

THE BALATON BULLETIN

**Newsletter of
The Balaton Group**

May 1993

Contents

THE 1993 ANNUAL MEETING.....	2
The Whole Balaton Catalog.....	2
Comments on the Trade Jargon by Laszlo Lovei.....	3
A RECENT HISTORY OF WORLD CURRENCY	
The Global Funny Money Game by Howard M. Wachtel.....	4
FREE TRADE -- YES, BUT IN A NEW FORM	
The Global Firm, R.I.P. by <i>The Economist</i>	8
FREE TRADE -- NO	
The Masters of Mankind by Noam Chomsky.....	9
FREE TRADE -- MAYBE	
Freer Trade, A Greener Continent by U.S. Senator Max Baucus.....	12
Report from Kyoto by John Peet.....	14
Better Toilets, Fewer Dams by Drew Jones.....	17
A Report from Sustainable Seattle by Alan AtKisson.....	19
Announcements.....	20
News from the Members.....	22

The 1993 Annual Meeting

The 1993 Annual Meeting of the Balaton Group will begin on Friday, August 27. As usual, we will assemble in Budapest. For those who arrive before August 27, we expect that rooms will again be available for our use in one of the dorms of the Budapest University of Economics. Our bus to Lake Balaton will leave after lunch. The opening session will start that evening in the Hotel Petrol in Csopak. The meeting will conclude just after lunch on Wednesday, September 1, so the bus can return to Budapest in time for late afternoon planes and trains.

The theme of the morning plenary sessions will be Trade, Development, and the Environment. Confirmed or semi-confirmed speakers as of this writing, with tentative presentation titles, are:

Peter Allen, International Ecotechnology Research Center, Cranfield Institute of Technology, "World Trade as a Self-Organizing System."

Bob Costanza, Center for Environmental and Estuarine Studies, University of Maryland, "How the International Trade System Should Work."

Herman Daly, World Bank, "Balanced Trade."

Faye Duchin, Institute for Economic Analysis, New York University, "An Input-Output Approach to Understanding the Trade System."

David Korten, People-Centered Development Forum, "The Problems of Free Trade."

Liz Kraemer, private consultant for international banks, "The Mental Models of Bankers and Traders."

Niels Meyer, Technical University of Denmark, "A White Paper for a New European Trade System."

Chirapol Sintunawa, Faculty of Environment and Resource Studies, Mahidol University, "The Effect of International Capital on the Development and Environment of Thailand."

Konrad von Moltke, Conservation Foundation, Washington DC, and Environmental Studies Program, Dartmouth College, "How Environmentalists Can Use the Trade Issue to Promote Sustainability."

We are in various stages of negotiation with other stellar speakers, as yet unconfirmed.

If you would like to attend, please fill out the enclosed application form and return it to Betty Miller before June 1. As always, space and funds are limited. As always, we will do our best to allocate scarce resources fairly, through a complicated distributional formula that looks a lot like "first come, first served."

The Whole Balaton Catalog

You will find with this *Bulletin* a draft compilation of your answers to the questionnaire we sent out with our last issue. It's still very incomplete, but it's already a cheery document, because it shows how many good people around the world are working in ingenious ways for sustainability, sufficiency, and equity. It's a tribute to our own diversity!

So that we can have a final version of this document by the August meeting, would you please:

- send us a questionnaire if you haven't already,
- read your own entry, if you have already sent a questionnaire, and check to see that we deciphered your handwriting correctly, that we have your vital statistics right, and that there's nothing more you want to add.

Additions and corrections to *The Whole Balaton Catalog* will be accepted up to July 1.

Comments on the Trade Jargon

(**Laszlo Lovei** of the World Bank sent the following corrections and extensions to the "Guide to the Jargon" section of the last *Balaton Bulletin*. He writes, "Since this is my last day in the office before going on mission to Belarus and Ukraine, these comments are somewhat short and hasty.")

Disclaimer (This is needed to please the Bank's external relations officers and lawyers.) The following comments reflect the author's personal opinion only. The fact that he does not comment on certain parts of the text does not imply the endorsement of those sections either by the author or the World Bank.

World Bank: You are right, the cost (in terms of preparation and processing) of an additional dollar provided to a country within one lending operation decreases as the number of dollars increases, so the Bank tries to avoid small projects in large economies. However, the size of Bank loans has to be in proportion to the size of the economies we are dealing with. A large number of small countries are members of the Bank, and we are obliged to be responsive to their needs. So the Bank prepares many small loans (even less than \$10 million).

The Bank is a multidisciplinary institution. I really do not think the number of ecologists is a good indicator. There were many staff in the Bank (sanitary engineers, environmental engineers, anthropologists, natural resource economists) who were committed to the environment even in the past, however their voices were weaker than they are now. Incidentally, how many ecologists attended the very first meeting of the Balaton Group?

Staff responsible for reviewing the environmental impact of Bank projects do have the authority to send projects back to the drawing board.

IMF: I believe your description of the IMF missed the point. Although I am not the most knowledgeable source on the matter, I would like to point out that:

- IMF steps in with a loan (with much shorter maturity than a World Bank loan) when a country needs balance-of-payments support and when it finds the country's macroeconomic (monetary and fiscal) policies acceptable.
- Sometimes, as in the case of runaway inflation or unsustainable budget or trade deficits, severe measures are needed to restore macroeconomic balances.
- The standard measures to get an IMF "standby" loan -- reduction of the fiscal deficit, reduced monetary expansion (less credit and less printing of money), devaluation -- can also help the poor. Low-income farmers and daily agricultural laborers, for example, usually benefit from devaluation, because it helps the industries producing tradeables such as agricultural goods, and hurts those which produce non-tradable goods, such as services. Many export items, such as cocoa, have a "world market price" expressed in dollars, so devaluation will increase the amount of domestic currency producers receive for the export (or for a product that substitutes for import).
- I have never heard of the IMF or the World Bank requiring export subsidies. In fact, because IMF people worry a lot about fiscal deficits, they seldom like subsidies. Devaluation stimulates exports better than subsidies do.

A RECENT HISTORY OF WORLD CURRENCY **The Global Funny Money Game**

(Excerpted from an article by Howard M. Wachtel, published in *The Nation*, December 26, 1987 -- shortly after a worldwide stock market crash.)

The October stock market crash was a symptom of the global economic changes unleashed by the free-market fantasies of Ronald Reagan, Margaret Thatcher, and

Helmut Kohl. The world's economic environment has been transformed by a powerful wave of globalization, privatization, and deregulation of capital. Now we must come to terms with the fact that we live in an integrated private global economy, knitted together by unregulated financial and commercial establishments using new information and communications technologies. While government and public policy remain confined to national boundaries, the new supranational economic order recognizes no geographic borders for its financial and commercial activities. Money is moved with the press of a button on a computer console and bounced off communications satellites, leapfrogging national borders.

Starting in 1975 the movement of money replaced the production of commodities at the commanding heights of the world economy, creating a new breed of money mandarins operating in a financial rather than productive culture. Epitomizing the new breed was James Roderick, who, upon ascending to the chair of U.S. Steel in 1979, said, "The duty of management is to make money. Our primary objective is not to make steel." True to his words, in 1986 Roderick abandoned the proud name of his company and changed it to USX. The new name was taken from the company's identification on Wall Street's stock ticker.

The origins of the new global economy can be traced back to 1973, when the major industrial governments, led by the United States, abandoned the postwar Bretton Woods system. Created in July 1944, the Bretton Woods system had placed governments squarely in the center of regulating international money, principally through the mechanism of stabilizing currency exchange rates within narrow and publicized ranges -- a fluctuation of no more than 1 percent above or below the official rate.

A fall in a country's currency exchange rate can occur as a result of the following sequence of events: If the sum total of all moneys leaving a country exceeds the sums coming in, a balance-of-payments problem arises. This can trigger a drop in the value of that country's money in the international economy, because the demand for the country's money in the world does not keep pace with its supply. When this happened under Bretton Woods, several steps could be taken: central bank intervention could increase demand for the currency in trouble; or devaluation of the currency could change the official rate of exchange to bring it into line with the market rate. If the country whose currency was too abundant could not correct its imbalances by these means, then it would be forced to buy back some of its currency by transferring gold in exchange.

The United States, which had about 75 percent of the world's gold supply after the war, underwrote this arrangement, and the dollar became the pre-eminent currency in the world economy -- literally as good as gold. For a quarter-century, the Bretton Woods system contributed to robust economic growth in the industrial democracies in

large part because of the predictability associated with the fixed exchange rate system. The foundations of the system began to weaken in the 1960s. The problem began with massive capital flows out of the United States as a result of Marshall Plan aid and foreign investment by new multinationally oriented American corporations. Washington could not indefinitely provide the gold backing needed to support the dollar. When Richard Nixon was elected president in 1968, U.S. gold stocks were about half what they had been in 1950. In August 1971 Nixon unilaterally took the United States off the gold standard and opened a new chapter in international finance.

Currencies around the world were free to find their own rates of exchange on a day to day, hour to hour basis. With governments removed from direct financial management, the money center banks -- Citibank, Chase Manhattan, and about two dozen other large banks around the world -- accelerated the development of their own nascent private monetary system. This system was organized around Eurodollars, a name that originally meant dollar deposits in bank branches in Europe, but now simply refers to dollars that circulate outside the United States, which are used for world trade.

American banks are required to set aside 20 cents as a reserve for every dollar deposited with them (and subsequently loaned back out) inside the United States. Eurodollar accounts are not subject to such reserve set-asides. The full dollar can be loaned out, raising the theoretical possibility of unlimited dollar creation. The total value of Eurodollars in circulation has grown at a rate of about 25 percent a year since the mid-70s, compared with a growth in real trade of only 4 percent annually, and a growth in the total number of dollars in the U.S. of only 10 percent a year. Starting from a base of about \$50 billion in 1973, the "stateless" Eurodollar system today is approaching \$2 trillion, almost as large as the domestic monetary system of the United States. It is as if we have been transported back to an earlier century, when private bank money operated around and in spite of government.

This expatriate currency mushroomed largely as a result of enormous dollar surpluses earned on oil sales by OPEC countries between 1974 and 1981; about \$375 billion more than they spent in the rest of the world. The money was placed in large-denomination certificates of deposit in offshore banking sanctuaries such as the Cayman Islands in order to provide protection against seizure, regulation, and taxation. But this was only a bookkeeping fiction. In reality, the funds became part of the Eurodollar system.

Having received these deposits, the money center banks sought borrowers who could be charged enough interest to earn the banks a profit. The banks first moved Eurodollars into Third World countries, saddling them with a \$1 trillion debt by the end of 1986, compared to less than \$100 billion in 1973. Instead of supporting new productive investment, a large portion of this debt went into luxury consumption. Over \$200 billion disappeared through capital flight back to the industrial countries. In

1982, after Mexico and other large Latin American borrowers effectively defaulted on loan servicing, Eurodollars were shifted into funding the U.S. budget deficit, into mergers and acquisitions, and finally into the U.S. stock market. Very little of this huge flow of funds went into investments that expanded production.

By the end of the 1970s privatized money that was operating in a deregulated international environment through money center banks began to take advantage of the enhanced sophistication of computer and information technologies to globalize the world's financial system. The convergence of these three trends -- deregulation, privatization, and globalization -- underwrote the new conservative counter-reformation of Thatcher, Reagan, and Kohl.

This stateless reserve of capital exerts a transnational effect on national economic policies, seeking the lowest common regulatory denominator as it travels around the globe in search of the best rate of return. Public policy is traded across borders, augmenting traditional competition in services and commodities. The globalized financial system allows the money center banks to make end runs around governments and then leverage their influence to promote the same deregulated and privatized environment within nation-states that they have been able to create supra-nationally. Since October 1981, for example, in response to pressure from Citicorp, Chase Manhattan, and other money center banks, the Federal Reserve has permitted banking "enterprise zones" in the United States, reproducing the unregulated and untaxed financial sanctuary of the Cayman Islands in cities like New York and Washington.

Trading in foreign currencies has become increasingly unstable as supranational capital has grown. National and international financial markets took on the coloration of gambling casinos a decade ago as a result of the large plays in foreign exchange rates accompanying the deregulation of international money. Speculation is no fun when there are no wild swings in prices. Fixated on achieving short-term financial returns, currency traders in the money center banks, armed with footloose Eurodollars, engage in destabilizing foreign exchange speculations by attacking the weak currencies and supporting the strong ones.

While the globalization genie cannot be put back into the bottle, every item on the wish list of supranational centers need not be underwritten by pliant governments held hostage by their own free-market ideologies. Ultimately new transnational economic institutions will be needed to stabilize exchange rates, rethink economic relations between the North and the South, restructure Third World debt, and mobilize investment for productive purposes. Borders must mean something again, permitting governments to inject effective public policies into their economies, and new transnational public institutions must be created to regulate the global economy.

But the immediate problem is the unregulated Eurodollar market. Money center banks should be required to observe the reserve set-asides that constrain U.S. banking. In the absence of such regulation, the October stock market meltdown will be only the prelude to a larger financial drama. Speculative money will continue to hit and run, moving from Treasury Bills to foreign exchange to mergers and acquisitions. Continuing instability will breed economic imbalances until another financial crisis occurs.

The postwar vision of the world economy was predicated on a degree of predictability and stability in exchange rates that would contribute to the growth in international trade by mitigating risk and uncertainty in financial transactions. For the past fifteen years the ideology of free markets and deregulation has replaced that vision with one that celebrates the cunning of unfettered entrepreneurialism. Arbitrageurs, options traders, and all manner of financial speculators have been on a feeding frenzy.

If something good is to come of the financial near-implosion of the past several weeks, it will have to be a better understanding of how the process of deregulated globalism has strengthened the symbiotic relationship between stagnation and speculation, and of what governments need to do to begin to restore investment for productive purposes.

FREE TRADE -- YES, BUT IN A NEW FORM
The Global Firm, R.I.P

(Taken from an article in *The Economist*, February 6, 1993, p. 69)

In a yet-to-be published study entitled "The Global Corporation -- Obsolete So Soon?" Cyrus Friedheim, vice-chairman of Booz, Allen & Hamilton, a firm of management consultants, predicts that today's global firms will be superseded by the "relationship-enterprise," a network of strategic alliances among big firms, spanning different industries and countries, but held together by common goals that encourage them to act almost as a single firm. These relationship-enterprises, says Mr. Friedheim, will be corporate juggernauts, with total revenues approaching \$1 trillion by early next century -- larger than all but the world's six biggest economies.

As an example of this vision, he suggest that early in the 21st Century Boeing, British Airways, Siemens, TNT (an Australian parcel-delivery firm), and SNECMA (a French aero-engine maker) might together win a deal to build ten new airports in China. British Airways and TNT would receive preferential routes and landing slots,

the Chinese government would buy all state aircraft from Boeing-SNECMA, and Siemens would provide the air-traffic-control systems for all ten airports.

At first this may sound far-fetched. But just consider: Boeing, members of the Airbus consortium, McDonnell Douglas, Mitsubishi, Kawasaki, and Fuji are already talking about developing jointly a new super-jumbo jet. General Motors and Toyota are discussing the possibility of Toyota building light trucks in a GM plant. And the world's biggest telecom firms have formed a group to provide a worldwide network of fiber-optic submarine cables.

The conventional model of the global firm is flawed, says Mr. Friedheim, because most so-called global companies still have a home base. For example, in 1991 only 2% of the board members of big American companies were foreigners. In Japanese companies foreign directors are as rare as British sumo wrestlers. Firms have a home-country bias, with the big decisions kept firmly at home.

This bias hinders companies' efforts to become truly global. For instance, when capital is limited, firms tend to protect their home market at the expense of developing untapped overseas markets. Second, anti-trust laws limit the ability of global firms to expand through takeovers. But most important is the problem of nationalism. Nobody likes foreigners controlling their industries. Witness the opposition aroused by the attempt of British Airways to join forces with USAir.

To the extent that "global" companies have a home country, governments will place them at a political disadvantage. A relationship-enterprise, by contrast, is one way for firms to side-step those constraints. A multi-national alliance of independently owned firms can draw on lots of money; they can dodge antitrust barriers; and with home bases in all the main markets, they have the political advantage of being a local firm almost anywhere.

The rapid increase in cross-border alliances between firms in recent years has encouraged American management gurus to talk of the "virtual firm" -- a temporary network of companies formed to exploit a specific market opportunity which lies beyond the technological reach of any one of them. But Mr. Friedheim's concept of the relationship-enterprise goes deeper. Such enterprises will be the result of longer-term alliances, formed for more than a single assignment. If successful, their industrial and political muscle could be immense.

Tomorrow's relationship-enterprises may already be coalescing. Mitsubishi and Daimler-Benz share engineers. Other firms are setting common standards to make it easier to do business together. For instance, Boeing and the three Japanese firms with which it is building the 777, a new airliner, have created a trans-Pacific telecommunications system to link their design operations.

Take the European airline industry. There is excess capacity and not all national airlines can survive. The Greek government, for example, can pump huge subsidies into Olympic Airways (costly), allow it to be taken over (politically tricky), or allow it to become part of a relationship-enterprise. It could then continue to fly the national colors, but cut costs by sharing maintenance and crews.

What if Mr. Friedheim is right? Such corporate monsters could act like cartels. Projects like the super-jumbo may be too risky for any firm to do alone, yet if aircraft manufacturers develop it jointly, that sole producer will enjoy an unassailable monopoly. Governments, therefore, will need to redefine competition rules, shifting them from a national to a global level. The world will need a global anti-trust watchdog to ensure that tomorrow's huge alliances do not hinder competition.

FREE TRADE -- NO The Masters of Mankind

(The following critique of present world trade patterns and of the trend toward larger trading zones is excerpted from an article by Noam Chomsky that appeared in *The Nation*, March 29, 1993.)

The World Bank reports that protectionist measures of the industrialized countries reduced national income in the South by about twice the amount of official aid to the region -- aid that is itself largely export promotion, most of it directed to richer sectors. In the past decade most of the rich countries have increased protectionism. These practices, along with the programs dictated by the IMF and the World Bank, have helped double the gap between rich and poor countries since 1960. Resource transfers from the poor to the rich amounted to more than \$400 billion from 1982 to 1990, "the equivalent in today's dollars of some six Marshall Plans provided by the South to the North," observes Susan George of the Transnational Institute in Amsterdam.

In the London *Financial Times* James Morgan describes the "de facto world government" that is taking shape in the "new imperial age": the IMF, World Bank, Group of Seven industrialized nations, GATT, and other institutions designed to serve the interests of transnational corporations, banks, and investment firms.

One feature of these institutions is their immunity from popular influence. Elite hostility to democracy is deep-rooted, understandably, but there has been a spectrum of opinion. At the "progressive" end, Walter Lippmann argued that "the public must be put in its place," so that the "responsible men" may rule without interference from

"ignorant and meddling outsiders" whose function is to be only "interested spectators of action," periodically selecting members of the leadership class in elections, then returning to their private concerns. The statist reactionaries called "conservatives" typically take a harsher line, rejecting even the spectator role. The "new imperial age" marks a shift toward the reactionary end of the anti-democratic spectrum.

It is within this framework that Maastricht, NAFTA, and GATT should be understood. Note first that such agreements have only a limited relation to free trade. One primary U.S. objective is increased protection for "intellectual property," including software, patents for seeds and drugs, and so on. The U.S. International Trade Commission estimates that American companies stand to gain \$61 billion a year from the Third World if U.S. protectionist demands are satisfied at GATT (as they are in NAFTA). The same methods are being employed to undermine Canada's annoyingly efficient health services by imposing barriers to the use of generic drugs, thus sharply raising profits to state-subsidized U.S. corporations. NAFTA also includes intricate "rules of origin" requirements designed to keep foreign competitors out. A prime U.S. objective is liberalization of services, which would allow supranational banks to displace domestic competitors. The agreements impose a mixtures of liberalization and protection, designed to keep wealth and power firmly in the hands of the masters of the "new imperial age."

NAFTA is an executive agreement, reached on August 12, 1992, just in time to become a major issue in the U.S. presidential campaign. It was mentioned, but barely. To give just one example of how debate was precluded, take the case of the Labor Advisory Committee (LAC), established in 1974 to advise the executive branch on any trade agreement. The LAC was informed that its report on NAFTA was due on September 9. The text was provided to it one day before. In its report the LAC notes, "the Administration refused to permit any outside advice on the development of this document and refused to make a draft available for comment." The situation in Canada and Mexico was similar. In such ways, we approach the long-sought ideal; formal democratic procedures that are devoid of meaning, as citizens not only do not intrude into the public arena but scarcely have an idea of the policies that will shape their lives.

The Labor Advisory Committee concluded that NAFTA would be a bonanza for investors but would harm U.S. workers and probably Mexicans as well. Property rights are well protected, while workers' rights are ignored. The treaty is also likely to have harmful environmental effects, encouraging a shift of production to regions where enforcement is lax. NAFTA "will have the effect of prohibiting democratically elected bodies at all levels of government from enacting measures deemed inconsistent with the provisions of the agreement," the LAC report continues, including those on the environment, workers' rights, and health and safety, all open to challenge as "unfair restraint of trade."

Such developments are already under way in the framework of the U.S.-Canada "free trade" agreement. Included are efforts to require Canada to abandon measures to protect the Pacific salmon, to bring pesticide and emissions regulations in line with laxer U.S. standards, to end subsidies for replanting after logging. Meanwhile Canada has charged the United States with violating "fair trade" by imposing EPA standards on asbestos use and requiring recycled fiber in newsprint. Under both NAFTA and GATT there are endless options for undermining popular efforts to protect conditions of life.

An October 1992 report from the Congressional Office of Technology Assessment reached similar conclusions. A NAFTA of the form now on the table could "lock the United States into a low-wage, low-productivity future." Radically altered to incorporate "domestic and continental social policy measures and parallel understandings with Mexico on environmental and labor issues," NAFTA could have beneficial consequences for the country. But the country is only of secondary concern to the masters, who are playing a different game. Its rules are revealed by what the *New York Times* called "Paradox of '92: Weak Economy, Strong Profits."

One consequence of the globalization of the economy is the rise of new governing institutions to serve the interests of private transnational economic power. Another is the spread of the Third World social model, with islands of enormous privilege in a sea of misery and despair. A walk through any American city gives human form to the statistics on quality of life, distribution of wealth, poverty, and employment. Increasingly production can be shifted to high-repression, low-wage areas and output directed to privileged sectors in the global economy.

Particular cases fill out the picture. G.M. is planning to close almost two dozen plants in the United States and Canada, but it has become the largest private employer in Mexico. It has also opened a \$690 million assembly plant in eastern Germany, where employees are willing "to work longer hours than their pampered colleagues in western Germany," at 40 percent of the wage and with few benefits, as the *Financial Times* explains. Capital can readily move; people cannot, are not permitted to. The return of much of Eastern Europe to its traditional service role offers new opportunities for corporations to reduce costs, thanks to "rising unemployment and pauperization of large sections of the industrial working class" in the East as capitalist reforms proceed.

Europe must "hammer away at high wages and corporate taxes, short working hours, labor immobility, and luxurious social programs," *Business Week* warns. It must learn the lesson of Britain, which finally "is doing something well," the *Economist* observes approvingly, with "trade unions shackled by law and subdued," "unemployment high" and the Maastricht social chapter rejected so that employers are protected "from over-regulation and under-flexibility of labour." American workers must absorb the same lessons.

The basic goals were lucidly described by the CEO of United Technologies, Harry Gray, quoted in a study of NAFTA by William McGaughey of the Minnesota Fair Trade Coalition: "a worldwide business environment that's unfettered by government interference" (for example, "package and labelling requirements" and "inspection procedures" to protect consumers). This is the predominant human value to which all else must be subordinated.

The trade agreements override the rights of workers, consumers, and the future generations who cannot "vote" in the market on environmental issues. They help keep the public "in its place." These are not necessary features of such agreements, but they are natural consequences of the great successes of the past years in reducing democracy to empty forms, so that the vile maxim of the masters can be pursued without undue interference.

FREE TRADE -- MAYBE Freer Trade, a Greener Continent

(The following commentary was written in mid-March for the *Washington Post* by Senator Max Baucus, a Democrat from the state of Montana, the chairman of the Senate Committee on Environment and Public Works.)

"Think globally, act locally," the bumper sticker admonishes. The advice is good, and millions have followed it.

When U.S. negotiators returned to the bargaining table with Mexico and Canada this week, they began a historic opportunity to extend environmental protections across this continent. For the first time our trade negotiators can look beyond the technical business questions that have dominated past trade talks and focus on concerns about the environment that are widely shared by Americans.

We can best use that opportunity by putting teeth in a key side agreement to NAFTA. I believe that the North American Commission on the Environment (NACE) can set a ground-breaking precedent for sustainable development and is the best hope for turning the Earth Summit's grand talk about linking environmental goals with economic development into action. And a strong NACE is a fair price to ask for the benefits that NAFTA will bestow on Mexico.

Never before have nations at such different levels of development attempted to negotiate a free trade agreement. The environmental records of the United States and Canada are far from spotless, but we share a long commitment to protecting public health and safety. Our regulators are backed by potent scientific expertise and

overseen by a vigilant community of environmental groups. Public opinion has made environmental concerns a driving force of individual, corporate, and government decisions. Americans will not settle for backsliding on the progress we have made.

Mexico's environmental protections were modeled on U.S. laws -- but comparisons end there. Enforcement is almost nonexistent. Companies there have trouble finding the expertise they need to clean up their operations. And, in the five years since Mexico's key environmental laws were written, public scrutiny has been tentative, at best. Despite its recent efforts to enforce its environmental laws, Mexico will be hard-pressed to catch up.

Present plans are to make NACE yet another commission to study problems and write scientific papers. Markets are all-knowing, the argument goes; wait for economic development to take Mexican public opinion down the same path that America traveled.

That approach won't solve the problems, and it won't seize the opportunities NAFTA presents. Even if economic development comes quickly, it won't enlighten companies into changing their ways of operating in Mexico any time soon. It certainly didn't in the United States. Even with a proven record of developing markets for American innovations, our firms historically have ignored the carrot of environmental technology until they felt the stick of environmental enforcement.

We cannot ask American companies and their employees to wait patiently while NAFTA works its miracles on Mexico's economy. Instead, we should encourage them to be the innovators that Mexico needs. Creating NACE as an iron fist inside a velvet glove would spur such innovation.

NACE should be empowered to investigate complaints that, because existing environmental laws are being flouted, firms are profiting from an unfair trade advantage. Left unchecked by serious enforcement efforts, such practices threaten to multiply with freer trade. Leniency on environmental laws south of the border is nothing less than a trade subsidy if the same laws are enforced north of the border.

If NACE experts find that a persistent pattern of violations has resulted in a trade injury, they should turn their cases over to the authorities of that country for action and stand ready to assist them with technical advice. If violations persist, governments should have the right to cut off the economic benefits of free trade to that firm or impose other sanctions.

Environmental problems around the globe are increasingly local. Pacts like the North American Free Trade Agreement offer us a way to "act globally" on the environmental issues that spill over our borders. Our responsibility to America's

citizens calls for us to evaluate NAFTA not as a way to help a struggling Third World neighbor -- but as an opportunity to improve our own quality of life.

Report from Kyoto

(The following report on the conference "Value Change for Global Survival" held in Kyoto 17-23 April was written by **John Peet**)

In early April I received a fax from Robert Socolow of Princeton University's Center for Energy and Environmental Studies inviting me to take part in a Scientists' Conference from 17-19 April prior to, and then participating fully in the Kyoto "Value Change for Global Survival" conference. Despite the impossibly short notice, Rob's professional reputation and the fact that Dana had put him in touch with me were enough for me to rearrange a week's teaching and go.

We scientists went to our preliminary meeting with a job to do. We were a group of very competent people covering a wide range of disciplines. Ably led by Rob Socolow, we tried for three days to come up with what we had been asked for. I realized later that few in the Global Forum power structure were really interested enough to hear. Maybe we were too specific. Maybe the main aim of the Scientists' Conference was just to add to the gloss of the Global Forum itself.

The Forum turned out to be predominantly an event in which style triumphed over substance. Warm and sincere fuzzies abounded, and there were many glitzy events. but I detected relatively little interest in, and no real attempt to address, what I felt were critical issues of political-economic policy.

Emotional, and entirely sincere, clarion calls for value change to ensure justice for children, the poor, the environment, and future generations were not matched by hard-nosed examination of economical and political policies that render such calls largely meaningless. The real issues were either fudged or ignored. I spent most of my time there feeling largely impotent at the fact that good opportunities for digging beneath the surface of current policies were going begging. As an eminent colleague in the Scientists' Conference remarked to me, "I am going home feeling that I have not earned my fare."

Once we realized the shallowness of the agenda, several of us concentrated our attention on contributing to the public discussion sessions and on lobbying. I made direct contact with two spiritual leaders and one parliamentarian, all members of the Global Forum Council. I made our concerns clear and pressed on them copies of some

of **Herman Daly's** highly relevant material, plus material of my own. Whether any of these interventions made any impression, time along will tell.

I have to acknowledge that I did enjoy the artistic events and the Earth Day concert, and I can't deny I was affected by many of the warm fuzzies. It was great to see spiritual leaders from different faiths getting together in what were clearly warm personal relationships. There were a lot of good people there, from a wide range of places, and that gave us all some very positive feelings.

Regrettably, there were few real parliamentarians at the Forum. One Opposition MP from New Zealand came, I'm glad to say, but nobody from our Government. That was typical -- nobody really important from powerful Northern governments was there, though there were several good people from small, largely powerless Southern countries.

I found Gorbachev's part in the Forum fascinating. Having lost the top job in the former Soviet Union, he is now putting some of his formidable talents into the International Green Cross. The stage-management associated with his and Raisa's entrances would have done justice to Ronald Reagan -- maybe that's where he learned the skills! Cynics were quick to point out that he was playing politics, looking over his shoulder at Yeltsin's referendum, due a few days after the Forum. Others pointed out that the legacy of his presidency is one of environmentally disastrous management of the Chernobyl incident, and secretiveness about other radioactive time bombs with orders of magnitude more curies than Chernobyl. To be fair to Gorbachev, however, I think the IGC could be a good idea. He doesn't see it as an international fire brigade or ambulance service. So will it be a body that concentrates on building fences at the top of the cliff? Or will it provide high-tech cardphones at the bottom of the cliff?

Answers to such questions are not yet clear. But the Charter of the IGC reads well. For example, its Objectives read:

1. To facilitate vigorous, timely, and effective response to present and impending man-made environmental disasters and to recommend changes needed to mitigate and prevent such disasters.
2. To promote value change through education and communications, to promote dialog, and to increase awareness and understanding of environmental issues, and to identify the primary sources of environmental degradation.
3. To advocate the development of an international Ecological Law as a basis for sound environmental policy.

"The International Green Cross will provide a global framework which embraces different levels of activity, different types of organizations, and different disciplines. It shall not discriminate on the grounds of nationality, race, religion, gender, class, or political conviction. The International Green Cross will foster the emergence of a new civilization based on universal values, a commitment to change, and a new relationship between humans and the Earth."

The issue of the central position of the word "cross" in the name was brought up by several people. Why not the Green Crescent in Islamic countries, the Green Om in the Indian subcontinent, and so on? That problem was not adequately addressed, with the consequent risk that the IGC may be seen by some as just another arm of Western cultural imperialism.

But I come back to the theme for the Forum -- value change for human survival. The Forum's Final Statement had a "consensus" (which I don't remember being given the opportunity to participate in framing): "In this fourth of a series of international meetings begun in 1988, we have sadly concluded that inadequate progress and effort has been made to reduce what is clearly a headlong course toward planetary destruction, and have focused our attention on the root causes of this urgent, continuing crisis. On this we have reached a consensus. In the spirit of love and respect that prevailed at previous meetings, we assert our unity in diversity by declaring together that there can be no significant improvement in the global environmental without radical change in the human 'environment' -- our collective attitudes and behavior both toward ourselves and life in all its forms."

Fine. But where is there any analysis of the political-economic and military systems that many of us see as root causes? What sort of value change is really needed? What chance is there that a conference will actually have the clout to have its findings even acknowledged, let alone incorporated into national and international policies? Did any of you read about the Forum in your newspaper? My family didn't - the event might as well have not occurred, such was the lack of media coverage in my country.

So here I am, home from an event that cost the Forum's sponsors two or three million dollars, feeling that nothing much has changed. I think questions of Power have to be included in any analysis if one is to have an understanding of what needs to happen if we are to build a peaceful, just, and sustainable world. For me a necessary (but not sufficient) prerequisite is a democratic process (of a type that currently exists nowhere on earth) to ensure that policies reflect community and collective values and the global common good, rather than brute economic and military power.

Balaton friends -- please note that the above comments come from someone who feels let down, confused, and a bit inadequate. Maybe I should have put what I've

written to one side for a month to cool down. But what are friends, if one can't share things when they are bad, as well as when they are good?

Better Toilets, Fewer Dams

(This article by **Drew Jones** appeared in the *Bangkok Nation*, January 31, 1993.)

Where can Thailand get more water? We're practically sitting on the answer.

Efficient toilets: a whole truckload of six-liter-per-flush models, "Made in Thailand" stamped on the bottom of each one. An environmental NGO near my home in Colorado had them imported to show us what most Californians already know: efficient toilets save money, strengthen the economy, and help the environment.

Local people yanked out the old water-wasting models that gulp over 20 liters per flush and installed the new Thai toilets. Since then we've been watching our water meters -- this simple change in technology can save each home approximately 87 cubic meters of water per year. That is worth Bt625 per year, a 25 percent annual return on a Bt2500 investment, unheard of in any bank or CD account.

What's more, by improving water efficiency -- as opposed to practicing water conservation -- local customers were not required to make any sacrifices in their quality of life. It was merely a matter of reducing waste.

This small program is considered tame in the mecca of water conservation: southern California.

Consider the city of Goleta, where the water district paid up to Bt2000 to anyone who would install an efficient toilet. They also distribute efficient showerheads, information on lawn watering, and tips on how to fix faucet leaks. Combined with rate structures, metering, and people simply wasting less, the program cut single family water use by 50 percent and total water use by over 30 percent. As a result, they avoided the need to build a new, multi-million dollar wastewater treatment plant expansion and didn't have to find a new, expensive water supply.

In Washington, DC, a "water service company" installs efficient toilets in apartments or condos at no initial cost. They will even return later to fix any leaks. The company takes 50 percent of the resulting water savings as its payment, leaving the other 50 percent as profit for the homeowner. Even the government is catching on -- 17 of 50 states require efficient toilets in new construction, and starting next year a federal

law will ban US toilet manufacturers from producing models that use more than 6 liters per flush.

Wise water officials are learning that toilets can supply water. Installing an efficient one is equivalent to digging a tiny well or tapping a small spring, one that gushes approximately 87 cubic meters in a year. Retrofit a whole city and the water supplier has struck a new, inexpensive supply, thus helping avoid new dams, pipelines, and reservoirs -- good news for the environment and the taxpayers' pocketbooks.

In this respect, Thailand is fortunate. Other countries looking to expand water supplies must build expensive dams that flood the land, displace people, upset river and forest ecology, and eventually silt up. And to avoid the dam with an investment in water efficiency, they must squander capital on imported technologies. Their money goes to Sweden, to Israel, to Germany.

Thai industry, on the other hand, is ready to manufacture environmental technologies, now considered a growth industry around the world. The toilets are manufactured just 30 kilometers outside Bangkok. The Thai people are practically sitting on them. Actually my neighbors back in the US are sitting on them, and Thais could be too.

Two manufacturers in this country produce efficient toilets. American Standard has made 9000 efficient toilets so far, some of them exported to Hong Kong, Singapore, Malaysia, Japan, Canada, and the US. If the demand grows, they can supply 650,000 toilets a year. Karat Sanitaryware, which built the toilets used in my hometown, exports over 2000 efficient models a year, but has the capacity to produce about 2.5 million. Despite the great need for the toilets here in Thailand, these companies seem too busy exporting to try marketing them locally.

If three million of the seven million people in Bangkok used six-liter-per-flush toilets in place of the 21-liter-per-flush type, it would create a supply of 66 million cubic meters per year, over one-fourth the supply of the proposed Mae Wong dam. Considering the great cost of the dam, both economically and environmentally, agencies such as the Metropolitan Waterworks Authority and the Provincial Waterworks Authority might consider helping to pay for these toilets.

One person who isn't even on their payroll is working to help the toilet manufacturers' local sales. Dr. Chirapol Sintunawa, head of the Association for the Development of Environmental Quality-Thailand, stacked some efficient toilets into the back of his pickup and drove through nine provinces. He showed hundreds of people the new technology and explained its many environmental benefits. With funding from the Asia Foundation and toilets donated by American Standard, he reached a variety of

people: monks, journalists, teachers, tour operators, government officials, and hotel owners, some of whom now use these toilets.

To save the equivalent of the other three-fourths of the Mae Wong dam, water suppliers might distribute or help fund the following: efficient showerheads that use 10 liters per minute instead of 20; faucet aerators that cut water flow while improving rinsing ability; laundry water recycling systems that capture and filter rinse water for the next cycle's wash; leak detection systems that help find breaks in a city's pipes; durable rubber washers that help fix faucet leaks; irrigation pipes that help stop water loss on farms; flapper valves that stop toilet leaks; rainwater collection cisterns; greywater systems that collect and distribute reusable water; and water-saving information that can correct wasteful habits.

Water efficiency is a simple way to help strengthen Thailand. Or it can stay a way for other countries to strengthen themselves, thanks to Thailand's exported toilets. My community in the US is certainly grateful. But consider the opportunity for using locally manufactured water-efficient technologies here in Thailand to stop the cycle of dam building and water wasting, avoid community conflicts, and preserve the health of the environment.

A Report from Sustainable Seattle

(by Alan AtKisson)

By the time you read this, Sustainable Seattle will have released its first (and partial) set of sustainability indicators, to what we hope will be a significant response from the media, public officials, and other folks. It's been a long odyssey; two years of patient organizing, many hours of consensus building, and our recent fixation with gathering the data and molding it into a presentable package.

From September to December 1992 we convened meetings of our "Civic Panel" comprised of around 150 citizens engaged with issues related to sustainability either as leaders or activists. We had participation from county and city officials, educators, high-integrity media types (one was a well-regarded TV reporter who recently resigned in disgust over what's happening in TV news). educators, labor organizers, business people, you name it. We ended our deliberations with a "dramatic reading" of the 99 proposed indicators, interspersed with stories, poems, and aphorisms that brought the data to life -- a surprisingly popular event. My favorite quote remains this one, from George Bernard Shaw: "The sign of a truly educated [person] is to be deeply moved by statistics."

Since then we've narrowed that list down further, and in May we will release a set of 19 indicators that 1) can provide a good snapshot of the whole, and 2) can have real numbers attached to them (other proposed indicators will require developing new, not-yet-available data). The list, in brief, and randomized:

- Wild salmon runs in local streams and rivers,
- Overall air quality,
- Water consumption per capita,
- Percentage of employment concentrated in 10 largest employers,
- Number of hours work at average wage required to meet basic needs,
- Percentage of Seattle streets meeting "pedestrian friendly" criteria,
- Juvenile crime rate,
- Child poverty rate,
- Percentage of low birth-weight infants,
- Percentage of youth involved in community service projects,
- Percentage of households meeting federal criteria for housing assistance,
- Literacy rate,
- Circulation of library materials,
- Tons of solid waste generated and recycled per capita per year,
- Renewable and nonrenewable energy consumption per capita,
- Vehicle-miles traveled in single-occupancy vehicles (and other modes as available),
- Population,
- Per capita health expenditures,
- Voting rates.

We're waiting to hear on grants that would allow us to develop the rest of the indicators, and workbooks and volunteer outreach programs to help people DO things to help the indicators improve. Our presentation will stress LINKAGES between indicators, both direct and subtle (a little covert systems theory). It's easy to see how air quality can affect health expenditures, for instance; more interesting is the parallel between the health of salmon runs and the health of neo-natal infants, both of whom suffer from misallocation of resources and toxic environments.

Meanwhile, one major goal is on the verge of being declared accomplished. When we started two years ago, I set a goal of "changing the terms of the debate" in the city to include sustainability as a key criterion in planning. Well, the City Planning Department just released its draft, 3-cm-thick Comprehensive Plan, required under our state's Growth Management Act. They titled it: "Toward a Sustainable Seattle." With our permission, of course!

Other signs: Our new governor is explicitly linking "economic development and environmental enhancement," and sustainable development (at least in name) is all the rage in state and regional economic planning. **Robert Gilman** recently briefed several

state cabinet officials on what sustainability means. The talk at these meetings sometimes degenerates into "jobs, jobs, jobs" with a faint greenish hue, but there's enough genuine movement in the right direction to raise one's hopes.

Announcements

New Arrival

Barbara and Joe Alcamo announce the arrive of Julia Ruth Vincenza on 14 April, 1993. 3.4 kg, 48 cm.

How to Get and How to Help With the Balaton Toolbox

The toolbox is more than software. It is a way of thinking about systems. Like all new tools, it needs investment of time on your part to tap its potentials.

The prototype comes in two parts. An "introduction to the toolbox" is a hypertext document that introduces you to thinking in terms of systems. The "toolbox for tomorrow" allows you to create and run models in a Dynamo-like language (NOW). Existing Dynamo or STELLA models can be converted in an hour to a few hours (depending on their size). A few sample models are already packaged for illustration. The software can be run on any IBM PC-AT or similar DOS-based computer. It is recommended that you have at least 2 MB RAM if you plan to run the "toolbox for tomorrow."

To tap the tools you need not use the "toolbox for tomorrow" at all. The "introduction" explains how you can think in systems to analyse your systems better. Once you master the new way of thinking, that itself will provide you with tools to understand systems. As with any thinking tools, which are invisible, you do not need any special equipment, beyond yourself, to practice it.

The toolbox is fully subsidized for noncommercial use. As with all Balaton projects, you can request a copy with just a page description of your proposed use. Mail proposals to Anupam Saraph or Wouter Biesiot at IVEM, Postbus 72, 9700 AB Groningen, the Netherlands or address an electronic mail request to a.d.saraph@eco.rug.nl.

If you are interested in participating in a workshop on the toolbox, for a few days before or after the coming Annual Meeting in Hungary, please let Anupam know. If there is enough interest, he will arrange a meeting place, probably in Budapest.

Call for Papers: Environmental Science and Management Studies Yearbook '93

The University of Latvia Ecological Centre hosted the First Baltic Workshop on Environmental Science and Management Studies (ESAMS) in Jurmala, Latvia, between November 30 and December 4, 1992. The workshop was attended by over 30 university educators from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, the Netherlands, Poland, Russia, Sweden, the United States, and Ukraine, representing active interdisciplinary environmental education projects.

Recognizing the rapidly growing needs for cooperation in interdisciplinary ESAMS, and in order to stimulate further dissemination of experience and networking on ESAMS in the Baltic region, the workshop participants recommended that a volume on the "state of the art" in ESAMS should be published. The proposed volume will not only contain material presented by the participants at the workshop, but will also include a compendium of associated papers on university level environmental education topics.

To date we have received almost 30 contributions from a fair number of outstanding authors. To successfully complete this project we require your assistance, specifically a written contribution on your experience and reflections regarding environmental education at the university level.

Papers will be accepted until June 1, 1993, and the ESAMS Yearbook '93 will be issued in the early autumn '93.

Submissions can be sent to the University of Latvia Ecological Center either by email or regular mail. If possible, please provide us with a copy of your article in Word Perfect 5.1 or any other word processing software on a diskette. Don't hesitate to contact us if you need any additional information.

We thank you in advance, and we are joined in this by our sponsors, the Ministry of the Environment of Baden-Wurttemberg, the Embassy of Canada in Sweden, and the Ministry of the Environment of Finland.

Raimonds Ernsteins
Director, University of Latvia Ecological Centre
19 Raina blvd., LV-1586 Riga, Latvia

phone 371-2-225304
fax 371-2-225039

telex 161172 TEMA SU
email root@ekocentrs.riga.lv

News from the Members

Alan AtKisson checks in from Washington State: I'm building a little consulting firm, AtKisson & Associates. My firm is completing a secondary school curriculum on sustainable development for the United Nations Association. The cultural diversity work is going really well, and I'm loving it. Also working on development/marketing plans for the Innovation Diffusion Game, facilitation contracts on natural resource negotiations, and variety of other things. I'm a regular diversified economy! Oh, and I'm singing for pay in little cafes and such.

Sustainable Seattle got some great TV coverage, about 10 minutes on the public station's weekly "Inside" show. They did a good job of explaining sustainability and illustrating it with action footage, together with a fair amount of talking head (mine; eerie to watch, really). We're pressing ahead with organization building, indicator polishing, and grant seeking. New volunteers keep showing up; we're looking to get our Sustainable Home and Sustainable Business programs off the ground.

Here are the lyrics to a new song I started thinking about last summer at Lake Balaton.

Look at the light shining off the Sound
There's nobody around
But me, and this body of water
Alone in a crowd
Of stars and stones and trees and passing clouds
Spirits high, I'm singing right out loud
Sing up the beauty of this

Clean water, clear water, pure water
Water of life
Cool water, wild water
It's the water of the life of the Spirit moving in the world

Look at these jewels of morning dew
The eyes I'm looking through
Are windows of water
When it falls down
I am water watching water hit the ground
Every drop splashes up a crown
The Queen of all the Earth is

Clean water, clear water, pure water
Water of life
Cool water, wild water

It's the water of the life of the Spirit moving in the world

The water takes complete control
Like a river running through my soul
Like a rainstorm roarin' up my spine
Like an ocean of love that rocks my mind

Look at the waves rolling up the beach
They can almost reach
The place where I'm standing
Won't be too long
The moon will pull that tidal rush up real strong
Me and my footprints will be gone
But evermore there will be

Clean water, clear water, pure water
Water of life
Cool water, wild water
It's the water of the life of the Spirit moving in the world.

I've finally finished a cassette album of songs called "Fire in the Night." I don't know how I'm going to distribute it to this far-flung network, but I'll do my best!

* * *

Valdis Bisters reports on a visit from his home base in Latvia to IVEM in Groningen, where he attended an intensive workshop on the development and use of the Balaton Group's "toolbox": I am back from the toolbox seminar safe and sound. It was a very exciting experience. We were five people all week: **Anupam, Drew Jones, Wouter Biesiot**, Klass Jan (from IVEM, working on a Dutch gas model) and I.

Most of the time we spent getting into understanding of the new actor/event approach to system dynamics. We chose two models each, which we wanted to include in the toolbox, and we went through the process of developing our understanding based on our chosen models, representing them and discussing them with others.

For myself this was very fruitful, as I have had little experience in the modeling process. Each of us finished a couple of models. Initially I took quite a difficult representation of a Lake and Polluting Industry and had to move back and build it step by step. That even was good for me to understand development step by step. Now I can feel what people who do not have any experience in system dynamics should feel about it.

We made a list of wishes for further development of the toolbox and will be sending it to Anupam. There are a number of intended improvements, however it is good to start to use it right away and run seminars on systems thinking. We all agreed that hardware is much more important before moving to the computer.

Summing up, we finished with inspiration to make use of it and to facilitate the toolbox to become a good educational product. I have certain plans to try it in our educational activities.

I was very lucky to combine my visit to Groningen with discussions with Rene Benders, one of the developers of PowerPlan. We have a Latvian input file, so I brought back a ready model with a number of improvements done by Rene at our request. Now I am planning for Rene and Wouter to come to Latvia and organize two seminars, one for our environmental management courses and one for energy planners of ministries and agencies.

* * *

Antonio Camara of the New University of Lisbon is "now in charge of a huge project: the Environmental Plan for the World Expo 1998 to be held in Lisbon."

* * *

Political news via email from **Moss Cass** in Australia: The hardline political fundamentalists here are waiting to turn back the clock, and before the recent election had served notice that they would reverse most of the actions of the Labor government in saving a number of significant natural areas of Australia. The Liberals (conservatives) had indicated they would take back Uluru (Ayre's Rock) from the Aboriginals, turning it over to the Northern Territory Government, which would exploit it, would open up the Kakadu National Park to mining, allow prospecting for oil in the Great Barrier Reef, and generally commit mayhem with the few achievements in the environmental area during the time of Labor.

There was an enormous sigh of relief when the Labor Government was returned. None of the pundits really thought Labor would win in the face of the highest unemployment since the depression in the 30s, an economy at rock bottom, and a leader who in the polls was less popular than the leader of the Liberal Party. In one way or another, with no help from the media, enough people realized that as bad as Labor was, the Liberals would be much worse. The Liberals would have pushed Reagan/Thatcher economic rationalism, there would have been even more unemployment, reduction of wages and conditions in employment contracts. In Victoria the top public servants took a big risk in refusing to sign employment contracts with the Liberal government, because the contracts in effect abolished any sense of security, and imposed conditions of secrecy, which in many people's eyes meant censorship and repression.

The hope is that by their vote, the Australian people have spelled the end of economic rationalism in Australia and heralded a reawakening of concern for people and society.

I think there is a basic good sense in ordinary people, and we insult them and ourselves when we succumb to the fear that we (ordinary people) can always be run over by those hungry for power.

* * *

Joan Davis will be moving the Balaton Hotel Zurich on May 26, to a home that, finally, will be hers. Her new home address will be:

Bergliweg 12, CH-8304 Wallisellen, SWITZERLAND

Her new home telephone number was not yet established at time of this publication.

* * *

Nani Djuangsih writes from the Institute of Ecology at Padjadjaran University in Indonesia: We have been conducting courses on environmental management, such as Environmental Impact Analysis, Law Enforcement, Air Pollution, and Integrated Environmental Planning.

Recently I was chairperson of the organizing committee of the Global Forest Conference, held last February in Jakarta and Bandung. The chairman of the conference was Dr. **Otto Soemarwoto**. There were around 350 people from 42 different countries. The result of the conference was the Bandung Initiative on Global Partnership in Sustainable Forest Development.

On March 6, 1993, **Prof. Dr. Otto Soemarwoto** got a Doctor Honoris Causa in Agricultural and Environmental Science from the Agricultural University of Wageningen in the Netherlands.

Given the topic of the next Balaton Group meeting, I am interested to participate and to share our experience. We are going to have here a one-day seminar on international trade policy on textiles. One of the speakers is Prof. Sarah Douglas from Illinois University, now a guest lecturer at Airlangga University at Surabaya.

I would also like to discuss with Balaton members the follow-up implementation of the Earth Summit and Global Forest Conference, especially with regard to collaboration on education, research, and public service activities.

I will be going to the East West Center for the month of April, and April 30-May 6 I will be at Berkeley to explore the possibility of collaboration between Padjadjaran and

Berkeley. Next June I will be in charge of giving a lecture at a seminar on Environmental Impact Assessment (sponsored by UNEP and the Islamic Development Bank) in Istanbul, Turkey. Our institute in collaboration with the University of Malaysia is preparing to have a seminar on the Partnership of Environmental Management Facing Global Issues November 25-27, 1993, in Bandung.

* * *

Raimonds Ernsteins emails from Riga in such wonderful Baltic English that we didn't have the heart to edit it: Raimonds and Valdis are trying to have some time to enjoy the fresh spring while we make our best to cope with pretty huge amount of coming activities. In May we start a number of interactive training courses for schoolteachers on environmental education in different regions of Latvia. Money comes from the TEMPUS project, which allows us to make that free of charge for participants and provides them with hands-on materials for their further work. For couple of courses we are looking to integrate new insights on system thinking Valdis brought back from toolbox workshop in Groningen. There are some schools who have an access to good PCs not slowing down the work in Windows. Very good way to talk visually and lively about serious environmental questions and get easy to the bricks our understanding is built of.

On university level we are proceeding with 3-month courses on environmental management for specialists of environmental protection agency being run in collaboration with our Danish and German colleagues. We try to integrate as much as possible simulation and gaming activities and it works well. We are having **Wouter Biesiot** for the seminar on energy supply- and demand-side management being planned as Balaton-supported activity in June. Besides training courses, we plan to run one-day seminar for energy planners here in Latvia. Seems to be a great event, because nothing is done so far in the field of energy education, especially considering interactive learning mode.

A number of new publications are coming out in the next couple of months prepared by our staff. Most welcome are the first textbook on ecology (translation from Swedish) and English-Latvian Glossary on Environment. Last one is a natural response to continuing debate in the society how to agree upon the new terms we have not used before, those like sustainability, environmental management, monitoring, carrying capacity, and so forth. Quite exciting to influence the minds of Latvian society.

We keep on going with our project Environmental Education Network for Central and Eastern Europe. The fifth issue of EENET NEWS just came out. Now we are looking to work more hard for the Baltic region. Next on the schedule is the Baltic Environmental Education and Awareness Rising (EE&AR) Action Plan we intend to carry out in

collaboration with environmental NGO network Coalition Clean Baltic, represented by all nine countries around the Baltic Sea.

The first Baltic workshop on Environmental Science and Management Studies held last December was very successful start to develop cooperation in our region. The network was initiated and the book based on the proceedings is under preparation now.

We have also finished translation of *Beyond the Limits* summary. We have shown it to some people of our university staff. Great interest. They ask to get copies even in xerox version. We will try to publish it soon. Although we are not successful with funds for *Beyond the Limits* yet, we have launched its translation already.

* * *

Drew Jones wrote in February from his visit with **Chirapol Sintunawa** in Thailand: We've been trying to get access to the water supply planners located in Bangkok. They are planning a series of dams that water efficiency could certainly help avoid. Using Chirapol's connections has been crucial -- he can make sure all my RMI propaganda gets into the right hands.

This past weekend I visited a luxury hotel on the beach for a pleasant mix of work and play. Saturday I toured the building with the chief engineer, a bucket, and a stopwatch. We found that the showerheads use 33 liters per minute, a true *naam mu* (water hog). By replacing them with 10 liter per minute models, they can save 80 cubic meters per year (one-half the volume of a proposed reservoir) at 1/20 the cost of water from trucks (a usual supply for the hotel during dry times.) The manager agreed to a hotel-wide retrofit and put the planned reservoir on hold.

The unexpected bonus of the stay has been the opportunity to read. I slowly, carefully read **John Peet's** book (with frequent forays into a light Thai novel -- his text is dense). John's book was excellent -- it pulled together my past education in engineering with my present study of sustainability in a disciplined, structured way. Now I am reading a classic, says Chirapol, Forrester's system dynamics text with the red cover and ancient type -- published the year I was born.

Distance from RMI is teaching me several lessons:

1. End-use/least-cost planning is new to most resource managers. Old hat in Old Snowmass is news elsewhere.
2. I must concentrate more on my writing. Without 35 aggressive editors in house, I have to be my own editor, and it's hard work.
3. RMI is an excellent place for me to be right now.

And an update in April, from Rocky Mountain Institute, after returning from the toolbox workshop in Groningen:

The most vivid lesson from the workshop (which was fascinating) was rather simple: you cannot hope to change the way someone manages a system until you understand exactly how that person views the system. I have been trying to convince water utility execs to consider demand-side management as a new supply of water, but have never taken a systematic look at the world view of that exec. Where does the money come from and go to? What are his or her concerns? To whom is he or she accountable? I'm kicking myself -- these are basic questions and I haven't asked them. I have a meeting scheduled for next week with our local utility. This time I'll just bring questions and leave the showerhead at home.

Joe Romm and I presented this and other systems thinking lessons to the staff last week. We are running a series of meetings on how to apply systems thinking not just to RMI policy work, but to management and operations. We introduce a few principles and a new language, and then the brainstorming erupts. What fun!

Latest drama: RMI was asked to advise the White House on an energy and water "upgrade." I had the joyous 6-hour task of picking toilets, dishwashers, ice makers -- all the water widgets I dream of at night. Hopefully they will use the calculations I sent along. Just efficient showerheads and faucets can cut a household's emission of SO₂ by four pounds, NO_x by two pounds, CO₂ by 1000 pounds, water use by 5000 gallons, and utility bills by \$34 - \$56.

* * *

Zoltan Lontay writes from EGI in Budapest: I am fully buried in my recent projects. (This is not a complaint but a boast.) I have the usual problems with days that last only 24 hours.

I enjoy the little environmental library that was set up with the Balaton Group's generous help. That is also true for my colleagues and friends, who may not enter my room without picking up something to read for the weekend.

An additional challenge for me is now to learn German. I am attending a course, mainly on weekends, and I am supposed to pass a state exam in June. Keine einfache Sache!

* * *

Anupam Saraph reports after a short return visit from the Netherlands to India: A long absence and a short visit to the old and familiar certainly can bring home recognition of change. Prices of essential commodities have almost doubled and the salaries of the top ten percent in industry quadrupled over the last year (since Manmohan Singh's famous bow to IMF policy). It's not difficult to visualize how easy it has been for power brokers to misuse growing feelings of resentment for unrelated purposes, like demolishing mosques and burning Bombay.

Riots in Bombay were neither religious nor fascist. They were the expression of the growing insecurity of politicians to sustain their rates of exploitation of society. With the enormous lowering in standards of the last two decades, corruption and malpractice have been growing exponentially, sparing not even the practitioners.

In cities like Bombay and Poona, most people would be indifferent to the religion of another person; what matters is the relationship. Talk to any Hindu, Muslim, Christian in these places; most still retain bonds with each other and blame the "vested" interests. There is talk in the newspapers and among people of how a fascist and religious face was created for the burning of Bombay by an erstwhile politician from Maharashtra to oust the chief minister of Maharashtra. On the plus side: increasing numbers are willing to break away from corrupt practices; increasing numbers are willing to stick their necks out for a cause.

Industrialization has become equated so strongly with economic success that communities have forgotten they became prosperous without industry. It was heart-breaking to witness the destruction of the state of Goa, a one-time tourist paradise, by growing industry in the last ten years. This year they will complete a train line from Bombay to Panjim to "boost the economy." The rest will be history.

There is much hope, however, as transformations of communities like Ralegajsidhhi signify. This small village of about 400 families (2000 people) was driven to poverty, neglect, and alcoholism fifty or a hundred years ago, by traders from the urban world. The traders took their trees at bad terms and over the years drove the land out of ability to support agriculture. With the leadership of one man, Annasaheb Hazare, the village has been brought back closer to its spiritual past over the last 15 years. The village is free of alcoholism now. It produces 8 to 10 times as much agricultural output as before. With unique family planning programs, crime control, and faction-free politics, it is now training change agents for 300 villages in Maharashtra!

It struck me hard that one key difference between the West and the East is the accumulations. The West has so many of them. And at the same time it has lost the requisite variety.

So much more to say, but this is becoming too long an e-mail. Among those excited and wishing to use the toolbox is **Samaresh Chatterjee's** group at YASHDA. I ran several demonstrations and a seminar for them. They train the administrators in the state government.

* * *

From **Anjali Sastry** at the MIT System Dynamics Group: I've been reflecting on the work I did in India promoting electric efficiency (in the form of compact fluorescent lamps) in Bombay and elsewhere. Some of my thoughts are presented in a paper called "Stalled on the Road to the Market: Lessons From a Project Promoting Lighting Efficiency in India" where Ashok Gadgil, a colleague from Lawrence Berkeley Laboratory, and I argue that the traditional technical-economic approach to energy efficiency implementation is flawed.

By reducing the problem of implementation to one of picking the right technology and getting the price right, the usual approach--which is the one we used in India, a result of our training--ignores how other factors, such as culture and organizational and institutional dimensions, affect the success of energy efficiency improvement efforts. We found that it is essential to account for these other factors, if implementation is to succeed, not just in order to avoid potential road-blocks but also to come up with solutions that work for everyone involved. In other words, culture, institutions and other elements of the context can--and must--be seen as integral parts of the solution, not merely as problems to be fixed.

Ashok and I presented our findings at the American Council for an Energy-Efficient Economy's Summer Study session, where our discussions resulted in a new newsletter funded by Amulya Reddy's South-based NGO, International Energy Initiative. The newsletter, called ENOTES, is electronic: a network of researchers and activists share lessons learned about getting energy efficiency to work in practice. We find that much of the academic literature is outdated and irrelevant, especially for people in the developing countries, and especially when it comes to reflecting on failures in the field and ideas on tactics to get potential allies involved.

Gilberto Jannuzzi, professor at the University of Campinas in Brazil, is the chief editor; Ashok Gadgil and I help with the editing. While our aim was to make the newsletter useful for activists and researchers in the developing countries, to date many of the subscribers have been from the US. So I'm looking for names--and electronic addresses-- of anyone interested in reading the newsletter and joining in the discussion list. I'm ASASTRY@SLOAN.MIT.EDU. I can even send paper copies if you're not plugged in electronically, although I'm not set up to do a lot of mailing.

I have been doing some teaching on the economics (e.g. how to calculate the cost of conserved energy for efficiency improvements, to allow comparison with supply

options) and the institutional aspects of energy efficiency implementation; I'm also involved in preparing and teaching an MBA class on environmental issues. I find a dearth of systems-oriented semi-academic (Harvard Business Review-type) papers on environmental problems and solutions. Any material of this kind would be most welcome.

Lastly, I've just finished a annotated review of the system dynamics literature that I hope is the first of a series of evolving surveys. **John Sterman** & I list about 90 system dynamics books, papers, games and software packages that we consider essential: but we realize that we're likely to be biased by our management- and US-based focus. Let me know if you'd like a copy of the paper and please send me your feedback. I hope that the survey is useful in (a) introducing the wide range of system dynamics work to more people; and (b) serving as a pedagogical tool for advanced students.

I was very happy to read the last *Balaton Bulletin*. It made me feel less lonely to realize how much work is being done to understand, develop and communicate systems perspectives of the Big Problems we face; and I'm excited at the prospect of doing more myself. So thank you!

* * *

Chirapol Sintunawa is pleased to announce to all those who have tried unsuccessfully to reach him by telephone or FAX (the FAX machine was located on the other side of Bangkok from him; the telephone number connected, if you were lucky, to his pager) that he has a new telephone/ FAX machine in his home. The number for both is: 66-34-324168

Chirapol also has a new e-mail number:
OIJST@ CHULKN.CHULA.AC.TH

* * *

Writes **Malcolm Slessor** from Scotland: I have just spent the last hour glued to the *Balaton Bulletin*. I was particularly interested in the bit by Yves Chouinard, who I knew way back when I was a more active climber. I am delighted the next meeting will be on international trade. We will make an effort to be there.

I have a suggestion. Why not have World4 and our GlobEcco models available for simulation, so that we could explore the effects of different policies on international trade, and their effects on the Third World? I would not really be in favor of a formal presentation. People then have to take one's results for granted, and they somehow are less credible. Also, it would be interesting to see if the two approaches to modeling result in the same conclusions!! If not, we have to ask ourselves why not.

We are rather busy, having won an EC contract to develop indicators of sustainability. We are working with economists in the Universities of Paris, Limburg, and Barcelona. Among other things, we have to build fully researched ECCO models of the UK, Scotland, and France.

Jane is returning to her old employment involvement (with respect to our model) and joins me in this message.

* * *

Haruki Tshuchiya writes from Tokyo: Thank you for the winter 1993 *Balaton Bulletin*. The newsletter brings much good information to me, and I recognize that I am not isolated from the Balaton people.

I am still working for the technology evaluation committee in the Environment Agency to build government assessment programs to arrest global warming. I am interested in the matter of time and energy. As it is commonly discussed that people consume energy to save time, I am trying to establish the relationships among time, and energy.

I expect some good changes in the political scene in the USA. The Clinton administration can definitely change the situation.

Last September I discussed the possibility of renewable energy with the STAP (Science and Technical Advisory Panel) member meeting at the Global Environmental Facility in New York. A.N.K. Reddy and Robert Williams showed a voluminous new book on renewable energy. It showed vast possibilities for solar energy in the 21st century.

The book *Beyond the Limits* is now published in Japanese. I enjoyed it very much. I hope many people read it.

Quotes, Thoughts, Graphs, Cartoons

A Conversation Between an Economic Modeler and an American Auto Worker
(From an essay by James Stanford -- thanks to the People-Centered Development Forum!)

Worker: If NAFTA goes through, Ford will surely move its Taurus plant to Mexico where it can hire workers for a tenth of my pay with no independent union. With the labor market already depressed, I don't see any prospect of finding a job at comparable pay.

Economic Modeler: Don't worry. I've constructed a computer simulation that demonstrates you will actually benefit from the trade agreement. Here's how it works. First I assume capital is immobile. Therefore Ford cannot move its plant to Mexico. Nor would it want to, because I assume unit labor costs are the same in both countries, and in my model Americans have a clear preference for U.S.-made products, even if they are more expensive.

My model assumes full employment and specifies that anything imported to the U.S. from Mexico must be balanced by American exports, so new export industries will necessarily spring up here to replace any industries that might be displaced by Mexican imports. Since you earn above-average wages at Ford, you obviously possess valuable skills. With full employment you will certainly find another job very shortly in one of these new export industries, probably with higher pay than you get now. So NAFTA will be good for you!

(Stanford says that nine of ten NAFTA models he has examined contained at least one of these assumptions, and two models contained all of them.)

Remembering and Forgetting

(This essay is excerpted from an anonymous editorial in *The New Yorker*, April 5, 1993)

"The bloody massacre in Bangladesh quickly covered over the memory of the Russian invasion of Czechoslovakia," Milan Kundera lamented in his 1980 novel *The Book of Laughter and Forgetting*. "The assassination of Allende drowned out the groans of Bangladesh, the war in the Sinai Desert made people forget Allende, the Cambodian massacre made people forget Sinai, and so on and so forth until ultimately everyone lets everything be forgotten."

Of course there are places in the world where the pattern that Kundera described remains dismayingly evident -- and the United States is certainly among them. When Europeans talk about other nations becoming more and more like the United States, this absorption in the present, oblivious of both past and future, is one of the things they often have in mind.

But there are places in the world where the past -- or anyway, a reified version of the past -- holds such continuous sway as almost to choke off the possibility of liveliness and creativity and forward-thinking in the present. The most pressing such instance currently is the tragedy of ex-Yugoslavia, where people not only seem incapable of forgetting the past but hardly seem capable of thinking about anything else. Serbians and Croats and Muslims are so mired in grievances dating back to the middle of the Second World War, or in the enmities dating back to the days immediately before the First World War, or even in martyrologies wending back well before the fourteenth century -- that it's almost as if the living had been transformed into pale, wraithlike shades haunting those ghosts, rather than the other way around.

Yugoslavia is not the only place where the living seem incapable of getting over, let alone forgetting, their pasts. There are also vast expanses of the crumbling Soviet empire, there is South Africa, there is Northern Ireland, and Central America, and Sri Lanka, and India, and Palestine. True, in many of these cases the past grievances have been artificially revived and exacerbated by demagogues intent on their own short-term tactical advantages, but the point is that populations in all these places are susceptible to such demagogic appeals precisely because the past, far from having been forgotten, remains a terrible, festering wound.

A certain kind of forgetting -- or, rather, a getting over, a superseding -- is exactly what is needed in many of these places. "Nations are a plebiscite every day," the French philosopher Ernest Renan wrote at the end of the last century, "and they are built on great rememberings and great forgettings." And yet what's called for is not simple denial. The Polish master Zbigniew Herbert warned in a poem recalling the immediate aftermath of the Second World War, "Ignorance about those who have disappeared undermines the reality of the world." Shoring up the reality of the world, however, is by no means easy.

Hannah Arendt was on to something crucial in her 1958 book *The Human Condition* when -- a Jew writing barely a decade after the Holocaust -- she insisted on the primacy of forgiveness: "Without being forgiven, released from the consequences of what we have done, our capacity to act would be confined to one single deed from which we could never recover; we would remain the victims of its consequences forever." For Arendt, forgiveness was essential to human freedom: Only through this constant mutual release from what they do can men remain free agents, only by constant willingness to change their minds and start again can they be trusted with so great a power as that to begin something new." This capacity for initiation, for beginning something new, is the core wonder at the heart of Arendt's depiction of the human condition. It is the great hope.

And yet the forgiveness she sees as the ground for that hope is not a simple forgetting. If anything, it is a highly charged and continuously recharged form of remembering. Nor can it be accomplished in isolation. "No one can forgive himself, just as no one can feel bound by a promise made only to himself," Arendt notes in a passage with particular relevance to the departing or mutating dictatorial regimes in Latin American and elsewhere that, as a routine final gesture before surrendering power, lavish blanket amnesties upon themselves. True forgiveness is achieved in community; it is something people do for each other. It is history working itself out as grace, and it can be accomplished only in truth. That truth is not merely knowledge; it is acknowledgement; it is a coming-to-terms-with, and it is a labor.

Ironically, in places where former antagonists refuse to acknowledge the horror of their past depredations, full-scale trials -- the painstaking laying out and proving of guilt, under exacting conditions of due process -- may be both necessary and salutary before any forgiveness can be extended. And such forgiveness makes sense only in the context of starting anew -- something that cannot be done if the prior malefactors retain their positions of authority, immune and unaccountable.

The past is kept alive, is continually revisited, but in the mode of supersession, of moving on. In Sarajevo and Belgrade, in Hebron and Belfast and Nagorno-Karabakh and San Salvador and Soweto and Los Angeles, there is tremendous work waiting to be done -- not only the work of finding some concrete way of securing the democratic rights of minorities within their larger polities, but also the equally daunting work of finding ways of advancing the spiritual and material well-being of the entire population. The point is to get on with that work as, precisely, a way of honoring the past.

Anyone who thinks infinite growth is possible in a finite system is either a madman or an economist.

-- Kenneth Boulding (an economist)

So far as the environment is concerned, the market does not fail; it simply does not exist in any economically meaningful way.

-- John Peet

It would be a mistake to suppose that every instance of government intervention is an abridgment of freedom, or that every area of market activity is an exemplar of liberty. The truth is that government and market are equally capable of promoting liberty or giving rise to oppression.

-- Robert Heilbroner and Lester Thurow

*I meant no harm. I most truly did not.
But I had to grow bigger. So bigger I got.
I biggered my factory. I biggered my roads.
I biggered my wagons. I biggered my loads
of the Thneeds I shipped out. I was shipping them forth
to the South! to the East! to the West! to the North!
I went right on biggering ... selling more Thneeds
And I biggered my money, which everyone needs.*

-- Dr. Seuss, from The Lorax

Growth is the engine of change. Growth is the friend of the environment.

-- George Bush, Address to the Earth Summit, Rio de Janeiro, June 13, 1992

It would be a real achievement if ... capital assets, natural assets, and environmental assets were equally "real" and subject to the same scale of values, indeed the same bookkeeping conventions. Deeper ways of thinking might be affected.

-- Robert Solow

We cannot be the least bit interested in purely quantitative concepts, such as economic growth or nongrowth applied to that mysterious aggregate GNP.... That which is good and helpful ought to be growing and that which is bad and hindering ought to be diminishing; whether aggregation of these two processes yields a higher grand total or a lower one is of no interest whatever.

-- E.F. Schumacher

It (the GNP) does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It allows neither for the justice in our courts, nor the justness in our dealings with one another. The Gross National Product measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to country. It measures everything, in short, except that which makes life worthwhile.

-- Robert Kennedy

For a statesman to try to maximize the GNP is about as sensible as for a composer of music to try to maximize the number of notes in a symphony

-- Garrett Hardin

THE NEW BILL OF RIGHTS

1. *The right to create products and participate in processes that do not harm others.*
2. *The right to work in a clean and safe environment.*
3. *The right to a job that is meaningful, worthy, and constructive.*
4. *The right to fair compensation.*
5. *The right to be told the truth about the company and its products.*
6. *The right to participate in critical decisions that affect the work force.*
7. *The right not to exploit other people or other forms of life.*

-- Paul Hawken

To press non-economic values into the framework of the economic calculus, economists use the method of cost benefit analysis. This is generally thought to be an enlightened and progressive development.... In fact, however, it is a procedure by which the higher is reduced to the level of the lower and the priceless is given a price.... All it can do is lead to self deception or to the deception of others; for to undertake to measure the immeasurable is absurd.... The logical absurdity, however, is not the greatest fault of the undertaking; what is worse and destructive of civilization is the pretence that everything has a price.

-- E. F. Schumacher

A man is rich in proportion to the things he can afford to let alone.

-- Henry David Thoreau

*We need to make no apology
For thinking about world ecology,
For mere economics
Is stuff for the comics
Unless we can live with biology.*

-- Kenneth Boulding

If I were to try to read, much less answer, all the attacks made on me, this shop might as well be closed for any other business. I do the very best I know how -- the very best I can; and I mean to keep doing so until the end. If the end brings me out all right, what is said against me won't amount to anything. If the end brings me out wrong, ten angels swearing I was right will make no difference.

-- Abraham Lincoln

There is no one but us. There is no one to send, nor a clean hand, nor a pure heart on the face of the earth, nor in the earth, but only us, a generation comforting ourselves with the notion that we have come at an awkward time, that our innocent fathers are all dead -- as if innocence had ever been -- and our children busy and troubled, and we ourselves unfit, not yet ready, having each of us chosen wrongly, made a false start, failed, yielded to impulse and the tangled comfort of pleasures, and grown exhausted, unable to seek the thread, weak, and involved. But there is no one but us. There never has been.

-- Annie Dillard