not ended yet, many of you are still forming your thoughts, taking up new positions in the debate, and (re-) shaping your reactions. Therefore, we introduce this section with some comments from the editors, which we hope may give rise to responses from the Balaton Group. We invite you to send us your contributions reflecting your opinion on these issues, which will then be published in a special section of the next issue of the Bulletin.

The next issue of the Balaton Bulletin will be published in March 2002 and the deadline for contributions is February 15<sup>th</sup>, 2002. Please send your contributions to Nanda Gilden (n.gilden@planet.nl) and Gillian Martin Mehers (gillian@lead.org), since Niels Meyer retires from his two-year term as coeditor of the Bulletin at the end of this year.

Best wishes for a healthy, peaceful and sustainable 2002!

Warm greetings from  
Nanda Gilden                      and                      Niels Meyer  
n.gilden@planet.nl                      nim@byg.dtu.dk

## OVERVIEW OF THE 20<sup>TH</sup> BALATON MEETING PROGRAMME

### Gillian Martin Mehers

The 20<sup>th</sup> Balaton Group Meeting, held 31 August – 5 September 2001 in Csopak Hungary, primarily focused on the challenging topic of “Globalization and Sustainability”. The 49 Members attending considered the following: how can a region preserve the special features of its culture, history, and political system while participating in the globalization of the world’s economy?

Thirteen speakers explored multiple dimensions of this theme in the morning plenary sessions, including

the definition of globalization and what forces promote and block it.

Dennis Meadows started this session with a post-card exercise on images of Globalization. Later he (and some volunteers) demonstrated the Globalization Game with a rod and washers.

The other main topics included food and land and the question of regional integrity in the global economy,

how to work with local resources to preserve diversity, and global energy systems versus regional differences. Afternoon workshops took some of these topics further, and also provided an opportunity to test some new ideas, materials and games, such as Alan AtKisson's Pyramid Game and several new activities from Dennis Meadows' *Systems Thinking Playbook*. Synopses of many of these presentations and workshops are featured here.

The impact of globalization on states and regions was viewed skeptically by many of the speakers, particularly when global governance mechanisms such as the WTO were discussed. Niels Meyers put it succinctly, "It doesn't help me, if I'm boxing with Mike Tyson, that we're boxing by the same rules." Other speakers however were eager to point out the benefits that par-

ticipation in the global economy has presented, such as access to markets, technology and information. As such, and in the tradition of the Balaton Group, a rich exchange created an atmosphere of learning and the desire to better understand together the dynamics of the current situation.

The 20<sup>th</sup> Balaton Group Meeting also held special significance as it was the first one at which Dana Meadows was not physically present. She was remembered however in many ways by her friends during the week through ceremonies both quiet and joyful, which honoured her commitment to the group, to sustainability and life. Many people felt her presence among the friends gathered at Lake Balaton for this commemorative meeting of the group.

## CONSEQUENCES OF ECONOMIC GLOBALIZATION

Niels I. Meyer

The conventional argument for free trade and economic globalisation is that countries that have opened their markets will have stronger economic growth than countries which rely on protectionism and import-substitutions. Experience from real life does not support this argument. On the contrary, the world economy and the economies of many developing countries grew much faster in 1962-82 (a period of import-substitution) than in the subsequent decades of increasing opening of markets.

Economic globalisation is creating a number of serious problems:

- Democracy is taken over by money, lobbyism and corruption. The Welfare Society is replaced by the Casino Society and a shareholder culture.
- Economic growth has priority over environmental and social concerns.
- Neoliberalistic principles are dominating the World Bank, IMF, WTO, OECD, EU and G8.
- No democratic control of multinationals, but unreserved support from WTO.
- Increasing gap between rich and poor countries and between rich and poor groups within countries.
- Global solidarity is disappearing and the "Global Village" is an illusion.

Money is a politician's best friend and American top politicians can not be elected without being independently wealthy or by selling his soul to commercial sponsors. President George W. Bush is now repaying his debt to commercial sponsors (oil, gas, nuclear, car producers, tobacco companies etc.) e.g. by refusing to ratify the Kyoto Protocol, stopping health investigations on tobacco, and allowing oil and gas drilling in protected areas.

Alternative political messages are not accepted by mass media who are increasingly dependent for their own survival on commercial advertisers. And commercial advertisers are opposed to alternative political proposals with criticism of the present form of globalisation and concern for environment and equity. This is another threat to free democratic debate.

Lobbyism is for the rich and especially for the rich companies. High level lobbyism is flourishing in closed societies like the *Bilderberg Group*, *European Round Table*, *Trilateral Commission*, *World Economic Forum* etc. These groups have, in many cases, succeeded in short circuiting democratic decisions.

Corruption undermines democracy but its political effect is often underestimated. Corruption is flourishing in many large democratic countries like USA, France, Italy, Spain etc. while the small Nordic countries are rated as the most "clean" nations on an international rating. With the increased integration in EU it is doubtful whether the Nordic countries can keep up their clean traditions.

The three richest men in the world own more than the total GNP of the 37 poorest nations. Economic entrepre-

neers are today's heroes, but society would do better without most smart entrepreneurs, including Bill Gates.

The WTO is an ideological, neo-liberalistic free market organization with little concern for environment and social problems. The WTO should be replaced by a UN program for fair and sustainable trade.

The industrial countries are gambling with the global climate through their emission of greenhouse gases. The "Discount Kyoto Protocol" is far too weak to stabilize the global climate and it is still uncertain whether it will be ratified by the required number of countries so that it can be formally operational. Another barrier is the liberalization of energy markets with the consequence that short-term commercial profits have highest priority while long-term environmental problems are not included in the commercial market concerns.

Chemicals are out of control. More than 50,000 chemicals have not been tested for their health effects and new chemicals are added every day. A new precautionary principle with reversed burden of proof is needed if chemicals are to come under societal control.

In conclusion, the present form of globalisation is not a natural law and it may be changed by human political decisions. Favourable alternatives are available, but they will involve radical changes of present priorities in industrial nations and in international institutions like the WTO, OECD, IMF, World Bank etc. The driving forces for the necessary changes may come from grass-root movements like ATTAC, Friends of the Earth and other green and democratic organizations.

Reference:

Niels I. Meyer: "The Unbearable Unfairness of Globalisation" (in Danish), Gyldendal Publishers, Copenhagen 2001.

## **FOOD AND LAND IN THE FUTURE**

### **Hal Hamilton, Don Seville, Arie van den Brand**

#### **Abstract**

Commodity systems are the fundamental economic juncture between human society and nature. At this juncture we find our sustenance and we cause problems. Agriculture, along with forestry and fishing, creates humanly available wealth from solar energy and nature's assets. The people who farm, however, have little power in the supply chain and are continually squeezed with low or volatile incomes. Farmers respond by adopting technology and expanding, but the resulting yield-chasing treadmill damages the diversity of rural cultures and nature.

For agriculture to be sustainable, policies would have to restrain this chronic overproduction and the related capitalization of farm income into input costs. This would be a fundamental shift. During the post-World War II era productivity has been the primary goal. Now ecological and social modernization could take center stage through a new contract between agriculture and the rest of society. Innovative markets sometimes reward high quality and regional distinctiveness. Some farmers are paid by governments for their production of green services, like wildlife habitat or water quality.

This emergent shift in agriculture raises many questions. Are some of the new markets harbingers of a large shift in food buying behavior, or will they be confined to the wealthy? Will the US and other parts of the world follow leading examples in Europe, or will these European innovations remain globally marginal? How far can governments reward the multiple benefits of sus-

tainable agriculture without violating the rules of the WTO? Or what will it mean for changing the trade-rules? Is there a need to redefine the concept of protectionism? What kind of values do we want to protect?

Our paper doesn't answer these questions—we wish we could! We invite collaboration.

#### **Root causes of problems in commodity agriculture**

Sustainability Institute (SI) has been modeling commodities since 1998 to uncover the root causes of unsustainable resource use, inequity in the supply chain, and price instability. SI modeling is done together with stakeholders in commodity systems in order to develop a shared understanding of trends in each system and the main drivers of those trends. The models then enable people to test policies that might restructure each system so that it produces better results.

The SI corn simulation model, after review with farm groups, revealed that major mindset shifts are necessary before solutions can be implemented. At the beginning of the modeling project, farmers and farm organization leaders identified the problem of net income (before subsidies) hovering near zero for decades. When gross incomes increase, costs tend to track right behind. The impacts of low farmer income include farmers quitting and consolidation of production on fewer, larger farms, with the well-documented ripple effects on rural communities. These effects include lower local employment, lower local purchasing, reduced school atten-

dance, and declining social capital. The environmental impacts from intensified production include climate change, lower biodiversity, and problems with water quality from the geographic separation of crops from livestock. The process of enlarging scale has negative effects on the diversity of the rural landscapes around the world.

One remarkable lesson from the model is that the system maintains its trend toward zero net income despite decades of shifting presidents, policies, export spikes, good weather and bad.

Classic economic theory doesn't easily explain chronic overproduction. If supply rises, demand should fall, pushing prices down, which should cause supply to drop and prices to rise again. If farmers receive lower prices they should reduce their production. They do otherwise however. Farmers increase their production in an attempt to stay afloat. Even when some farmers quit farming, their acres are purchased by neighboring farmers on the same production treadmill, with the result of a relatively stable number of acres planted, regardless of dropping prices. Furthermore, the demand for most agricultural commodities does not increase much when the price drops, thereby weakening the "market signal" that is supposed to regulate supply and demand. The very weak market signals that might otherwise have some regulating impact are "distorted" by off-farm income, subsidies, bailouts, and measures to take land out of production.

When policies do increase farm income, such as quick infusions of subsidies in election years, those income spurts tend to be absorbed by landlords and input suppliers as land prices, rent payments, machinery prices, and other input costs escalate.

Policies that do not address these twin realities—chronic overproduction and the capture of farm income into input costs—will not result in long-term improvement of producers' income. And policies that do not address the farm income dilemma are unlikely to sustainably solve environmental and rural development problems.

Some policies do promise to have lasting impact. Those promising policies include voluntary or mandatory limits on how much is marketed per acre or per farm, incentives to establish maximum farm sizes, limits on input use (particularly nitrogen), and incentives for crop and livestock re-integration that would reduce the need for externally purchased inputs.

These policies are germane to all agricultural commodities, but they would require major shifts in the mindsets of most of the stakeholders in the system.

## **An emerging shift in the relationship between agriculture and society**

A shift in both mindsets and policies is perhaps possible as Society's expectations for agriculture expand from production to environmental goods and social needs for unique landscapes. These new expectations may herald an historic shift.

The post World-War II era was an era of unchallenged technology adoption and enormous productivity increases. Europe was rebuilding from devastation, and the most important goal of the Common Agricultural Policy was to ensure food self-sufficiency. The US used its abundant natural resources and growing transportation infrastructure to become the dominant player in the world market for many major commodities. Food production and export growth succeeded beyond expectations, but these successes have been paid for with increasing social and environmental costs.

Many now decry, and resist, the further "industrialization" of agriculture, particularly as the costs of animal epidemics escalate. Mad cow disease has cost the UK approximately US\$9 billion to date, and foot and mouth \$14 billion, equivalent to the value of 13.5 years of meat and dairy exports.

There is an underlying mismatch between biology and markets (from Wouter van der Weijden). Trade removes nature's numerous geographical barriers preventing species crossing large distances. In a market economy production will, according to the law of comparative advantage, concentrate in the regions where production costs are lowest. Moreover, price competition forces entrepreneurs to cut costs. These short-term economic imperatives result in manure surpluses in livestock regions and deficits where feed is produced; and animal disease as a biological time bomb.

In nature it is rare for a predator to eradicate its prey species, but the market value of some goods rises rapidly as they become scarcer. Even when a tasty fish species, for example, becomes scarce, it still pays to continue hunting them. Market feedback comes far too late in biological terms.

Neo-liberal economists generally consider government regulations to be constraints on market functioning and argue for deregulation. The Thatcher government in the UK decided to leave regulation of the production of animal feed more to the market. One consequence was a reduction of the minimum temperature for heating products made from animal waste to save energy costs. The invisible hand has manifested itself as a virus.

Public attention has now focused on these dysfunctions of industrial agriculture, exemplified by the following public remarks:

*“From now on, consumers’ interests, not farmers’, are to be put first.”*

—German Chancellor  
Gerhard Schröder

*“Society should be setting the farming agenda”*

—EU Commissioner Fischler,  
8 March 2001

*“We need a full-scale review of intensive farming “*

—Michael Meacher,  
UK Environment Minister

Some farmers’ organizations now call for a period of ecological modernization to succeed the previous period of technological modernization. New goods and services can reconstruct the eroded economic base of both the farm enterprise and the rural economy. New food supply chains and farmer-managed nature and landscape will characterize this period. During the last fifty years food production and green services have been split apart by policies to enhance production. Now they are being reunited.

Farmers offer a new social contract to their ‘urban’ neighbors, usually in the form of negotiations with government, and sometimes with regional water authorities and other agencies. This new contract augments food production with nature conservation, landscape stewardship, wildlife habitat management, water supply, green tourism, children’s education, and healthcare on farms. Examples of this new contractual relationship are multiplying. The Swiss government and Swiss consumers invest substantially in their landscape and rural culture. Many European cheeses, meats, and wines are protected by a label of origin and sometimes with a special relationship with public parks. Wetlands and wildlife habitat have become important objectives of US farm policy. Tourism amenities are some of the multiple benefits of local agriculture around the world.

The concept of multiple benefits is used to reward developments in agriculture we want to secure. Farmers can be green entrepreneurs, paid by the market for providing environmental services like bird nesting or “salmon safe” practices. Policy can be designed to provide green payments or investment in the sort of agriculture that provides the most benefits.

The premise of this policy direction is that the future of agriculture will be determined by the degree to which it meets the needs of society much more than by the degree to which it meets the needs of farmers. So far, however, multiple benefits are not rewarded by most

ways the market works. If we want these services, we need to develop and to organize new market and policy rewards for them.

In the Netherlands, for example, a new e-commerce marketing system is being pioneered by the Farmers’ Union, WLTO, with 17,000 farmer members. These farmers have realized that 6 million urban consumers live “just around the corner.” The president of the Farmers’ Union said, “In the past the rural landscape was a result of agricultural activities and in the future agriculture will be a product of the rural landscape.” Their project is to create a Virtual (Green) Supermarket called “Green, Fresh and Fast,” which will be launched by a pilot this winter in Amsterdam.

In addition to the elimination of some “middle man” costs, added value for producers will come from higher prices for green functions and quality attributes like specific regional identity. The Farmers’ Union hopes to help integrate the needs of consumers with those of citizens, assuming that citizens have needs for a livable countryside with great variety and well shaped rural landscapes, natural values, cultural heritage, peace and quiet, and open green space. Consumers want safe, healthy products and tasty food, along with transparent characteristics of environmental care and animal welfare.

Green, Fresh and Fast will use the market to value multiple benefits from agriculture. Another Dutch example, In Natura, develops a contractual relationship between 100 local nature cooperatives of farmers and the government. In return for payments over a period of 6 years, farmers provide green services, particularly bird habitat and the protection of specific rare species. The local nature cooperatives include not only farmers but also their citizen neighbors in ecological assessment and planning. These cooperatives build local identity and pride, with shared experiences and quality control, thereby helping to avoid bureaucratic regulation. Individual farmers are paid for their biodiversity output, with co-financing by the EU. Begun in 1997 in the West of the Netherlands, by 2001 30 cooperatives, with 3,000 members, have 65,000 hectares (about 160,000 acres) under conservation.

Somewhat similarly, the French Land Contract System (Contrat Territorial d’Exploitation) provides government financing of land management contracts with farmers. These contracts are a new tool to help farmers committed to implementing systems of production that are of social benefit but which cannot be fully remunerated by the market and require financial input from society. An average of 135,000 ff is committed over 5 years to this program, again with EU co-financing.

The Dutch and French examples of rewarding multifunctional agriculture suggest that relying solely on

the market is problematic. In all of our roles as citizens, we bring needs to the food system that complement our roles as consumers.

One telling example of this citizen/consumer duality is the development of organic farming. The market for organic products in western countries is growing more than 20% each year, but organic commodities are subject to the same structure as all other commodities: concentration of production in larger and larger units; investment by industrial capital; industrialization of the value chain; and a yield, scale, technology treadmill (even if environmentally correct technology, in this case).

For example, quoting Michael Pollan from the *NY Times*, “Horizon is a \$127 million public corporation that has become the Microsoft of organic milk, controlling 70 percent of the retail market. The milk is now “ultrapasteurized,” a process the carton presents as a boon to the consumer (it pushes the freshness date into the next millennium), but which of course also allows the company to ferry its milk all over the country.”

Pollan goes on to describe “the organic movement” as “a \$7.7 billion business: call it Industrial Organic. Although that represents but a fraction of the \$400 billion business of selling Americans food, organic is now the fastest-growing category in the supermarket. Perhaps inevitably, this sort of growth — sustained at a steady 20 percent a year for more than a decade — has attracted the attention of the very agribusiness corporations to which the organic movement once presented a radical alternative and an often scalding critique.

When I think about organic farming, I think family farm, I think small scale, and I think hedgerows and compost piles and battered pickup trucks. I don’t think migrant laborers, combines, thousands of acres of broccoli reaching clear to the horizon. To the eye, these farms look exactly like any other industrial farm in California — and in fact the biggest organic operations in the state today are owned and operated by conventional mega-farms. The same farmer who is applying toxic fumigants to sterilize the soil in one field is in the next field applying compost to nurture the soil’s natural fertility.

Today five giant farms control fully one-half of the \$400 million organic produce market in California. Partly as a result, the price premium for organic crops is shrinking.”

## Concluding Questions

These trends in organic lead us to ask, as we assess different approaches to the sustainability of agriculture, “Just what problem does each solution address?”

What would it take, and what would it mean, to scale up these alternatives? What else would be needed to “really fix” the system problems? Are these new trends inherently marginal (boutique farming in rich regions), leaving the larger sector of commodity production to grind its weary way onward on most of the best land around the world? Or are they the leading edge of a sustainable food system? Under what conditions could a new system supplant the old? Is there a “tipping point” where small innovations diffuse rapidly into systems change?

In both rich and poor countries, what is the *potential* power of the local culture, the local products, the local recipes, the local *bonne bouffe*?

And finally: How do we create production, price and income policies in a global political economy? What will the consumers pay by the shopping bag and what kind of services will have to be paid by taxpayers’ money as common goods? What kind of mechanism do we see to integrate the citizen concerns and the consumer concerns? How independent can a local/regional rural economy be? What are the limitations? And what are incentives to increase interdependency? How do we see the sovereignty of such economies?

We intend to facilitate a transatlantic, and eventually international, research and writing project to explore these and related issues. We invite conversation and collaboration.

# GLOBALIZATION AND BIODIVERSITY CONSERVATION: THE ROLE OF ECOTOURISM

Gerardo Budowski

## Summary

Biodiversity at its three levels, species (and subspecies), gene richness and ecosystems is presently being lost at a very fast rate, in particular in the tropics where 50% or more of all terrestrial species are found in the rain forests. Other diversity rich ecosystems are coral reefs and wetlands. We know relatively little about biodiversity since most of the species have yet to be identified, let alone the genetic diversity and the ecosystems where they are found. Human influence is the major threat because of destruction or deterioration of habitat, the perverse introduction of alien species and the loss of indigenous knowledge. Biodiversity provides many free services to humans such as pollination, decomposing matters and recycling nutrients, stabilizing water flows, as a source of genes, fixing carbon dioxide, etc. Successful management of biodiversity is little practiced although many countries have subscribed to the Convention on Biological Diversity, in Rio 1992.

Ecotourism defined as “responsible travel to natural areas, conserving the environment and improving the welfare of local populations”, is presently the fastest growing sector of the tourism industry and, because of its ever-growing global dimension, has both negative and positive influences on biodiversity. Examples are adverse impacts of hotels and other constructions, lack of participation and loss of traditional rights of local populations close to what are now protected areas, concerning hunting, gathering of forest products, etc. Benefits include a significant increase in the appreciation of protected areas, including the recent creation of a large number of national parks and the promotion of responsible ecotourism where biodiversity conservation is a distinct objective. 2002 has been officially declared the international year of ecotourism by the UN Other promising developments include the declaration and joint management of international transboundary parks also called “peace parks”, the increased initiatives by indigenous groups to control ecotourism in their regions and better-structured training programs at different levels, some with global implications.

## THE AACHEN FOUNDATION

Stephanie Weis-Gerhardt

The Aachen Foundation is a private one, focusing on sustainability. We interpret sustainability as meaning dematerialization. To operationalize dematerialization we need an economy with different economic framework, a Resource Input Optimization (R.I.O.) Economy. To push the implementation of dematerialization the Aachen Foundation is launching several steps.

- The R.I.O. Innovation Prize characterizes the awardees as milestone actors on the path towards the R.I.O. Economy. The prize will be first awarded in the Spring of 2002.
- The R.I.O. Innovation Team, consisting of high ranking business people who discuss the chances of and obstacles to dematerialization, develops suggestions and concrete projects geared at changing the overall framework. The team met first in Autumn 2001. The point of departure is the

“Carnoules Appeal” (Friedrich Schmidt-Bleek et al.: [www.factor10-institute.org/CarnoulesAppeal.pdf](http://www.factor10-institute.org/CarnoulesAppeal.pdf)).

- The Aachen Fora, provides a way for companies to present their approaches towards dematerialization to a wide public. The next Forum will take place in Spring 2002.
- The R.I.O. Books are investigations of the state of the art of dematerialization in different countries. The first book will be published in summer 2002.
- The new R.I.O. Generation is a group of young people, who demand that saving resources become part of the constitution.
- The R.I.O. Professorship for resource productivity and innovation of products should guarantee training and consulting in the field.

## **THE COMMUNITY FOUNDATION: WORKING WITH LOCAL RESOURCES TO PRESERVE DIVERSITY**

**Peter Lamb**

Imagine an organization in your community that is created to support people, their ideas and their visions for a better world. Community Foundations are a form of organized philanthropy that serve as community development tools to work across community interests. They derive from the concept that the people closest to a situation will find the most effective solutions. Community Foundations support the “3<sup>rd</sup> Sector” and provide a balance of power between the government and the civil society. Each foundation focuses on local needs, builds a permanent endowment from many sources, depends on local governance for decision making and is adaptable to various cultures, societies and legal systems.

Community Foundations are the fastest growing form of organized philanthropy and are spreading internationally from their origins in the United States in 1914 during the Progressive Movement. Community Foundations share common characteristics: they seek to improve quality of life in a defined geographic area, they are independent from government or donors, they are governed by a representative group of local citizens, they make grants to the NGOs that carry out the community work, they build permanent assets (funds that are invested and the income used for grants) and they engage local leadership around important community issues.

Community Foundations utilize their local and regional networks to convene community leaders and leverage resources to move entire systems. Often the resources are very small in contrast to the size of the issues. The foundations make competitive grants to the NGOs in the community. These grants can support ongoing work or provide “seed” money for new programs. Often these grants to NGOs can provide cover for people working on difficult community issues such as increasing diversity, human justice and access to education. Finally, Community Foundations work with people of wealth—the donors—to use their resources strategically through the foundation to improve quality of life in their local community.

These contacts may be useful as you plan to establish a Community Foundation in your region:

The Transatlantic Community Foundation Network  
<http://www.tefn.efc.be>

Community Development Foundation:  
Emerging Partnerships,  
Jooyce Malombe, The World Bank (NGO and Civil Society Unit), 2001.  
<http://www.worldbank.org/ngos>

Building Philanthropic and Social Capital:  
The Work of Community Foundations,  
Peter Walkenhorst (ed.), The Bertelsmann Foundation, Gutersloh, 2001.  
<http://www.bertelsmann-stifung.de/index.cfm>

QLF/Atlantic Center for the Environment,  
Ipswich, MA, USA  
<http://www.QLF.org>

The Council on Foundations, Washington, CC,  
USA: <http://www.cof.org>

Saguaro Seminar: Social Capital Working Group  
<http://bettertogether.org>  
<http://bettertogetherNH.org>

The New Hampshire Charitable Foundation,  
Concord, NH, USA  
Peter F. Lamb, Vice President [pl@nhcf.org](mailto:pl@nhcf.org)  
<http://www.nhcf.org>

# LIBERALISATION OF ENERGY MARKETS AN ITS CONSEQUENCES FOR RENEWABLES: THE CASE OF DENMARK

Niels I. Meyer

Liberalisation of energy markets in Europe was started in UK(1989) followed by Norway(1991), Sweden (1994) and Finland (1996). In parallel to this, the EU Commission promoted long and difficult negotiations for a directive on liberalization of electricity markets. In spite of considerable skepticism both from governments and utilities in the beginning, the Commission succeeded in December 1996 to have an EU directive on liberalization of electricity markets accepted by the EU Council of Energy Ministers. The desire from some Member States to support environmental concerns was partly fulfilled through the introduction of so-called Public Service Obligations (PSOs) based on criteria of environmental protection.

The promotion of energy systems based on renewable energy sources has been based on different schemes in different European countries. The dominating models have been:

- *Feed-in model* (fixed price model) with favorable tariffs between 7.7 and 9.3 eurocents per kWh and obligations for utilities to accept all green electricity.
- *Tender system* (e.g. based on Non-fossil Fuel Obligation, NFFO in the UK from early 1990's).
- *Green Pricing*: voluntary buying of green electricity at a premium price.
- *Green Certificate Trading* driven by specified quota for green electricity.

There is experience from a decade with the first two models, while the last model is only in a preparatory phase. At this time seven EU member states have adopted the feed-in model while another seven are preparing for a green certificate trading model.

The feed-in model has been used with success for wind power in Denmark, Germany and Spain. These three countries have about 84% of all wind power capacity in Europe in spite of higher potentials in other European countries.

In the green certificate trading model producers are paid the market price for electricity plus income from sale of green certificates. The driving force for sales of green certificates is specified quota for green electricity by government – e.g. as obligatory consumer quota or utility quota.

Denmark had been using the feed-in model to promote wind energy for more than a decade before the introduction of the EU directive on liberalization, and by 2001 wind power covered about 13% of the total Danish electricity consumption. However, in June 1999 a large majority in the Danish parliament decided to introduce an energy reform where promotion of green electricity should be based on the green certificate model. One of the arguments was, that this model was considered more market conforming than the feed-in model.

The subsequent work by the Danish Energy Agency (DEA) with the operational details of the certificate model has disclosed a number of complications. As a consequence, the starting date for trading of green certificates has been postponed several times and complicated transition rules have been introduced. The latest development seems to postpone the start of trading to year 2005.

One of the problems is the uncertainty concerning the future price of green certificates. This uncertainty makes it very difficult for private investors to obtain the necessary banking loans. The uncertainty has manifested itself in a rather drastic way. The last year it was possible to establish wind turbines based on the feed-in model in Denmark was 2000, when a record of 600 MW wind power capacity was installed. In striking contrast to this, the trend in 2001 will probably result in less than 100 MW new wind capacity.

The original political argument for changing from the successful Danish feed-in model to the uncertain green certificate model was based on the hypothesis that the later model was more market conforming. This argument has recently been contested by comparing the two models in relation to market principles. The feed-in model fixes the price of green electricity while the quantity of green electricity is decided by market forces. In contrast to this, the certificate model with specified quota fixes the quantity of green electricity while the price of green electricity is determined by market forces. Thus, it is mostly a matter of taste which model is most market conforming. In addition, it has been proposed that the feed-in model could be made more dynamic and market conforming by basing the tariff on benchmarking principles.

In conclusion, the Danish energy reform is threatening to ruin the Danish leadership in wind power. In addition, the whole liberalization of the energy sector is questionable in relation to creating a sustainable energy development.

# GLOBALIZATION OF THE ENERGY SECTOR (HOW GLOBAL CORPORATIONS GET CONTROL OVER THE ENERGY SECTOR): THE CASE OF HUNGARY

Zoltán Lontay

## EGI in a globalizing world

EGI Contracting Engineering was established as an energy consulting institute in 1948. It was owned by the state until 1992, when it was taken over by a multinational corporation. With the takeover the former role of EGI as a national brain tank in energy planning was lost. Although most of the earlier capacities of EGI have been sustained, today priority is given to short-term profit generation, and the future of the organization depends on company affairs the Hungarians are unable to influence.

## The energy situation in Hungary at the end of the 80's (before globalization)

Hungary was (and still is) a small country with an energy demand of ca. 25 mtoe per year. The US\$ 4 billion per year energy market was isolated from the “free” world, it was integrated into the COMECON economic system, and characterized by

- strong, vertically integrated, state-owned and state-controlled energy companies
- controlled (subsidized) end-use energy prices
- strong Soviet influence, still well developed domestic intellectual, technological, and manufacturing capacities.

The economy was in ruins, with an enormous foreign debt. The whole Eastern European region was in the brink of major social changes. No doubt, the “global capital” had its eye on this market, seeking to expand into new territories. We can assume that it had the following targets:

1. Get the energy (oil, gas, electricity, district heating, etc.) markets.
2. Weaken / eliminate local competitors.
3. Secure monopolistic position if possible.
4. Lessen the role of the state in planning, policy making, and regulation.
5. Discourage end-use energy efficiency.

It has been proven by now that within 10 years the global capital succeeded in reaching practically all of the above targets. On the surface the process started

when the transition of the social and economic systems, begun in 1989. (In reality preparations started earlier.)

## How privatization/globalization happened

It was the World Bank that appeared first and urged liberalization of energy prices, and structural changes in the energy sector. Western advisors came then and proposed that the state energy companies should be broken up (vertically and horizontally) and privatized. The first (rightist) government established the legal/economic environment for privatization and split the energy organizations. They introduced market prices for energy but wanted to maintain a key role for the state in the energy field.

The second (leftist) government gave up the idea of major state control over the energy sector. They executed privatization of most of the energy companies. The control over the majority of the energy sector was transferred to international corporations, such as EdF, Bayernwerk, Tractebel, Italgas, AES, RWE, GdF. All the electricity and gas distributors (the market) and the majority of power generation capacities were transferred to these corporations. Only the nuclear power plant, the electricity wholesale organization and a share of the national oil and gas company remained in state ownership. The following arguments were used to support privatization:

- compatibility with market economy
- access to capital for modernization of energy infrastructure
- the state is the worst owner
- cash income for debt service
- access to western technology and management culture
- necessary for EU accession
- international corporations have easier access to primary energy sources.

At the same time, the opponents of privatization had the following arguments:

- national control over the energy sector as a strategic sector must be maintained

- the national economy may become vulnerable
- the new owners will not rely on national suppliers (machinery, engineering services)
- due to high profit expectations of private owners energy prices will grow.

The third (patriotic) government at present is making preparations for energy market liberalization. It is unavoidable for a country that has EU accession as a high priority political goal.

Regarding the ownership of the privatized companies, there was a diverse ownership first. Later the owners exchanged shares to create territorial monopolies. The existence of background agreements may not be excluded, while the anti-trust authorities face difficulties in following ownership changes.

**What was promised by the supporters of privatization and what happened at last?**

Privatization will result in an inflow of capital.	The new owners keep the level of investments at the lowest possible level. Huge profits are withdrawn from Hungary.
Cash income is produced for the state.	The “family silver” was sold off below price (inexperienced government officials, indebtedness, corruption). Secret clauses of privatization contracts contained costly obligations for the state.
Modern technologies will be introduced.	Access to technologies could have been possible for national companies, too.
Infrastructure will be operated more effectively.	True, however, it is not the Hungarians who enjoy the benefits.
State monopolies will be eliminated.	Yes, but even bigger private monopolies take over the field.
Political dependence on the Soviet Union will be eliminated.	It is replaced by economic dependence on corporations (which may influence politics, too).
There will be a chance for the local supply industry.	Only the role of “local subcontractor” is offered.

**The Mátra Scandal**

The so called Mátra scandal underlines some of the drawbacks of the energy privatization in Hungary.

In 1995 RWE and EBW (two multinational companies) were bidding for the privatization of the Mátra Power Plan. The day before signing the \$74m privatization contract a secret agreement was signed which said that

- RWE/EBW pay an additional amount of \$26m if

- they can buy two power distribution companies off the competitive bidding process
- they receive exclusive right for the construction of a 1000 MW power plant (off the competition).

The end of the story is that in 2000 the government, unable to comply with a part of the secret commitments, had to pay \$30m to RWE as indemnification.

## The strategy applied by global capital

We can summarize the main elements of the strategy applied by global capital:

- start the process with the World Bank and IMF
- use aid programs to collect information
- identify your internal allies as soon as possible
- demolish policy making capabilities
- do not hesitate to apply political pressures.

## Globalization and sustainability

The key sustainability strategy is end-use energy efficiency. Today, in the time of preparations for market liberalization, state energy efficiency policies are considered to be not “market conforming”. The energy companies want to sell more kWh-s and m<sup>3</sup>s at any price. End-user energy efficiency is none of the business of the energy industry. Any energy efficiency programs should be financed from tax money, they say.

## Stories

A power distributor launched a campaign to encourage residential customers to use more electricity.

Largely due to the promotional campaigns of power distributors (and hotter summers) the air-conditioner market is growing rapidly.

A piece of advice from a DISCO: “Buy a new, efficient fridge, and put the old one in the garage.”

Excerpt from the monthly report of a power distributor: “Thanks to the summer drought the farmers had to switch on their watering pumps.”

A gas distributor refused to connect a district heating plant to the gas network because the plant was not ready to sign a 15 year gas purchase contract (a couple of years before market liberalization!).

In the development of energy legislation the Government relies on Advisory Committees, which are under the influence of the corporations.

Some of the energy / green NGOs, which ought to critically watch the energy corporations, are influenced by the corporations through sponsorships.

## Was all that unavoidable? What could have been done in a different way?

- Privatization was unavoidable.
- From the possible privatization strategies, the one with the promise of the highest cash yield was selected.
- Majority shares and management rights were handed over to maximize price.
- It was the corporations that could pay the most.
- The price the state received was not a good bargain.

## WORKSHOP REPORTS

### Adult Training in Systems Thinking Principles: Experiences, Resources and Materials, by Gillian Martin Mehers

An afternoon workshop was held during the recent Balaton Group meeting which brought together members who were actively involved in systems thinking training and education activities. The following account outlines contributions from those attending.

Gillian Martin Mehers facilitated this discussion and opened with a description of the challenge that LEAD International has had in developing a training module on systems thinking for young leaders. After several iterations of a one-day module, LEAD is getting closer

to understanding what can be done in one day, and sees the need for a longer, multi-stage approach to teaching systems thinking principles to its diverse, multi-sectoral and multi-national group of learners. Interest is high to see how other trainers and educators have tackled this important issue in their learning activities.

**Ullrich Loening:** Within the M.Sc. in Human Ecology there is an “Action for Transformation Module” which looks at sustainability in the Balaton sense. It includes empowerment education and models how to do things.

**Hal Hamilton:** The Sustainability Institute has run 8 “Systemability Workshops”, which are 2-day workshops for general and specific audiences (such as agriculturalists or grantmakers). We would like to adapt it to an action context and work with teams. It is currently used nationally within the USA.

**Don Seville:** Systems thinking training needs to introduce the theory of social change (tipping points). Two useful resources are Dana’s booklet on leverage points and her Whole Earth article on this topic (*Whole Earth*, Winter 2001, [www.wholeearthmag.com](http://www.wholeearthmag.com)). The challenge is to change mindsets with these workshops, which should be a combination of tools and theories. Systems thinking is difficult to teach as people need both principles and tools, but often in the learners group some people understand the tools and others appreciate the principles. The training should be used to help people be more strategic change agents. Archetypes can be useful to help people identify behaviour.

**Valdis Bisters:** It is hard to teach causal loop diagramming in a few days. It is easier to use archetypes in a short course as they are more powerful. It is difficult to train people in systems thinking only at the level of diagramming – you may need a computer to show stocks and flows. A mentor or apprenticeship could be very helpful.

**Lazslo Pinter:** In GEO training, we are not training people to apply systems thinking, but informing people who would hire systems experts. This is a different kind of training. We do exercises to show systemic linkages to help people realize connections and very simple modules and building blocks of systems which are not too technical. These are based on very practical questions, examples and games, and then we build on that. It is good to link this training back to the context of the audience using examples from their own situations. Currently we are developing train-the-trainer materials and strategies.

**David Berry:** These are complex notions and people are often hypnotized by their previous point of view. A quick exercise can help – have people focus and appreciate empty space – such as in their stomach and in their lungs. This should make them more open and value empty space but can also lead to a feeling of uncertainty as they may come to a new conclusion.

**Any Sulistyowati:** I use the *Systems Thinking Playbook* games, and frame them within a useful context for participants. I also use *Fishbanks* to introduce systems. I often find it hard to apply in real life, particularly in rural Indonesia, where there are no time series data, so it is difficult to understand behaviour over time.

**Masse Lo:** In general, learners (LEAD Associates in this case) are fascinated by systems thinking, but it needs to be reinforced over time. They are very keen to have this kind of training, but it should be done at both the local level and the international level within a longer training program. At the local level, trainers need to build their own exercises to show relevance before talking about systems in terms of global applications.

**John Peet:** Systems is introduced in the final year course for engineers at the University of Canterbury. These are people who don’t always see how their learning can be improved by understanding management and ecology. They also have a 4-hour workshop on ethics where there is an introduction to the iceberg principle.

**Diana Wright:** If you have a mixed group for systems thinking training you can use the team approach to training. One team member can use a causal loop diagrams to explain something, and another can tell a story – one can be a “techie” and one a storyteller. Process skill training is important for this.

**Julia Marton-Lefèvre:** In doing international training there is often a problem of vocabulary in English, so examples are extremely important.

**Hal Hamilton:** Mental models can be good to use first, for example personal ones of everyday interaction. Peter Senge has some useful examples of this.

**Dennis Meadows:** The *Systems Thinking Playbook* is a very useful resource for teaching systems thinking principles. The Browne Center has a 1-day workshop for senior corporate people on systems. It is often not very successful as it promises too much. At most, it can be expected to help people understand behavior over time graphs, a couple of archetypes (adapted to their specific issues), and 3-4 exercises. Relating systems thinking to sustainable development can be even more challenging.

## **The Skeptical Environmentalist**, by Niels Meyer and Joan du Toit

This session was convened by Niels and Joan. The meeting flowed naturally from an e-mail discussion on the Balaton listserv which had started before the September Balaton Meeting. The subject of the discussion was a book by Bjorn Lomborg, a statistician at the University of Aarhus, Denmark, entitled *The Skeptical Environmentalist*. An English translation of the Danish book, which appeared about two years ago, has recently been published by Cambridge University Press.

Lomborg's work has received a lot of attention because it is held up to contain rigorous statistics supplied and interpreted by an environmentalist who is skeptical about the costs of mitigating environmental problems. Lomborg questions the priorities of environmentalists and specifically questions the value of the Kyoto Protocol.

The objective of the meeting was to discuss (especially with the Danish colleagues) how seriously to take this study. The fact that the book has reached a wide audience in publications such as *The Economist*, *The Guardian*, and *The Times Higher Education Supplement*

makes it a potentially influential work. The misrepresentation of facts or wrong interpretations could do much damage to the environmental cause.

According to Niels and Jørgen the Danish scientist's reception of the book was not very good, but they concede that he has presented useful statistics and pointed out errors in environmental reasoning in some cases. His presentation of facts, however, is reasonably selective and some of the conclusions reached are wrong.

Alan AtKisson has undertaken to review the book for some publications. Joan undertakes to do a review of the different views of the book.

[Recently, critical reviews of Lomborg's book *The Skeptical Environmentalist* by professional experts appeared in journals such as *Nature*, and will appear in *Scientific American* (January 2002). There are rumors that the new Danish government is planning to make Mr. Lomborg the director of a new Danish Environmental-Economic Institute! - Eds.]

## **"Fish Bowl" Exercise**, by Katherine and John Peet

Present: Arie, Stephanie, Jørgen, Nanda, Ayumi, Zoltán, Peter, Masse, Tomas, Any, Otto, Jennifer, Diana, Beverly, Ulrich, David, Hermann, Malcolm, Bianca, Jane, Arie, Gennady, John and Katherine

The aim was to pursue the question of whether some non-English native speakers fully understood all our discussions. Those in that category were asked to move to the center of the room, with native English speakers on the outside.

Masse started by commenting that his comprehension was generally OK, but that he had problems with the worldviews of, for example, US and Europeans being quite different from his, making it often very hard to take in the full implications of the discussion. As an example, the word "globalization" is not the same as "mondialisation" for him. As another example, he introduced the topic of the International Convention on Desertification. It had been signed by most countries, but most were unaware that it was not about deserts but about land degradation. The global and African situations on desertification illustrated issues involving questions of subsidiarity. Most of the BG discussion had been at the global concept level, but at the regional, subregional or national levels, issues are much more complex and very different.

Katherine then invited others to respond by clarifying what they had heard, from Masse's comments.

Arie felt that this issue of desertification deserved much fuller treatment, at a future BG meeting.

Nanda felt that it was not the language so much as the cultural context or paradigm from which communication comes, that is often the problem.

Jennifer expressed the opinion that some BG presenters were too Westernized. The whole picture can be lost when the cultural context is not shared.

General discussion proceeded with evidence of some lack of meeting of minds!

Ayumi felt very comfortable with spoken English, but pointed out that she sees and thinks in ways different from westerners. For example, sustainable agriculture has a different meaning in Japan, where the expression derives from a context where body and soil cannot be separated. Hence, local production should be consumed locally. People are both producers and consumers, and bring wastes back to the soil. Similarly, the Chinese do not refer to sustainable agriculture, but to ecological agriculture. If the concepts do not recognize the body and soil as central, she feels the result (commodification) is not sustainable.

Tomas commented that upbringing in a language and formal instruction in a language are often different.

Diana pointed out that not only different languages but different lenses such as cultural and educational disciplines are relevant. For example, economists and ecologists often fail to communicate. Speakers should try to address their biases up front when talking to people from other backgrounds.

Any gave the illustration that for the EU, 40 ha and 20 cows make a small farm, whereas in Indonesia, a fraction of that makes a farm; they are entirely different.

Katherine then pulled the threads together. It hadn't been a proper "fishbowl", since most of those present were non-native English speakers with few native speakers outside the circle! However, the discussion had been worthwhile. She commented that Subsidiarity had not come into the BG meeting on Globalization. Subsidiarity is about process, not a topic on its own, and identification of common ground in a conference requires that careful attention be given to the processes adopted.

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## **Vulnerability and Future Trajectories of Lake Balaton**, by László Pintér and Bob Wilkinson

The working group was convened by László Pintér and Bob Wilkinson to discuss the current state and emerging dynamics of Lake Balaton, in light of multiple, interacting driving forces and stresses. Our goals were to consider whether a constellation of key trends can give rise to increased vulnerability of the lake system. The fact that the Lake Balaton Development Council, a newly formed high-level policy coordination body, just decided to sponsor a study to look into the feasibility and risks of diverting water into Lake Balaton from rivers in the Southern or Northern Trans-Danubians in Hungary, supports that these concerns are shared by others.

We noted some of the key variables that could weigh heavily in the determination of vulnerability dynamics:

- Particular hydro-morphological characteristics, such as large surface area or extremely low average depth;
- Relatively small watershed and reliance on one major river for surface water input;
- Heavy and probably unsustainable overdevelopment of shoreline settlements over the last decades, but increasing wastewater treatment;
- Collapse of agriculture in the 1990's undergoing slow revival and restructuring, possibly entering new phase of growth;
- Weak watershed-based policy coordination, fragmented jurisdiction, few effective CSOs.

In addition to these, we noted that most leading climate models project a shift in regional climate in the Carpathian Basin in the semi-arid direction possibly with an increasing frequency and severity of drought conditions. While the spatial elements of climate models are notoriously problematic, as a minimum, they confirm that considering the possibility and implications of this regional climate trajectory are warranted.

Lake Balaton is a major source of national revenue for Hungary, and there is a major industry with a long tradition involved in carrying out research and development planning in the region. Because of this, as Genady Golubev pointed out, all useful niches are already occupied. However, the group thought the arguments brought forward warranted further preliminary investigation. We felt there was a real issue that required stronger attention, and that because of its unique history, connection to the region. Based on what is found we could make a decision whether further action in this question is worthwhile. It was agreed that László Pintér would hold brief meetings with relevant staff at the Hungarian Ministry of Environment and Regional Development and László Somlyódi at the Budapest Technical University, a Lake Balaton expert and Balaton Group member.

These discussions found the following (in loose pressure-state-response style). Water quality in the lake at the moment is on the level of the early sixties, based on lake-specific biological indicators. There has been a faster than expected improvement compared with the 1970s/1980s. The reasons are complex, but some of the factors, natural and anthropogenic, are well known. There is a dredging program that removes and deposits large amounts of nutrient-rich sludge in settlement ponds around the lake. Nutrient inputs have decreased—phosphorus alone by around 50%. A significant factor has been a decrease of sewage input, as the collection systems have been expanded. A significant proportion of the sewage is taken out of the watershed. It is likely that, in the case of Lake Balaton, Hungary will have to go beyond EU water quality directives for sewage treatment. Whether and whenever that happens, water quality could further improve, assuming everything else being equal. For now, there are still settlements or parts of settlements relying on poorly insulated cesspools, rather than proper sewage treatment, though coverage is quickly expanding. As we know, the collapse of agriculture meant that the use of agrochemicals has dropped and non-point runoff also decreased.

As we saw during the BG 2001 meeting, water levels are currently a major problem, and the issue featured prominently in local and national media. There

are some potential solutions. On the input side, one option might be to divert water from the Dráva and Rába rivers to the lake (the Dráva is on the border of Hungary and Slovenia/Croatia and the Rába is running into the upper reaches of the Danube in Northwestern Hungary). On the output side there is a possibility to regulate through the one outlet, the Sió canal (though persistently reducing flow-through may have water quality implications).

Precipitation over the last few years has been below average. While this may be part of a 30-year cycle, longer term national meteorological data are consistent with global trends and indicate what may be more fundamental changes. According to very recent data of the National Meteorological Service, over the last few years average surface temperature in Hungary has increased 0.5° - 0.8° centigrade. As expected, there are regional differences, and warming has been stronger in the Trans-Danubian region, i.e. the Western part of the country where the lake is located. The warming occurred in two phases, the first between 1910-45 due to known natural factors (vulcanism, solar activity), the second between 1976-2000, possibly due to anthropogenic factors.

Some of the unknowns are non-point urban runoff, increasingly important as settlements continue to expand. Fertilizer use has started growing (not true for manure), so nutrient input from this may start increasing. According to László S. this is the only difficult-to-predict variable.

On the institutional front there is a large number of NGOs, but none that would stand out as dealing with the lake as a whole—most are small local clubs. However, in 1999 a multi-stakeholder Lake Balaton Integration forum and a Lake Balaton Development Council were set up. The Council has a new, impressive-sounding Strategic Plan dealing with economic, infrastructure and human resources development, but also environmental protection. These institutions channel government funding into a variety of projects, most of them having to do with tourism, information systems, infrastructure etc. There is no sign of any climate change vulnerability or adaptation work, although in an interesting development the Council just decided (in September 2001) to commission some research to look seriously into the possibility of water diversion and assess the possible ecological risks of using non-Balaton water for that purpose.

To sum up, there is little indication of watershed-based, future-oriented and integrated vulnerability analysis in the context of Lake Balaton. There are, however, well-established institutions with local expertise and mandate to carry out such work, including research and development planning regarding socio-economic aspects. If anything, the BG could contribute by organizing an annual meeting around the topic of “lake management” and bring together relevant expertise from other geographic areas (e.g. Great Lakes, Aral Sea, Lake Victoria) with key individuals from organizations concerned with Balaton in order to facilitate cross-fertilization of ideas and agenda setting for research and development.

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## **Lesson Learned from Organic Agriculture Project in Geblug Village, West Java, Indonesia,** by Any Sulistyowati

### The Beginning of the program: Organic Farming for Young Farmers

This project started in 1997 because of our concern about the rapid change of rural landscape to real estate construction. There was high rate of land selling by farmers who then changed jobs to become physical labors in the city. In Indonesia, small farmers were identified as a marginal group in society very likely to be in poverty. Some of their problems were unfair and unstable price for cash crops, stable but very cheap price for rice, lack of capital, lack of land and lack of technology. In the beginning, we wanted to break the cycle of poverty of Geblug people by introducing organic agriculture. The idea was to reduce each farmer's dependency to external inputs and to diversify income through mixing farming activities and production and marketing cooperatives.

Our first group was made up of young people, many of whom were unemployed or likely to lose their jobs because of the national economic crisis. We made a plan to facilitate the farmers' learning process. In the beginning, the program was very successful, as indicated by the rapid increase in the number of people who joined the program. There were 50 people in the group.

We initiated the program by giving capital to start organic farming activities. We also facilitated creating direct marketing link with the consumers. In about one year, 100 people were involved as consumers. Most of them were our friends. We created a farmers' group which (we hope) can organize buying organic inputs in large amounts to get better price. *Wacana Lestari*, a bi-monthly newsletter was published to facilitate the link between farmers and consumers. It contains pieces on education, politics, and advocacy (especially in organic agriculture) to create consumer awareness.

### The mistakes: lack participation and economic sustainability

After two years, we realized that there were mistakes in our approaches. The macro economic condition was getting better by that time, and fewer farmers were interested in organic farming because they could earn more as laborers.

The economic incentive mechanism we created through establishing markets and providing micro-credit was very interesting for farmers in the beginning, but not enough to keep them farming when better opportunities arrived. Two years is not enough to ensure a farmer's awareness of environmental problems. Moreover, even if their awareness is good enough, it is still very difficult to keep them doing organic agriculture when the income cannot cover the living cost. And of course they can not pay back their credit! There is no sustainability without economic sustainability.

The other problem was the gap between the farmers and us. At that time, many of the initiatives came from us. We ignored the farmers' capacity to organize themselves. We forgot to build the culture of transparency and control mechanisms within the group. We assumed that they were all friends and everything would be OK. Then the group leader became corrupt and it took a lot of time to resolve that problem. We should have built the farmers' capacity to organize themselves, to think about their problems, and to facilitate their own learning process. It would have been very slowly in the beginning, but in the long run it would have been more sustainable because every single decision would have been made by the farmers—they would do it consciously.

Until recently, we were still working to develop organic farming in Geblug. We reviewed and developed some new approaches that are more suited to conditions there. We changed our approach, not only with economic incentives, but also through increasing awareness and participatory learning processes. These include creating the awareness among farmers that their local problems are related to what happens at the global level.

We also started working with smaller groups (5-7 people per group). It will be their initiative to start organic agriculture projects. We have also become more careful with our approach, applying it consistently and evaluating it regularly together with the groups.

The other phenomenon that happened after the national economic crisis was the increase in land sales, especially for a Chinese graveyard. So our program has extended from organic agriculture techniques, to creating awareness among farmers about how important the land is for rural livelihood—helping them to keep their land and avoid manipulation by the land buyers.

### Extension of the program: Micro credit for Women and Children's program

The good result of our activities in Geblug was that more groups wanted to participate in activities. For example women's and children's groups wanted to become involved. Different from the previous program, these new programs were initiated by the groups themselves and they asked us to facilitate the program. It started with five women who were interested to do something to improve their family conditions. We tried out some small businesses that could be done in their house and did not take much of their time. After around a year, it developed into a micro-credit program. We (the women's group and us) set the goal that within 3 years the group should be self-managed, self-funded, and our NGO would be willing to help them in doing that. Now, this project had been replicated in four villages with about 150 women.

The children's program was initiated by the women's group. They wanted their children to go to school, but didn't have enough money to pay the school fees. So, we talked to the children and asked what they wanted to do. They wanted to take care of small animals and sell them when they were big enough. The money earned could go to paying school fees. The children could also save their money within the group and take it out when needed.

Will these activities be sustainable? It is still long way to go....

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## **World Summit on Sustainable Development (WSSD) Johannesburg, by David Berry**

Niels Meyer summarized the meeting in Vail, Colorado, where the UN Commission on Sustainable Development invited distinguished citizens from Europe and North America to discuss sustainable development issues for the WSSD. Four other meetings were held around the world. Balaton Group members Hunter Lovins and Istvan Lang were also present.

The Colorado Group supported renewables, not nukes, for energy options to reduce carbon emissions and they made many other suggestions. The British chair's report has errors, but Niels says its not bad. All 5 reports are available at the WSSD web site (<http://www.johannesburgsummit.org/index.html>). Hunter pitched the Balaton Group to Nitán Desai the UNCS D head. He said he would welcome Balaton Group input.

Berry described the process of national reports to WSSD now being prepared by UN member states. A draft version compiled by UNCSD staff from various submissions by each country is the default document for countries failing to submit their own national reports. In discussions at a CSD meeting in April, no content agenda for the WSSD was yet identified. Since then, the following issues have emerged most strongly: good governance, financing sustainable development, water, energy, and climate. Indicators were so unpopular with G77 + China that they might not be significant at the WSSD.

#### How can B.G. contribute?

**Katherine:** Discussing the role of place as counterbalance to the adverse effects of globalization.

**Valdis:** There are lots of national plans for sustainable development, but are they consistent? Does the plan of one ignore the impact of actions on other countries?

**Bob:** The Balaton Group's unique contribution may be a long-term view beyond current the sustainable development agenda—creating a restoration agenda for our renewable systems. We shouldn't do what lots of NGOs already do.

**Jørgen:** Apply Daly rules as definitions.

**Ulrich:** Go beyond Daly rules.

**Berry:** Use our contacts to encourage providers of technology to be included in the declarations. We need action from the WSSD, not just words.

**Ulrich:** Best done as individuals supported by the Balaton Group network, not as the Balaton Group itself.

**Jørgen:** Definition of sustainable development are muddled by adding other issues: women rights, resources, etc. Can we clarify?

**Berry:** Endowment framework of the U.S. indicator group provides a sort mechanism that distinguishes environmental, economic, and social capacities (or capital) that we pass on to the next generation from our current quality of life.

**John:** Institutions must be explicitly mentioned in the framework.

#### Four Options for Balaton Group View

1. Direct statement to WSSD — Possibly redundant.
2. Long-term restoration agenda — Okay, viewed as real by WSSD?
3. Work as individual members resourced by Balaton Group— Let's do this!
4. Balaton Group as a resource to review drafts. Let's review government & NGO prepcom documents for comment and to resolve inconsistencies.

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### **The Pyramid: a Game Session About Indicators**, by Alan AtKisson

On Sunday, a group of about 20 Balatoners became the first-ever to play "Building the Pyramid," a new simulation and training experience being designed by Alan AtKisson's consulting company (AtKisson, Inc.).

The game was designed for a day, but the Balatoners played it in about 2 hours.

They provided Alan with invaluable feedback, and several expressed interest in putting it to work right away.

The game involved building an actual, physical pyramid, about 80 cm tall, with equilateral triangles and colored ties. It was on display in the common area of the hotel for most of the week.

The game instructions will be changed as a result of the Balaton Group's experience. The changes will focus on reinventing the "Trust Chips" element of the game, and increasing the amount of training given on each of the four "Levels": Indicators, Systems, Innovation, and Strategy.

For more information on the game, contact Alan@AtKisson.com.

## THOUGHTS ON THE BALATON MEETING 2001

### **The Impression of a First Time Participant,** by Maxwell Omondi

I heard about the Balaton Group for the first time in 1998 from Michael Ochieng Odhiambo, who himself is its member and with whom I have been associated since 1997, while serving as a pupil under attachment at his prestigious law firm, the Ms Ochieng-Odhiambo & CO. Advocates. Today, we are working together at the Resource Conflict Institute (RECONCILE), a natural resource and environmental policy and law research non-governmental organization which Michael founded and is directing. However, it was not until this year (2001) in July, that I began to know what the Balaton Group was about (though not in great detail) and I thought that it was interesting. This was an opportune time because Michael had decided to introduce me to the Balaton Group. He proposed my name to Dennis L. Meadows who then sent me a letter of invitation and facilitated my travel arrangements to the 20<sup>th</sup> Group meeting in September 2001 at Csopak, Hungary. Dennis Meadows coordinated my travel in so diligent a manner that it won him my admiration. Many thanks to Meadows.

The Balaton meeting 2001 was full of activities and presentations, which were an inspiration to me, and kept my mind busy around the clock. Apart from meeting the lovely, friendly and extra intelligent people, the meeting presented to me a real opportunity to enhance my limited knowledge of globalization and sustainable development. It has not been long since I first got involved in development activities and studies. But within

that short time, I have learned through humbling experiences that the paradigm of development as perceived in the Western world by developers and scholars is quite the contrary of its perception in the developing/underdeveloped world wherefrom I come. The discourse at the last Balaton meeting was one such humbling experience for me.

It is my desire that the association, which I have started with the Balaton Group, should continue to greater levels since from that association I believe that my personal work in natural resource management and environmental policy and law research will be undoubtedly enriched, while at the time I can make my contribution to the group. Sustainability is the key component in our work, which I also find relevant in the work of almost all of the Balatonians. Being a young Balatonian, I look forward to collaborating with the rest of the members, old and young alike while being mentored by the older ones and sharing new knowledge and experiences with the younger ones. In my view, the Balaton Group in ten years should be a wonderful one with a multi-racial membership from diverse cultural backgrounds and disciplines. I realized that I was the only member with law background during the last meeting, a fact which made me feel a little bit misplaced. But non-the-less we must all appreciate that law is an important element that needs to be considered in achieving sustainability in development.

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### **Reflections on the 20<sup>th</sup> Balaton Group Meeting,** by Bert de Vries

Upon returning from the 20th Balaton Group meeting, I reflected on some of the discussions I had at the meeting in the Hungarian Academy of Science with a number of energy-related business and government officials.

Hungary should not follow without reservations the liberalization and privatization trends. The first signals of retreat are visible in the EU. In the Netherlands, parliament has now started to seriously question the liberalization and privatization of infrastructural activities such as electricity, railways, water, communications. There are good reasons for it.

The process of liberalization and privatization (lib&priv) in the Netherlands is led by a few ministers who, in my view, combine market fundamentalism with

incompetence. More structural reasons why Western European countries experience this wave might be:

1. Due to a combination of economic growth and high savings, huge amounts of capital are aggressively in search for profit opportunities—buying the ‘family silver’ as cheaply as possible and using the familiar tricks of the bad uncle (civil servants easily cheated). The invasion of US business culture with its eroded ethics based on survival of the fittest and lawyers is another related factor.
2. Market saturation with the subsequent aggressive marketing and boredom out of material affluence makes people desire

adventure and excitement. Speculation—usually the domain of the wealthy few—has become a popular game, next to the casino and the lottery. ‘Starting your own business’ becomes the hallmark of adventure and wealth—big cars, beautiful women etc.

3. Many youngsters have been educated into ‘Market World’ types of activities: financial services, business economics, fiscal experts etc. All are predicated on the digital money fluxes going around. For them, keeping the money-go-round running has become a necessity of the job and of therefore life.
4. The mirror image is that state companies have a low profile, provide boring and badly paid jobs—which easily becomes a self-fulfilling prophecy, given also the much larger advertisement budgets of private companies. Hence, a real deterioration in the quality and commitment of public service personnel is happening. The market fundamentalists blame public companies for this while they actually are (at least partly) responsible for it.
5. All these trends tend to increase the [perception of] uncertainty which in turn induces a desire for quick money; become a millionaire before you are 35. Knowing that this is only possible for at most a few percent of each youth cohort, competition and economic warfare/jargon become the tune of the day.
6. A final interesting component of present-day lib&priv trends is the back-to-your-roots movement. Many regions, even within a small country such as the Netherlands, become more pronounced in expressing their ‘autonomy’ and demanding more control (read: jobs and money). Given that we have become so productive, ever more people have the time for non-professions such as politician, paid or unpaid.

This is not to say that lib&priv are bad or always insensible. My personal ‘theory’ has always been quite simple. Lib&priv—in one the Shell Planning brochures announced as *There Is No Alternative TINA*—make sense if there is a vested interest in a sector where deep innovations are coming onstream. In such a sector, the owner of fixed capital (for instance, of the public network of telephone, electricity, gas, water, railway) will suffer large losses if new innovations can bypass the network. They will tend to resist it or at least control the transition—sound business, practiced by all pri-

vate oligopolies in the world. This situation occurred in telecommunications with cellular phones, and lib&priv made sense. It may have been the best way to force large public telephone companies in Europe to accept competitors based on novel technologies. In the US, Bell had long ago been split because of monopolistic tendencies. In the provision of electricity, water or railway transport, there are no promising new options around the corner to compete. Hence, there are no fast profits to reap and risk capital will be suspicious and demanding. Secondly, any network is intricately related to spatial aspects of land use, which is why economists have introduced the notion of a ‘natural monopoly’ with many political ramifications. My conclusion is that such networks can best be governed on the basis of community, not stakeholder interests.

### **Telecommunications**

The telecommunications company KPN went to the stock market in the early 1990s. It has built up a multi-billion-Euro debt; shares plummeted within a year from 60 to 0.6 Euro. ‘Leading voices’ propose that the government—still owner of a large part of the now worthless shares—buys shares. Huge profits have been made by private (and largely foreign-based) competitors who won a significant market share with their mobile phone activities. But so did KPN. Then, all parties suffered huge losses in their blind competitive extrapolation of telecommunications business. Most disastrous is the US-based company UPC which has bought itself into various communication options, is now reputed for its bad and rude service, and has lost even more stock value than KPN. Over-all, telecommunications have penetrated the market at a staggering rate—and lib&priv has probably stimulated the process. The end of the story is not in sight. One may wonder, for instance, what will happen if the struggle for ‘content’ is won by Big Capital, further eroding the public television and radio system.

### **Electricity**

The lib&priv of the utilities has created huge conflicts among the various parties and the issue is not yet settled; lawsuits are going on. The utilities of Utrecht and Amsterdam have been sold to a Texas energy company—1300 guilders (600 Euro) for every citizen, cheered the local newspaper. The long-term strategic investments such as an advanced coal gasification plant had to be taken over by the government. Private capital does not want to invest in such strategic longer-term but riskfull undertakings. Discussions about the set-up for distribution, transmission and generation of electric power are renewed in parliament, partly because the California energy crisis somewhat tempered the market fundamentalists. In the meantime, I get advertisements from three different companies brochures to buy “100 % clean green electricity” at a marginally lower price than normal electricity be-

cause it is not taxed. However, there is no word about energy efficiency, which is a different branch within the company anyway.

## Transportation

The attempts to privatize public transport provide the saddest stories. Famous is the story of 3 years ago, in which a Chicago-based company bought via secret negotiations the public bus company in the city of Groningen and sold it, within a few months—forgetting promised obligations—to an British company who happened to already own most of the public transport in the region. As in Hungary, here too naïve civil servants (helped with the prospect of a doubling of salary) squandered family silver. As in Britain, here too the tendency of private companies is to prey upon each other until one survivor is left. Other municipalities have learned from the experience and have become much more cautious. More serious is the struggle about the national railway company NS. The company is not yet privatized but everything is being prepared for take-off, the main argument being that government subsidies should stop. Their service has gone down consistently, with now less than 80% of the train arriving in time, and with labour conflicts and strikes. I am not an expert, I just read the paper. A recent article was revealing. None of the 5 newly appointed CEOs (this heroic title is now also becoming familiar in the Netherlands)

comes to the office by train, as all former ones used to do. All of them but one have a background in accounting/finances—engineers have given way to financial experts. The status of on-the-train jobs has been declining, criminal behaviour in trains makes these jobs less attractive. Then a sequence of recent news:

- NS has made a profit: on selling snacks in their station shops.
- NS is globalizing; they bought a railway company in Poland.
- NS received less government subsidy than before. However, including the government subsidies for non-profitable tracks in low population-density regions, government support went up.

Recently, the minister has seen herself forced to retreat on earlier plans and demands. We now face the repair of years of mismanagement by both government and directors. NS already has problems finding good personnel. The psychological damage done may take the longest to recover from. So, dear friends in Central and Eastern Europe, I ask you seriously to consider carefully the role which liberalization and privatization can play. Government still has to play a role, despite all the present market fundamentalism. We all benefit from a balanced approach.

## DANA MEADOWS FELLOWSHIPS

### The Balaton Group Dana Meadows Fellowships, by Dennis Meadows

The Balaton Group is now looking for nominations of ten outstanding young activist-scholars, who can be supported for the next ten years as Dana Meadows Fellows. Candidates would typically be 20-30 years of age, female, and the citizen of some country outside North America and Western Europe. We have a special interest in the countries of Eastern Europe and the former Soviet Union. But the principle criteria are energy, intellect, dedication to the cause of equitable and sustainable global development, a record of success in communicating with and leading others to do good work, and the personality required for participation in our annual meetings. We are eager to consider any candidate who impresses even one of our members as having these characteristics.

Each fellow will be invited to attend at least three Balaton Group meetings over the coming decade. Each will be supported by two or three mentors from among the senior members of the Balaton Group. Each will

have access to a yearly stipend of around \$2000 to pay for expenses that are professionally useful. The goal is to support all the fellows in gaining personal mastery, political influence, and organizational power at the start of their careers.

The mentors will make an important contribution. Our existing members will volunteer for this role, 2 or 3 per Fellow. The mentors will be in frequent contact with their respective Fellows through e-mail, phone, and by personal meetings. The mentors will work to ensure that their Fellows are invited to key meetings and conferences, acquainted with important new publications, and considered for relevant jobs in the key international agencies. From time to time mentors might help the Fellows obtain advanced education. But we expect that Fellows will have completed their graduate education, before they are enlisted in our program. Where further training is useful, it would be in the form of short courses or workshops.

The initiative arises out of a tragedy and a success. The tragedy is the death last February of our co-founder, Donella Meadows. Donella was hailed by many leaders in the field as the greatest environmental writer in the 1990s. She was a MacArthur Fellow and a Pew Scholar. She wrote or co-authored nine books. Among them one was *The Limits to Growth*. That text was selected as one of the ten most important environmental books of the 20th century. She was nominated for a Pulitzer Prize and received many other honors.

The success is the Balaton Group's phenomenal record in taking its members, who were mainly students and young academics two decades ago, to levels of great influence within their respective countries and organizations. By building within its members trust, personal friendships, shared vision, a culture of group learning, and a habit of mutual support to achieve environmental goals, the Group has helped most of its members gain positions of power and influence within the environmental community and international organizations. The Group now includes many institute directors, senior professors, government officials, and prominent members of international research and advisory boards.

In January 2002 the Balaton Group will start its third decade as a world-wide network. It is the occasion for several new initiatives. Among them is this memorial to Donella Meadows. Through this fellowship we desire to create a process that will "pass the torch" to a new generation of leaders. About half of the Balaton Group members will reach retirement age in the coming decade. We want to pass on our knowledge, values, contacts, and prestige to a younger cohort. Bringing into the Balaton Group a set of outstanding young professionals, who are both activists and scholars will also reinvigorate our group. We expect to learn as much from them as we teach.

The Balaton Group Steering Committee will meet next in Zurich in late January. There we will consider initial nominations and identify 3-5 Fellows as participants in next year's meeting. We will be looking for people who have the skills, the intellect, the motivation, and the values to work for peace, equity, and sustainable development within their respective countries or among the international organizations.

We expect that Balaton Group members will be the best source of recommendations. However, to find suitable candidates for this program we will offer application forms to the best women participants in a number of existing leadership programs. A partial list of the programs we will work with includes:

- LEAD/International, which has a national

program in the CIS. Prof. Nikita Glazovsky, Program of LEAD/CIS is enthusiastic to work with us.

- The IIASA Young Scientists Program.
- The capacity building programs of the REC, under its new Director, Toni Popovski.
- The International Human Dimensions Programme on Global Environmental Change.

Of course our program will not compete with or supplant any of these valuable initiatives. We will pick outstanding graduates from these programs and provide them with an additional professional support over the coming decade.

The initial steps in the schedule for this program are:

11/01 - Announce the program, formulate a simple nomination form, and distribute packages of information to organizations that might recommend suitable candidates.

1/02 - Review the initial applications, identify 3-5 Fellows, assign mentors, and invite the fellows to the September '02 meeting.

9/02 - Conduct the 21st annual Balaton Group meeting, use that experience to refine the criteria and the procedures for the Fellowship.

4/03 - Identify the second 3-5 Fellows, assign their mentors, and arrange for them to participate in the 2003 Balaton Group meeting.

The Balaton Group has developed sustaining funding for its staff and central activities. So there will be no overhead levied against the Fellowship grants; the principal and interest will be fully expended on the Fellows.

This preliminary budget is based on the assumption that we will raise \$200,000, earn 5% annually on the unexpended balance, and spend all principal and interest on the Fellowship. Then we will have about \$25,000/year for this effort:

Many costs of the Fellows will be borne by their own organization, or by their mentors and by member centers of the Balaton Group. Our members collectively control annual budgets totaling well over \$50 million. Some funds will be available from these budgets to pay for costs of participation in meetings, for research projects, and for advanced training of the Donella Meadows Fellows.

To make a preliminary nomination for a Fellow, send Dennis Meadows the following six pieces of information:

1. Name, address, title, telephone number, and e-mail address of the nominee
2. Copy of a typical resume that lists birth date, education, and work experience.
3. One or two paragraphs describing why you think the Balaton Group and the Fellow would both benefit by our "adopting" this person into our program.
4. One or two paragraphs written by the nominee summarizing the goals and the strategy they have for the next decade of their professional work.
5. The names, addresses, titles, telephone numbers, and e-mail addresses of three professionals who have personal knowledge of the nominee. We'll contact them for an informal discussion about the nominee.
6. An explicit statement that the nominee would be available to participate at our expense in the Balaton Group meeting next September.

These nominations may be submitted anytime. Those which are received before January 15, 2002 will be considered at the next Steering Committee meeting.

### **Donella Meadows Fellows Program: a Feasibility Study,** by Hal Hamilton

Sustainability Institute has been given a grant to design and do a feasibility study for a Donella Meadows Fellows Program. The initial, draft concept is to endow a program that would give 2 or 3 fellows at a time full support for a two year program of work with Sustainability Institute and within their own institution. The goal is to increase the number of people, particularly women, with system dynamics and organizational learning skills. We at SI are hoping that these fellows might work closely with colleagues in the Balaton Group.

Hal Hamilton Sustainability Institute  
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## **THE IMPACT OF 11<sup>TH</sup> SEPTEMBER ON A SUSTAINABLE WORLD**

The terrorist attacks on New York and Washington on 11<sup>th</sup> September mark a point in modern history. Although we probably will never understand the full consequences of these attacks in terms of impact on our economic, political and social systems, most of us already agree that something has changed and that more changes are to come. Historians will have sufficient material for writing volumes of papers in the coming decades!

Many things have happened since September 11<sup>th</sup>. We mention two out of a long list.

From the beginning President Bush has had support for his war against the Taliban regime in Afghani-

stan from the EU member States and from many other countries. Sympathy for the innocent civilians killed in the USA and feelings of revenge dominated peoples minds and directed political actions. As time passes, information becomes available on the social and economic situation in Afghanistan, and the wisdom of using bombing strategies against terrorists is increasingly being questioned. Uneasiness grows as more and more innocent civilians are reported to fall victim in Afghanistan.

At first it was unacceptable to even hint about alternative strategies or to suggest analyzing why so many people hate the rich western countries so much that they are willing to commit suicide. Religious fundamental-

ism is probably only part of the explanation. Now more voices suggesting alternative strategies to combat terrorism are being heard.

In the wake of September 11, Western politicians voice the limitation of democratic rights in the name of terrorist warfare, perhaps more for short-term electorate success than for the wellbeing of society. The EU Member States are presently considering new laws with much stricter penalties for actions, which may be interpreted as terrorism – with an unclear and broad definition of terrorism. Opposition to this policy of restricting democratic rights is sometimes labeled as unreliable, sympathizing with the ‘enemy’, etc.

The irony of this situation is that such restrictions of democratic rights will not reduce the base of terrorism at all. On the contrary, it will encourage terrorists that a single act like the World Trade Center attack is enough to bring the western countries into such a state of panic that they are willing to give up basic democratic rights.

Thus, the first hours and days after the terrorist attack influenced the rules and conditions for political actions thereafter. An old-fashioned picture of the ‘enemy’ determines the counter-attack and encourages the President of the United States to proclaim that those who are not with us are against us.

An increasing number of people realize that the military actions in Afghanistan and the undemocratic political spin-offs are not going to solve the terrorist problem. Instead we should take the opportunity to focus upon answering the many questions facing us, such as what caused all this to happen and what is really needed to avoid such situations in future?

The papers published on the following pages of this Bulletin illustrate some aspects of the complex economic, political and social situation of the present day in an attempt to find answers.

Alan AtKisson seeks a solution in an unequalled effort to achieve national energy independence and energy sustainability. Andrew Jones and Elizabeth Sawin picture the trap of violence escalation and propose practical escape routes: understanding the long-trend dimension of the conflict and how our actions have supported

the current conflict situation. We received an article by Eric Rasmussen published in the RMI Newsletter of Oct 2001; it suggests working on justice and including environmental concerns in refugee camps if we want to achieve peace and sustainability.

Finally we reproduce a shortened version of an article by Jørgen Norgards article in the Danish newspaper ‘Information’ (April 5<sup>th</sup> 2001) that predicts what happened on September 11 and focuses on a more equitable distribution of wealth on our planet.

More facets of this complicated issue are important and await an open discussion:

- What is the role of the United Nations in reducing terrorism?
- What effort is needed to provide the poor in the world with a secure basis for existence?
- Are we doing the right things in international development programs?
- Are cultural differences sufficiently understood to prevent violence (did the USA really understand the Taliban messages)?
- If and when are military and political actions against other countries permitted under the umbrella of anti-terrorism, and who sets the rules for what?
- Are we not closing our eyes for alarming situations in our own countries such as differences in income, rightwing extremism, hidden payments to military action groups, etc.?

Sharing our thoughts and opinions on these and other questions, and discussing what we can learn from what has happened on the 11<sup>th</sup> September is a way forward towards a sustainable world. We invite you to send us your contributions reflecting your views, which will then be published in a special section of the next issue of the Bulletin.

All this can possibly be used as input to the Balaton working group – initiated by David Berry – that will prepare and discuss the Johannesburg Summit.

— The Editors

## THE NEW MANHATTAN PROJECT

Alan AtKisson

For most Americans, the terrible events of September 11 are still resonating vividly. Most people I talk to cannot imagine going out like they used to, shopping for fun, or planning a trip to Disneyland.

Most do not yet even want to be consoled.

Which is why the current headlines from the nation's leaders — urging people to shop, spend money, plan a vacation, get about the nation's business and, in a word, consume — ring terribly hollow.

What may not be so apparent to people living elsewhere in the world is the extent to which the attacks struck so many Americans directly, and personally. By the horrible global calculus of disaster, six thousand deaths is not so large a number. You have to add zeros to approach the loss-of-life figures in India or Central America, where natural disaster has recently killed on a larger scale. You have to add several zeros to approach the civilian death toll in the Jewish Holocaust, or at Hiroshima in 1945 (the product of something called, horribly enough, “the Manhattan Project”).

But the 6,000 lost on September 11 resonate far beyond their numbers. The United States of America is a highly mobile and interconnected place. People change jobs often, travel widely, and connect virtually with people all over the country. The whole notion of “six degrees of separation” — the idea that everyone is linked to everyone else by a chain of acquaintance that is never more than six people long — was born here. Frequently, that chain is really only about two people long.

Which means that an amazingly large number of people know someone who perished in the attacks, or know someone who knows someone. Usually several someones.

That personal sense of loss is triggering a great deal of mourning and serious reflection — as it should. Let the reflection continue, for as long as we need. There is much to think about.

One thing I find myself thinking about, more poignantly than ever, is the extent to which our national economy — indeed, our national identity — is dependent on consumption. That's partly why our leaders are exhorting us to “go spend money.” If we give in to depression, we don't spend money, and the economy grinds to a halt. So these are well-meaning encouragements, intended to get us moving again and to reduce the pain of an inevitable global recession.

But these calls to consume are also painfully ironic. Most of the consumption we are being asked to do — travel, buy cars, buy stuff in general — makes us increasingly dependent on foreign oil. And it was our dependence on oil from the Middle East that helped create the long, sad story of foreign policy entanglements, that gave birth to the resentments, that paved the way for a global terrorist conspiracy in the first place.

I am not blaming a monstrous act of terrorism on American consumption. Crimes against humanity are unpardonable. I am, however, calling attention to the geopolitical and economic vulnerability that our nation's consumption patterns — particularly our energy consumption patterns — have created. And since OPEC oil is expected to become an increasing percentage of total global oil production, that vulnerability will only increase in the future.

Unless we do something quite drastic.

As part of any comprehensive strategy for combating terrorism, we must now, finally, reinvent our energy policy. And not just American energy policy, but the energy policies of the entire industrialized world.

The goal must be national energy independence, and energy sustainability.

Let us create, in response to the events of September 11, a massive research and development project, the likes of which the world has never seen before. Let us pour every ounce of our scientific and technical expertise into developing the widest possible array of clean, safe, reliable energy sources.

No nuclear: in an era of terrorist threat, it makes no sense to increase the number of dangerous targets. Blow up a nuclear plant, and you kill thousands by methods immediate or slow, and contaminate a huge piece of earth for generations.

Instead, let us advance the hydrogen fuel cell, the solar panel, the wind turbine. Let us become the masters of energy efficiency. Let us find sources of energy we don't even know about yet. Let us solve the problems of global warming, energy dependence on the Middle East, and urban air quality, while creating a “New New Economy” that's based on something more tangible than websites.

Why not call the effort the “New Manhattan Project,” to redeem the terrible legacy of the last one,

and to memorialize the unwilling sacrifice made by 6,000 people, their loved ones, and the networks of people they knew.

Success would not erase the tragedy, or the loss. But it might at least bring, to the nation and the world, a little consolation.

*28 September, 2001, Find/Replace :A Weekly Column on Sustainability, Innovation, and Global Affairs. © 2001 by Alan AtKisson. Distributed by AtKisson, Inc. All rights reserved.*

## **DECLARE WAR ON ESCALATION**

### **Andrew Jones and Elizabeth Sawin**

Which came first, the violence or the retaliation? That is today's somber version of the old "chicken or the egg" riddle.

On September 11th, it sure felt like the violence came first. But while there is absolutely no legitimate justification for the despicable mass murders, the men who attacked the U.S. almost certainly saw their actions as retaliation for earlier violence. Osama bin Laden once offered his rationale: "The evidence overwhelmingly shows America and Israel killing the weaker men, women and children in the Muslim world and elsewhere." And why had we killed people in the Muslim world? Partly in response to earlier violence such as the bombings of the USS Cole and the U.S. embassies in Africa.

Now, with U.S. leaders offering rhetoric such as, "I say bomb the hell out of them. If there's collateral damage, so be it," [Senator Zell Miller, NY Times 9/13/01] the United States appears ready to answer retaliation with retaliation.

So, blame them? Blame us? No on both counts. While those who attacked us must be held accountable, laying blame for the repeated cycles of violence will not prevent similar tragedies in the future.

Blame makes sense in a world of straight lines, where any event has a clear, single cause. But in a world of circles and cycles, where retaliation causes violence which causes more retaliation, the idea of blame only distracts us from the real problem - all the players on both sides are deeply stuck in the trap called "escalation."

We have seen this trap before and elsewhere. In the Middle East with Israelis and Palestinians. In Ireland with Protestants and Catholics. In the exponential growth of nuclear weapons during the Cold War.

What can we do to break out of the escalation trap? Drawing from the field of system dynamics, which has

analyzed escalating systems from arms races to price wars, we offer three practical escape routes.

1. We can pay attention to the long-term trends.

If we respond to this attack in isolation, we doom ourselves to being solely reactive. We should see this event as the culmination of a long trend of violence on both sides of the conflict reaching back to the '79 Iranian hostage crisis, the Gulf War, various hijackings, and multiple military strikes. Looking beyond a tragedy as large as the catastrophes of last week is not easy, but we need to search for patterns and then for the root causes of those patterns.

2. We can ask ourselves how our actions have helped create the current situation.

If we see the recent attacks as random events or caused by evil, insanity, or religious fervor, our only solution is to exterminate everyone with violent tendencies towards the U.S., build our defenses, and hope for no more bad luck.

But we have an alternative. We can explore our role in the escalation cycle. This does not mean giving in to terrorists, but it does mean asking uncomfortable questions and not settling for simple answers.

For example, we all live with the presence of injustice and inequity in the world. But is it possible that the way we live contributes to the despair and desperation of others? Do we ask or allow our government to take actions that push people to follow extremists like bin Laden? Even asking if our own children's comfort is bought at such a price feels devastating. Perhaps a careful look will convince us that we are unconnected to the conditions that bred the attacks on the U.S. But, caught as we are in the dynamic of escalation, our security now depends on whether we have the courage to examine these tough questions.

3. We can focus on actions that de-escalate long-term conflict.

Conflicts carry a huge payload of momentum. Ramping down the tension feels like leaning your shoulder into the front of a slow-moving train - the momentum just brushes you aside. But the same mechanics that drive escalation - misunderstanding, aggression, blame - can be tipped in the opposite direction to de-escalate tensions via understanding, engagement, and respect. We can begin the long slow movement towards peace by demanding that those responsible for the recent attacks be brought to justice out of respect for the rule of law, not out of a reflexive demand for vengeance.

We must bring to justice the criminals who have killed innocent people in such staggering numbers. But we must do more than that. We must avoid accelerating the cycle of violence and ramp down the tensions that are the root-cause drivers of conflict. This will only be possible if large numbers of us are able to examine our impacts on the lives of people in the Arab world and explore our own impulse to retaliate.

If we can rise to this challenge we might see a new riddle emerge - which came first, the restraint or the peace?

*Andrew Jones and Elizabeth Sawin work with Sustainability Institute, ([sustainabilityinstitute.org](http://sustainabilityinstitute.org)) a think-do tank dedicated to sustainable economies, environment, and communities, based in Hartland, Vermont.*

## **SHAPING OUR RESPONSE: REFUGEE CAMPS AS A MODEL FOR SUSTAINABLE SETTLEMENT**

**Eric Rasmussen**

*(Eric Rasmussen is a US Navy physician. This is a shortened version of his article, written in October 2001, that appeared in the RMI Newsletter.)*

In February of 1994, Robert Kaplan wrote an article for the Atlantic Monthly entitled "The Coming Anarchy." That essay presented a clear and telling depiction of how scarcity, crime, overpopulation, tribalism, and disease were affecting the world's social fabric. The article also impressed President Clinton, and the general acclaim helped propel Kaplan into a book-length expansion entitled "The Ends of the Earth: A Journey to the Frontiers of Anarchy" (Atlantic Press, 1996).

That book remains very useful reading. It is a bleak story, in the main, but it contains knowledge we need to acquire if we're to understand the world formed since the loss of the other superpower. Fortunately, as a fleck of copper within the gray sand of the tale, there is a story late in the book that helps relieve the despair. It tells of the Rishi Valley, near Bangalore in India. Rishi's common cycle of poverty, degradation, and decline was arrested through unusual attention to husbanding local resources, restoring local hydrology, and educating the local community on the strengths and possibilities of their environment. The consequent transformation was remarkable and is serving as a model for restoration throughout southern India.

We once supported both the people of Afghanistan and those from elsewhere who rose in support of the Afghan opposition to the Soviets. We armed and trained those we thought might serve as a bulwark for us in

Central Asia, then we left them behind once our own ends had been met. We're now facing opponents in Afghanistan who once worked for us in that war, and the training we gave them created a formidable foe.

Understandably, many within Afghanistan are now worried about our response to the US attacks. Tonight they are moving as quickly as possible out of our way, crossing borders in every direction. The UN High Commissioner for Refugees estimates up to a million will flee into Pakistan, 400,000 into Iran, and thousands more across the northern borders into Uzbekistan and Tajikistan, all arriving before Thanksgiving. The needs of that mass of humanity pose a genuine threat to the security and stability of the surrounding nations, each of which was only marginally able to manage the basics for its own citizens even before this onslaught. Wouldn't it be useful to find ourselves able to ease that refugee burden and perhaps establish a foothold for a more sustainable society in those new camps?

However, before we make any decisions on that sustainable society we need to know more about the young and the poor in the wastelands of that region. We need this knowledge because violent young men have come from there to us and expressed their views about our society. They have done it with calculated and deliberate malice against the innocent and unsuspecting. Nearly 6000 died in a few hours, roughly equaling our

Vietnam dead in all of 1966. Nothing even remotely like this has ever happened in the West.

It now seems likely that Afghanistan is the geographical source of the violence visited upon us, although many Al Qaeda cells in many countries may share in the guilt. Afghanistan is a very unfortunate, though hardly surprising, location. Should the United States choose to take an equally violent retribution there, it will be visited upon a nation and a people already on the edge of the abyss.

Few of us know much about Afghanistan. Brief perspectives from the news fail to recognize the depth, complexity, intensity, and sophistication of a culture so completely outside our ken. We may feel anger at the events of September 11th, but for many of us it is tinged with a dispassionate respect for an enemy who can live unnoticed within a despised society for years while preparing for a complex suicide. These men attacked the most powerful nation in the world using blades designed to open cardboard boxes, succeeded in their attack to a degree almost beyond imagining, shook social and economic foundations globally, and may well have tipped the United States into a financial recession. Current figures show that, in the week after the attack, more than \$1.4 trillion was lost from the world's financial markets. This from a combination of cardboard box cutters and an unshakeable will. That "will" is a critical component in their success, and much of it is developed within a very limited educational system in the worst of circumstances. We in the West are only vaguely aware of Islamic schools. For many men in Afghanistan (women are excluded) those schools are now the only source of learning and advancement. Although the Taliban are not Afghan (and are viewed by many Afghans as unwelcome outsiders), they have forced on the native Afghans conformation to an extremist Islamic doctrine called Wahhabism. In the newly-established Islamic schools they teach the Wahhabi version of their faith, facets of which include the demonizing of us and of Israel, and the advocating of a self-sacrificing violence. Their doctrine and their opinions, in no sense excused, are shaped by the atrocities exchanged during the Soviet invasion of Afghanistan, by the brutality of the subsequent civil war, by the deaths of Palestinians in Israel, and by their daily life of violence, illiteracy, isolation, deprivation, and insecurity bred by poverty. They have continued to struggle in the face of environmental devastation and ever-dwindling resources having little but their faith to hold on to, and their belief system is deeper and more pervasive than almost anything we can understand.

We in the United States recently appeared to be embarked on a somewhat isolationist voyage, taking our own measure of global agreements that we thought might not be in the best interests of the United States,

and accepting participation with the world only if we thought it to our purpose. That is now altered significantly, and the Grand Coalition developing will probably force our cooperation globally in ways not envisaged on Inauguration Day 2001.

That change may be an opportunity. If we're now intending to cooperate with international partners toward common goals, a few rational humanitarians working in sustainable development could help that new cooperation move forward more effectively. And we would start with refugee camps. Thoughtful people with some experience in sustainable development can now describe better ways to develop a society, its communities, and its tools than we could ten years ago.

For transforming established communities we can learn from the successes in Curitiba, Brazil detailed in "Natural Capitalism". For the development of a community within challenging regions we have the examples of Gaviotas and the Rishi Valley. In describing ZERI, the Zero Emissions Research Initiative, we can demonstrate a superior method for efficient, sustainable, and profitable business practices in a dozen places around the world. Within the projects coordinated through Rocky Mountain Institute we can show thirty successes that optimized each location for the people it contained. Michael Hawley at MIT established schools in Cambodia that have stimulated even the youngest pupils to teach. John Todd's Living Systems produce fresh water from sewage. And, to help us understand what it takes to succeed in a harsh and unforgiving environment, we have Janine Benyus, unfolding the elegant and appropriate engineering used in nature in "Biomimicry" (William Morrow & Co, 1997).

There are other valuable people, many of them friends and colleagues, all willing and able to create something helpful out of utter waste. We should recognize, though, that while elegant solutions are often simple, they cannot be piecemeal. They should instead be complex, resilient, and integrated. The key, as described by Amory Lovins and Gunter Pauli, is a "whole systems" approach to development, including something as austere and forbidding as a refugee settlement. ZERI's concept of "concentric rings of utility", each using the waste products of a previous industry until there is no final waste at all, may be exactly the solution required when resources are scarce, the population is fragile, and the initial environment is unforgiving.

Now, more acutely than we had wanted, we find an opportunity to look carefully and well at the plight of a newly-displaced population. The Afghan refugee camps now needed on the Pakistani, Iranian, Tajik, and Turkmen borders are an ideal opportunity to establish sustainable settlements, providing tools and techniques that encourage the willing return of a refugee popula-

tion. In addition, if we can design a sustainable and reproducible way to meet the human needs of both the new arrivals and the prior occupants in the austere conditions of an ad-hoc refugee camp, the way that's done should also help billions of other people trying to create sustainable settlements where they already live. The discussion of how that might occur is already underway.

Global relief organizations have now acquired enough experience with refugee camps to discuss problems like cultural intelligence in detail. Those of us not directly involved in relief work, yet with a set of tools that might be useful to those agencies, need to learn how to integrate our assistance to them effectively. We can see, for example, methods by which ZERI and Natural Capitalism might form educational crucibles, introducing knowledge about sustainable self-sufficiency to those who need to start over. As the crisis eases and repatriation becomes possible, we would be able to help them return to their original homeland smarter than they left.

Should we succeed in developing such an international model, host nations may be less reluctant to offer refuge, and the pain suffered by all participants could be reduced. It would also ease the ongoing burden and expense on those countries and agencies taking responsibility for the displaced. To my knowledge, no attempt has been made to implement this degree of sustainable development within refugee camps forming in a crisis setting. The relief agencies have done extremely well in relieving urgent needs in the face of dwindling donor support, but their time and resources are limited. We

can, I think, bring to those agencies, and to the donor governments, some hope for a system that will become self-sustaining, providing the tools for creative growth needed by any community. We can help them with water provisioning and purification, novel and nutritious food crops, power production, cooking fuel, disease surveillance and response, effective sanitation from biological systems, educational models that work in remote environments, employment within the camps, food production, the development of non-violent communication skills, and longer-term job opportunities. And much of the effort can be designed using the people in the camp and the environment that surrounds them, decreasing their helplessness, frustration, and rage.

Current events have been disheartening. But we can harness that sorrow and frustration to stimulate a diverse assortment of intellects. Pushed by the images of brutality and waste and loss, we can turn our energy toward the development of a more just and equitable and sustainable society in a corner of the world that badly needs that opportunity. Martin Luther King said "If you want peace, work for justice", and there are few more stark examples of unjust inequality than the need for a refugee camp. Let us use our intelligence, our energy, our sense of fairness, and our newly-forming coalition to achieve a more worthy goal than simply using our military capability for retribution. I think a refugee camp designed and built as a sustainable system from the ground up might be a decent start, and the ripples would be beneficial across a large pool of the dispossessed throughout the world. If we are smart, and just a little compassionate, we will take this rare opportunity to quietly start another Renaissance.

## FOUR GOOD REASONS FOR MORE EQUITY IN THE WORLD

Jørgen Stig Norgard

*This article was first published in the Danish newspaper "Information", April 5<sup>th</sup> 2001.*

If we do realize that human's material expansions on the Earth are somehow constrained by nature's carrying capacity, I suggest four arguments for a more equitable distribution of the wealth. On the other hand, I have not been able to identify any valid arguments for the increasing inequity, which seems to characterize global as well as national developments.

I have termed my four arguments: "moral", "security", "economy", and "satiation". The latter is the most controversial since it is turning the present dominant policy upside down.

### Moral Argument

Economics as a scientific discipline is said to have developed from ethics and moral. Nevertheless, eco-

nomics of today is so dominated by mathematics, that moral support from that quarter cannot be expected. Some even suggest that economics and moral must be kept apart. Politically we must therefore count on the elected representatives when considering moral. But rather than regulating the market in a democratic way, politicians often tend to flee the moral responsibility by letting themselves and the development be controlled by the market. The high emphasis on international competition and continued economic growth corrodes the moral basis.

Recognition of the physical limitations of the Earth ought to strengthen the moral demand for a more equitable distribution of global resource utilization and pollution. The liberal thesis that each individual should have the freedom to develop his own potentials as long as it

does not reduce other people's options to do so, has acquired a new meaning. When I burn one liter of oil, I do reduce other people's use of oil as well as their environmental space to release carbon dioxide.

TV confronts us with starving people, but we repress these pictures. The thought that our excess consumption in one way or another is taken from the mouth of these people might well be true, as the case with the oil shows, but it is unbearable. We are seduced by the politicians' claims, that only by increasing our consumption shall we be able to help suffering people! Actually, the economic structure *can* be twisted in such an immoral way, that this somehow becomes the result. This is especially possible when the affluent countries settle the rules for trade and economics.

Up through the 1900s the Scandinavian countries have established a relatively high internal equity concerning income, education, social welfare, etc. This distribution where "few have too much and fewer too little", as it says in a Danish song, is build on the principle that we cannot in decency accept deep poverty, and that affluent wealth is unsavory. Today, however, the Danes burden the environment much more than required for a good life. We, and in particularly our politicians, should from a moral point of view aim at more equity among the Danish citizens as well as with our fellow global citizens.

### Security Argument

Fear of social unrest has within nations always been decisive for a reasonable equity. Strikes have been one of the milder forms of protests against inequities, and violent conflicts have been rather rare in Denmark. Our politicians seem to have been morally on the leading edge of the development towards greater equity. USA, on the other hand, has run the inequity closer to the brink of violence, as expressed in riots and high crime rates.

Globally there is a risk of conflicts too, if inequity between rich and poor countries increases. Since militarily the rich countries are superior in "legal" warfare, it is more likely, that the inequity results in terrorist's "illegal" war against the rich countries, for instance in the form of suicidal actions. [*Italicized after 11. September 2001, jsn*].

Finally, Europe is under the threat of massive illegal immigration of Asians and Africans, claiming part of the Earth's wealth. This threat is already part of the political agenda. For our own safety, we should increase equity by assisting the millions of citizens in our neighboring countries on the spot where they live, rather than risking their illegal immigration.

These threats of physical assaults constitute an essential reason for a more equitable distribution of wealth, both globally and nationally, although this selfish argument is not the most flattering.

### Economic Argument

With growing wealth the marginal benefit decreases. A family with 20 square meters of floor space will benefit more from another 10 square meters than will a family, which is already in charge of 200 square meters. The real utility of the second car, coat, washing machine, house, etc. will always be lower than that of the first one.

Let us make the reasonable assumption that the aim is economizing, in the sense of striving for an economy, which provides the largest total utility for the society as a whole from the resources available. In that case, a more equitable distribution could contribute substantially. If, for instance a rich person could do with one global travel less, this could make it economically and environmentally possible to supply some years of healthy food to a family in a poor country.

### Satiation Argument

A more equitable distribution of income, work, etc. would promote an economic satiation. As a consequence, further expansion in production and consumption per capita could come to a halt, with the associated environmental benefits. More equity curbs people's enthusiasm to make an extra effort to earn for an increased over-consumption.

Human needs can be divided into two categories. *Absolute or basic needs* for food, shelter, and other necessities for life do not depend on how much one's friends and neighbors have got. Also, these needs are at some level of consumption sufficiently satisfied – people are satiated. In a country like Denmark, that level is abundantly reached for the average citizen. On the other side are the *relative needs*, which are driving people to buy fancier cars, bigger houses, longer travels, exclusive food, fashion dresses, etc. The relative needs are insatiable, and they are based on what other people have already acquired, in an endless race, and with inequity as the driving force.

Economic satiation in affluent societies would obviously be a blessing in a world with limited resources and a billion people lacking the most basic necessities. And it would be a gift for an environmental conscious and democratic government, striving towards a sustainable development with happy and satisfied citizens. Per definition, economic satiation does imply economical satisfaction. Imagine, if in the real world it is actually

not the consumers' insatiable greed that is forcing industry to pollute and utilize the Earth's scarce resources at a furious pace. In fact, opinion surveys, labor conflicts, and leave of absent schemes, have for years indicated the Danes' preference for more leisure over more consumption. And these preferences are not built on people's awareness of the environmental advantages from a satiation, but rather on their wish for a better daily life. The trends are more prevailing in the North-European countries, which are already enjoying a high standard of living as well as a relatively equal distribution of wealth.

Satiation would no doubt have occurred long ago, had it not been for the vigorous counter attacks from politicians and businesses in the form of increased advertisement, longer shopping hours, electronic payments, etc.

### Reconsidering GDP and Work

We are indoctrinated through the press and politicians to believe that it is a good sign if Gross Domestic Product, GDP, increases. In Denmark today, however, this arithmetic number is a very poor expression of real improvements, and when introduced it was never meant to be. Buy and chuck out will, for instance, increase GDP. The same is the case with treating illnesses in hospitals, fighting crime, and cleaning up after accidents, which means that the more of this kind of troubles the better for GDP. On the other hand, positive developments like for instance more time with family, reduced use of energy, and shorter distances to work, all pull down the GDP.

If GDP is corrected for some of the most absurd contributions, which some researchers have already done, it turns out that over the recent 30 – 40 years, the *real economic welfare* in USA has declined, despite of – or because of – strong growth in GDP. Such corrected indicators are, however, far from perfect to measure quality of life, but they do reveal the most serious reasons for not aiming for growth in GDP in rich countries like Denmark.

Some groups choose to ignore the trends towards satiation, because it is contrary to their own plans. And since these groups typically include people with a large saying in society, we do not hear much about the possibility of a satiation. But in a well functioning democracy it should be possible to establish the satiation so desperately needed.

What then could be done to promote an economic satiation in an affluent country like Denmark? Economists and politicians actually know very well what could help, for instance more equity. They know that, because for long they have used this measure, just turned upside

down. Besides the counter attacks mentioned, with more advertisement, longer shopping hours, etc., inequity is an important measure to *prevent* satiation and maintain steady growth in GDP. In Denmark, politicians are watching their steps on suggesting more inequity. But already in 1983, OECD actually pointed out to Denmark, that a larger gap in incomes would be desirable for the sake of growth in GDP.

Politicians' eternal demand for an expanding GDP is based on two arguments, both closely related to the issue of distribution. Firstly, increased production can "generate jobs", probably one of the most insane goals ever created in our Western civilization. The alternative of sharing the work to be done is rarely considered. A second argument is that the growth will increase the pie to be shared. When everybody can have an extra bite of the pie, it is less troublesome to maintain the inequities in income and work, since politicians can escape taking from the privileged. Hence, growth in GDP is perceived as necessary in order to maintain inequities, and on the other hand the inequities in affluent countries seems necessary to drive the growth. Inequity and GDP-growth bite each other's tails in a circle, getting ever more viscous to humans and the environment.

The key to a development, which is environmentally sustainable for all of us, lies in achieving satiation. This should be encouraged to occur gradually in the various countries, as they reach an appropriate level of material welfare, starting out in affluent countries like Denmark. Here satiation could be promoted by more equal distribution within the country's borders. How far to go in equity should be a question of finding the appropriate balance between an *inequity*, sufficient to give the incentive necessary to provide the goods wanted, and an *equity* mitigating the greed for affluence. There really is no reason to allow a small insatiable minority to ruin our common environment.

With more equity, people in general could be satisfied with an environmentally responsible consumption, if in return they were offered other improvements like more freedom and more time together with family and friends. This satisfaction can never be reached with eternal growth, which just build on eternal dissatisfaction. Obviously, the society should maintain a certain dynamic in the economy, aiming at continuously improving the living conditions, including the environment. This should, however, be without the yoke of claims for eternal growth in economic activities. Contrary to what many politicians try to convince us, as well as themselves, about, the environmental problems are inextricably bound up with the economic activities, since they are the origin of the problems.

Moral, safety and economizing have always been good arguments for a redistribution of the Earth's goods.

But they have been kept in check by a claim for an inequity to drive the growth in GDP. Today's environmental constraints are quite perceptible, and so are the signs of a possibility for an economic satiation in the affluent parts of the world. On this background, it is hard in decency to insist on expanding the GDP. This recognition could eliminate the last argument against more equity.

Europeans can easily afford to behave decently, both nationally and internationally. The only barrier for more equity is now the narrow and shortsighted selfishness, which the growth manic societies have cultivated so industriously over the recent decades.

## **COMMUNITY FARMS IN THE 21ST CENTURY: OUTSIDE THE BOX, BUT INSIDE THE HOOP**

**Steven McFadden**

*Note from the author: This is an abstract for a paper on CSA farms that I updated over the summer. While it does not explicitly include the context established by the terrorist attacks on 9/11/01, I know it is still urgently relevant. If you are interested in reviewing the entire paper (8 pages, plus references), you can find it at this link on my homepage <http://www.chiron-communications.com/farms-2.html>.*

Without government or outside support, and in the face of an ongoing 20\_year tide of general decline for small farms, the CSA (Community Supported Agriculture) movement has been inaugurated over the last 15 years in North America, and has grown at a moderate rate to involve as many as 1,200 farms, and over 120,000 households. Many thousands more CSA farms have taken root in other nations from Europe and Japan to Australia.

CSA farms represent new economic, ecological, and social approaches to agriculture. Since the CSA form is inherently adaptable to local resources, needs and choices, it has developed many variations. More variation and innovation is likely in the years ahead.

CSA is not just another new marketing approach. Rather, it is about the necessary renewal of agriculture through its healthy linkage with the human communities that depend upon farming for survival. CSA fosters coherent and positive links between agriculture and communities, including urban, suburban and rural neighborhoods, churches and schools.

In the years ahead many thousands more CSA farms will likely arise on North America, and elsewhere in the world. What will motivate them? What will make them possible? What agricultural, environmental, social, and educational benefits might they convey?

CSA implicitly embodies the original North American (Turtle Island) social and environmental ethos < the native American concept of the Sacred Hoop that embraces and connects all facets of life. The leading edge of both physics and mathematics apparently validate this worldview, especially through Superstrings and Chaos theory. CSA farms employ rhetoric different than from that used by either physicists or Native American elders, but these farms take a practical approach in close correspondence with Native philosophy and the supporting science.

Thus, while the CSA approach may be “out of the box” of conventional agriculture, it is clearly “in the hoop” of the indigenous approach to food, land, and community, and thus also in the hoop of contemporary scientific understandings about the nature of our world. Because of this, CSA appears poised to continue growing in the immediate future, albeit gradually. But in the century ahead, why not 150,000 CSA farms in North America, or more? Why not millions of shareholder families? Why not at least one CSA farm in every city, suburb and town? The proven benefits could help renew and revitalize the foundation of communities and farms from North to South, and East to West. By extension, CSA could also help serve as a basis for renewal of the larger human relationship with the earth.

## ANNOUNCEMENTS

### Steering Committee of the Balaton Group

Below is a list of the members of the BG Steering Committee. The Committee will be planning the next annual meeting and welcome suggestions for subjects to be discussed.

*ex officio members:*

Dennis Meadows -  
dmeadows@cisunix.unh.edu  
Joan Davis - davis@eawag.ch

*term expires in 2002:*

Zoltán Lontay - lontay@egi.hu  
Gillian Martin Mehers - gillian@lead.org

*term expires in 2003:*

Aromar Revi - arevi@taru.org  
Nanda Gilden - n.gilden@planet.nl

*term expires in 2004:*

Wim Hafkamp - hafkamp@fsw.eur.nl  
Jeel Ezzine - jeel.ezzine@ieee.org

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### Dana Meadows Fellowship

If you have recommendations for candidates for the Dana Meadows Fellowship, please send the Steering Committee information on the potential fellow: a bio and one-page summary of where he or she would like

to be ten years from now. (Please, see details on pages 23 and 24.) The Steering Committee will meet 25-28 January in Zurich, so please send comments as soon as possible.

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### Balaton Bulletin

Since Dana Meadows' withdraw from editing the Balaton Bulletin, Niels Meyer and Nanda Gilden have been co-editors of the Bulletin. After two years, Niels retired from this job at the end of the year and Gillian Martin Mehers will be the new co-editor with Nanda. Thanks to Niels for all his work for the Bulletin and welcome to Gillian!

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### Energy and Biodiversity Initiative

The Conservation of Biodiversity is by many considered as being one of the corner stones of sustainable development: if we fail on the preservation of biological diversity on our planet, we fail on our efforts to change our world into a more sustainable one!

Therefore the initiative described below should be welcomed as an important step. The Centre for Environmental Leadership in Business (CELB) at Conservation International launched an initiative known as the Energy and Biodiversity Initiative (EBI). It involves five international conservation organizations working in close co-operation with five major energy companies to integrate the objective of biodiversity conservation into oil and gas development and transmission. The Initiative seeks to be a positive force for biodiversity conservation by bringing together leading energy companies and conservation organizations to share experiences

and build on intellectual capital to create value and influence key audiences.

The companies participating in the EBI are BP, Chevron, Enron, Shell and Statoil, while the conservation organizations involved are Conservation International (CI), the World Conservation Union (IUCN), Fauna and Flora International (FFI), The Nature Conservancy (TNC) and the Smithsonian Institution.

The two-year initiative began in January of this year, with a consensus-building and planning meeting in London, England. Since then the group has met twice in its entirety. In between meetings, individual initiative participants are collaborating in four separate working groups to develop specific recommended practices based on four different topic areas:

- The Business Case: the rationale for integrating biodiversity conservation into oil and gas operations;
- Best Practices: identification and implementation of on-the-ground best technical and management practices;
- Impact Measurement: metrics and performance indicators for measuring the positive and negative impact of oil and gas development on biodiversity; and
- Site Selection: criteria for deciding whether to undertake activities in ecologically sensitive environments.

To ensure that this initiative proceeds with input and feedback from key stakeholder groups from all sectors interested in the oil and gas industry and conservation, each working group consults with various parties throughout the two-year life of the initiative.

For more information, contact:

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<http://www.conservation.org/>

## NEWS FROM THE MEMBERS

### News from **Joe Alcamo**:

A few words on what I have been up to — I spent September 2000 to April 2001 with my family in California where I was a Visiting Professor at Stanford. Besides teaching my kids how to play baseball (and understand “the Simpsons”) I finished 3/4 of the manuscript of a book called “Our Thirsty Future: Scenarios of Scarcity or Surplus” (on global water scarcity). Now I am trying to find the time to finish the manuscript between the many, many research projects going here at the Centre for Environmental Systems Research on the global and European environment. One of the ones I find most interesting is a project with fellow Balaton colleague Genady Golubev and his colleagues at Moscow State University on “Global environmental change and its threat to food and water security in Russia”.

By the way, an item that may be of interest to our younger colleagues in the Balaton Group — Some colleagues at the University of Hamburg and I have just received support from the Max Planck Society to found a “Max Planck International School in Earth Systems Modelling” (associated with the Universities of Kassel and Hamburg) and we are now looking for top-notch doctoral students. Students would have a unique chance to study and work with some of the most exciting groups in Europe doing modelling of the global environment, and would even get paid for it! Anyone interested should contact me.

\* \* \*

**Dimitri Kavtaradze** sends word of a Russian Presidential award:

A Russian newspaper published President V. Putin’s “Awards on Education”. Among “other personalities” that became nominees of the Presidential award (a new mode of “Stalinskay Premiay”), careful readers can find the names of **Gennady Yagodin, Natasha Tarasova** and **Dimitri Kavtaradze**... for developing educational materials on systems training for sustainable development and scientific principles, and for implementation in the Russian Federation of education for sustainable development”.

In this award, there is recognizable piece of your love, support and sharing wisdom! Balaton’s World (Csopak and e-mail) was constant and was a serious support in our minds and experiences “travelling”. Thank you and all Balatoners.

Hope that some day we will open Champaign to celebrate it!

\* \* \*

Here are some short personal notes from **Dr. Li Wenhua** to Dennis Meadows. Dr. Li participated in the 1985 BG meeting, and he brought to the meeting Qi Wenhua, who has become a regular participant.

I was delighted to receive your letter and learnt that the Balaton Group is still active well.

Because there is no retirement age for the academic in China, I am still work in the Chinese Academy of Sciences.

Recently, I went to South Asia for evaluation of the five years research work of the International Center for

Integrated Mountain Development for one month followed by the participation of the Open Conference held in Amsterdam.

\* \* \*

Some notes of **Steven McFadden**:

World leaders talk steadily of a long and costly war against terrorism. Estimates of the duration run from 4 to 20 years and beyond.

If we take these avowed pronouncements at face value, then we must also wonder what our world will look like at the end of this global eruption. I believe that if we envision it, and direct our strength toward it, in the midst of this war the people of the world can work steadily and effectively towards a sustainable future.

Specifically, if enough citizens around the world pay respectful attention to the foundation of civilization - agriculture - then we can in a fundamental way help shift the direction the world is rushing toward.

Similarly to the way Dana saw it, I also believe that Community Supported Agriculture (CSA) has the potential to be an important part of this shift. It has the potential to provide extra security, and oases of vibrant environmental and social health. The vast corporate-industrial farms that now dominate the global food supply are vulnerable to terrorism. They are vulnerable in a way that local, ecologically sound farms — supported directly by local households — will never be.

Pax Vobiscum, Steven

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The European Engineering Association (SEFI) has awarded the Leonardo da Vinci Medal for 2001 to **Niels Meyer**.

The statutes of SEFI states about the medal: *The Medal is the highest distinction SEFI can bestow. It is awarded by SEFI to living persons who have made an outstanding contribution of international significance to engineering education.*

The award ceremony took place at the Technical University of Denmark in Copenhagen on September 12 (in the shadow of WTC) in connection with SEFI's yearly international conference. The nomination focused on Niels Meyer's "great contribution to bringing social studies and social engagement into the curriculum and behavior of both students and researchers".

The first Leonardo da Vinci medal was awarded in 1983 to the previous chairman of the EU Commission

Jacques Delors. Niels Meyer has assured that he shall not follow in the footsteps of Delors.

\* \* \*

This news is from **Qi Wenhui**, sent before the last Balaton Group meeting:

Thank you very much for your invitation to attend the BG meeting of 2001. I understand there will be great days of the 20th anniversary of Balaton Group. I am so sorry I can not join you to celebrate this year, and have our usual discussion.

Tomorrow I'll join a delegation of Chinese Academy of Engineering to visit US NAS and NAE to exchange and discuss the potential co-operation on water resource sustainable use. We completed a strategic study on China's water resources use towards sustainable development, with a team of Chinese Academy of Engineering.

Now we are focusing our study in the west region, especially the arid and semi-arid area of China. Besides we'll meet people in Washington, DC, our visit will focus on the arid area in California. This visit will last to the end of this year.

I was travelling in Xinjiang, ranging between desert and oases, for over a month. That is a part of our study on the rational water use in artificial oases and to protecting natural oases in that area.

I am so sorry that Dana could not attend this important meeting, seeing the great achievement of BG in the last twenty years, and planning our future. I wish she would be able to be aware of all of our progresses, and doing with us.

Please convey my congratulations to all friends. I hope to keep in touch with BG forever.

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News from **Jorje Zalles**:

I recently accepted a position as International Education Coordinator at Hawk Mountain Sanctuary, in southeastern Pennsylvania, USA ([www.hawkmountain.org](http://www.hawkmountain.org)). Unforeseen circumstances led to a postponement in my plans to establish "Holistica," a non-profit center for biodiversity and sustainable development research in Ecuador.

I am currently working on paleo-ecology as a means to visualize the fate of present biodiversity given global climate change and variability. My work focuses on bird distributions during the Quaternary, specifically, the evolution of complete migration in American hawks, and the development of montane bird communities in the Ecuadorian Andes.

My wife, Ana, and I would love to have you over should you wish a refreshing dose of central Appalachian nature walks. My new address is 1700 Hawk Mountain Road, Kempton, PA 19529. My office phone is (610) 756-6961. I can be reached at [zalles@hawkmountain.org](mailto:zalles@hawkmountain.org).

*Un fuerte abrazo a todos.*