

## **"The historical role of the environmental movement; ecological economics and welfare indicators in a world of decline", article by Wouter van Dieren for the Erasmus Liga (the Netherlands Association for The Club of Rome), September 1997 (translated from Dutch)**

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Had anyone, during the environmental movement's first years, foretold the actual situation in 1998, he probably would have been called a fool or imprisoned as an agitator. It really is incredible how much has been achieved. Unfortunately it is by far not enough. The regression has not been stopped, only delayed - quite an accomplishment in itself, though.

The environmental movement's history is both short and long. When Babylon's lush pastures succumbed to salinisation, 4000 years ago, people protested. Plato, Tacitus and Herodotus (1) wrote about soil erosion, clean water, crop rotation and air pollution. In the tenth century before Christ, in ancient Lebanon, cedar forests were cut down to enable Jerusalem to be built, and especially Salomon's temple. Josef's interventions in Egypt stood for the discovery of agricultural politics: he levied taxes and build up stocks for times of drought and scarcity. All events about environment and nature.

When Pasteur and Koch discovered bacteria and their role in illness and death, this was a step of historic importance in pollution control. The whole nineteenth century is characterised by a drastic, technological change in planning, urban development, health care, waste treatment and sewerage. As late as 1830, Amsterdam endured a cholera epidemic, and its canals could be smelled far outside the city walls. Until then, waste from households, textile industries, tanneries, shipyards and city farms was thrown into the canals or lied scattered in the streets. The city smelled of H<sub>2</sub>S and butyric acid, the sickly smell of garbage cans. Rats walked on the litter-brimmed water. (2)

Such situations did not yet initiate the Dutch environmental movement, though. It really began in 1900, when the imminent Naardermeer impoldering was averted as a result of the foundation of Vereniging tot Behoud van Natuurmonumenten (Society for Conservation of Nature Reserves). Then we had to wait until 1962 (World Wildlife Fund), 1966 (Waddenvereniging), 1970 (Milieudefensie), and 1971 (Greenpeace). In 1945, the so-called Contact-Commissie voor Natuur en Landschapsbescherming, Kunst en Wetenschap (Contact Commission for Protection of Nature and Nature Reserves, Arts and Sciences) was established. In the fifties the last two concepts were dropped from the name, and fusions with other organisations led to the foundation of Stichting Natuur en Milieu (Society for Nature and Environment).

Between 1968 and 1975, the Netherlands counted some 4000 environmental action groups in which, from the start, no clear distinction was made between environment, nature, traffic, energy, waste and other subjects. Even *Limits to Growth* (1972), though sometimes considered an environmental report, deals with many more issues: economy, production, food, pollution, raw materials, population growth; in short, all global problems. (3)

The environmental movement's history is one of emancipation, and as such ancient history. Nowadays, some people are saying that public participation in large-scale infrastructural projects should be limited. They believe the modern world order to be the right one, based on a kind of conclusive, definitive ideological basis, which needs resolute goals and no hindrance from those who do not share this ideology. Oddly enough, the people who share this conviction are especially found in circles of the so-called engineers' socialism. They forget that our pleasant way of life is a result of public participation, gained in the struggle with all kinds of authoritarian power blocks since the early Middle Ages. Rough capitalism is restrained by a thousand and one adjusting and arranging rules, varying from commercial and notarial law, land registers, inspection services, safety rules, labour law and social security, to the myriads of European-made regulations which even dictate the strength of a can of peas or the viscosity of olive oil.

Calling such legislation an organisational mania is wrong. It was preceded by centuries of emancipation - a fact which is constantly being forgotten and attacked by those who are in power.

We often look upon modern emancipation as a final stage, won especially by our generation. This is not the case. History knows hundreds of emancipatory movements which stand up to the standards of independence and resistance in the name of conviction and justice. In this respect it does not really matter whether such a movement originated from religious conviction, like the conversions to Christianity in ancient Rome, the Reformation of 1517 or the abjuration of Philips II in the Netherlands, or from social motives, like the French revolution and its many successors in the nineteenth century.

The environmental movement was a logical result of two decades of resolute post-war reconstruction, in which an unambiguous economic model was forged. In 1945, in a spirit of solidarity which had resulted from the second world war and the ensuing destruction, people combined efforts in the conviction that they would create a better world, once and for all. And they did. Even in the Netherlands which, until then, had been a foremost agricultural nation, the industrial consumer society was founded. As long as nobody stepped out of his respective role, the reconstruction was not endangered. Thus, authorities, industry, trade unions, universities and churches balanced each other, without realising that the bastion around them had started to crack.

Solidarity fully depends upon infallibility and success for everyone; factors which soon became uncertain. The baby boom was coming, and its numerical flood was about to sweep away the whole structure. Radio, press and television opened up the world and, consequently, the churches became empty. Submission to a concept of life which tries to sell sin, guilt and penance to a world about to drown in Bacchanalia of consumption and hedonism, was too much to ask for. And the same was about to happen to every other form of authority. In 1966, the Provos could fire away freely: police, administration, university, science, technology, industry - in short, all unquestioned authorities from the past became easy targets, and the world would never be the same again. Women claimed their rights, the taboo on sexuality was overthrown, homosexuals commanded their rightful place under the sun and, step by step, the right on individuality was won, as a reaction to centuries of collectivism and obedience.

And so it happened that all eyes were opened to the other side of the so-applauded reconstruction. Mainport Rotterdam - then called Botlek or Europoort - where the Netherlands earned a living, was also the place where the air was polluted. Beautiful old polders disappeared under ugly dormitories. In 1963, Rachel Carson's *Silent Spring* (4) was published, foretelling a dead spring as soon as the chemical industry's products, and especially DDT, would have wiped out the remains of life. It was recently followed by Theodora Colborn's *Our Stolen Future* (5), a remake, now with endocrine disruptors as the malefactor, disrupting the reproduction of man and beast. Technology, science and industry appeared to be fallible - which was a shock, comparable to the Reformation itself, when both papacy and the universal power of the church proved to be unequal to the call for purity and humility. Neither the ancient church nor economic growth and its pillars have ever fully recovered - that much is sure.

Consequently, the environmental movement has become the largest world-wide so-called NGO (non-governmental organisation), with more influence and more members and supporters than the trade unions. When planning the future, it is especially the environmental movement any government nowadays encounters. A new railway, a new technology, expansion of air traffic, energy prices, choices in transport, agriculture, fishery, water, soil, and air - the environmental movement is involved. Thus, the environmental movement has started to function as an amalgam, combining the emancipatory components of the last half century.

Why then does the environmental movement does not have yet more influence? According to the latest Environmental Balance from the Dutch National Institute for Public Health and Environment, most emissions have indeed decreased since 1970 in absolute terms - even though, relatively speaking, they keep on increasing. These are unexpected successes, resulting from regulations, a sense of responsibility and autonomous technical ingenuity. Meanwhile, though, the world is not improving, and the overshoot and collapse from *Limits to Growth* will either manifest itself today or will do so in the near future. How come this process cannot be stopped? A number of reasons can be discerned.

The first one is that the world is not being ruled by rationalities, but by faith and myth - as it has always been. The only difference now lies in the pretence, claiming reason and denying myth.

The second reason is that this faith is currently called "growth" and "progress", even though its components are based neither on consensus nor on real understanding. "Economic growth" consists of added value, *creating something from nothing*, which is a most desirable process in itself. This growth, however, is even counting depletion of the world as progress, which is at least a miscalculation and at worst a perversion no economist can explain.

The myth of growth knows more of such anomalies. Economic statistics count many activities in the fields of destruction, crime, war, loss of welfare and conflict as economic growth. The Bosnian reconstruction will take 25 to 50 years, which will be a period of extremely high economic growth: three or even ten percent a year. Income! Growth! Employment! Production! Certainly. But the nett result will be zero, since it comes down to restoration of the pre-war situation. Either "growth" is wrongly measured, therefore, or we are fooling ourselves.

The third reason is that history only takes winners into account. All extincted plant and animal species are forgotten. In our days, some one and a half billion people are living in poverty. They have no champions who stand up for them, and no figures are available indicating that their sufferings have to be subtracted from the income of a small group of newly rich. The statistics that tell us how well the Dutch economy is doing, overlooks some 25 percent of the population who no longer participate: the unemployed, the disabled, people in search of work, and people who are unvoluntarily pensioned off - the countless categories that are no longer allowed to participate.

Another reason: the statistics of progress adds up apples and oranges, but does not mention losers and loss; it counts costs as profit and damage as income. A society which is being ruined as a result of stress, crime, pollution, noise, traffic jams, waste, accidents, illness and fear can reckon itself rich and prosperous, the amount of so-called economic activity in such a world being very high.

Environment is about warnings, about Cassandra, about care and future, about respect for plants and animals, fellow men and fellow creatures. Environment is about so-called economic goods, like soil, water and air. These goods seem to be abundant but are, in reality, scarce. Until now, they were not given a price, because this would disturb the current economy - even though the market would start behaving more rationally. It would be such a threatening event that it does either not happen at all or just in driblets and much too slowly.

Since GNP is an aggregate of all extravagancies mentioned, we are for some years now searching for a better measure for economy, ecology, welfare and future. Attempts are being made by the World Bank (6) and the UN, and reports written by the Club of Rome (7). A promising attempt is the Index for Sustainable Economic Welfare, ISEW, first designed by Nordhaus and Tobin (1972; 8) and then further developed by Daly and Cobb (1989; 9). In search for an answer to the question if growing production, measured in GNP, leads to growing welfare, they found that such a parallel did, once, indeed exist. Welfare does not just consist of income and consumption, as it is often assumed nowadays, but also of employment, leisure, education, health care, a clean environment, safety, and faith in the future. In the ISEW, these variables are calculated and qualitatively assessed. Household labour, for instance, is no part of GNP, but is counted as income in the ISEW - as it should be. Government services in GNP are neglected, because it is argued that they do not yield any added value. In the ISEW, however, they are considered investments, for instance in dikes. Just imagine how odd it would be to say that the safety of dikes is worthless in the Netherlands. Traffic jams, car accidents, environmental pollution, commuter traffic and advertising, in the ISEW they are welfare-decreasing expenses. Advertising? Indeed so, since ads are expenses made to increase consumption. In the rational market theory such expenses do not occur.

The ISEW has been calculated for a number of OECD countries: the Netherlands, England, Sweden, Germany, Denmark, Italy, Austria, Canada and the United States. The outcome is always the same. Between 1950 and 1975 the growth of welfare is proportional to the growth of production. Later on there is a growing divergence, which is very rapid in England and the US. The Netherlands are the last country where this phenomenon occurs, around 1980 (10). Since then, increased production does no longer boost welfare. On the contrary. The costs of growth increasingly outweigh the benefits.

This analysis is so remarkable because it shows the limits to growth long before they were foreseen by Meadows *et al.* The real issue appears not to be the depletion of physical resources, but the phenomenon of diminishing returns and saturation. Meadows projected overshoot and collapse between 2010 and 2050 when, as a result of pollution, depletion and population growth, food supply and industrial production would crash. This scenario is now being overtaken by a completely different one, in which the illusion of growth stops much sooner.

At first sight, the successful Dutch economic model demonstrates the opposite: public purchasing power is increasing, the financial deficit declining, economy and employment growing. Alas, all that glitters is not gold. The public purchasing power takes no account of drop-outs - which are set back. The financial deficit overlooks the national long-term engagements, and the national accounts do not reckon with environmental debts. As I have explained elsewhere (11), the national debt could well amount to some 3000 billion if it were to be calculated in this way, which is a factor ten higher than the current deficit. And employment is not at all growing: the statistics have been changed - which was the first, stealthy adjustment - while the other non-participating groups mentioned here are not reckoned with. The economy is growing, in the classical sense, and will continue to do so as long as we keep on renovating and rebuilding the entire country, under a cover of noise, and continually intoxicated with hedonic stress.

The importance of these analyses for conservation is evident. The environmental movement tries to protect our heritage, nature and living space from further attacks, and is too often defeated by the arguments which state that growth will always be needed. The power of such arguments drastically changes when apparent advantages of growth are lacking - which is indicated by the ISEW.

The environmental movement's historical role concerns the defence of wildlife areas and protection of water, soil, air and free space. Its social role is that of emancipated citizenry, opposing unrestrained power, as it has been doing for centuries. Its modern role is to criticise the economic process itself, which has turned into production for production's sake and growth for the sake of growth.

Part of this last category are the former Club of Rome activities and modern research into environmental economics, which still has a long way to go. In the meantime, the world is not getting any better; each day 200 plant and animal species become extinct, while 350 million tons of fertile top soil is being washed away into the sea, to name just a few examples. Silent Spring is not far away. One day, after a long and dark winter, yearning for the sunlight of spring, we will awake in the nightmare of birds that do not sing or nest and trees that do not bud: "our stolen future".

## Literature

1. Acot, Pascal (1988), *Histoire de l'écologie*, Presses Universitaires de France.
2. VAM, Jaarboek Jubileum 1979.
3. Meadows, D. L., *et.al.* (1972), *The Limits to Growth*, Universe Books, New York.
4. Carson, Rachel (1991), *Silent Spring*, Penguin Books, London.
5. Colborn, Theo, Dianne Dumanoski, and John Peterson Myers (1996), *Our Stolen Future: Are We Threatening Our Fertility, Intelligence, and Survival? -- A Scientific Detective Story*, Dutton, New York.
6. The World Bank (1997), *Expanding the Measure of Wealth*, CSD Edition, Draft for Discussion, The World Bank, Washington D.C.
7. Dieren, W. van (ed.) (1995), *Taking Nature Into Account*, Springer Verlag, New York.
8. Nordhaus, William, and James Tobin (1972), *Is Growth Obsolete?*, In Economic Growth, NBER no 96E, Columbia University Press, New York.

9. Daly, Herman, and John B. Cobb, Jr. (1989), *For The Common Good*, Beacon Press, Boston, Massachusetts.

10. End 1997 a survey of ISEW studies will be published, editors: Dr. Hans Diefenbacher (FEST, Heidelberg) and Dr. Alex MacGillivray (New Economics Foundation, London). More ISEW-studies are being made in South Africa, Australia, Korea and Israel.

United States: Daly and Cobb, *For The Common Good*, see reference 9.

Germany: Diefenbacher, H. (1994), *The Index of Sustainable Economic Welfare - A Case Study of the Federal Republic of Germany*, in Cobb and Cobb, 1994.

England: Jackson, T. and N. Marks (1994), *Measuring Sustainable Economic Welfare - A Pilot Index: 1950 - 199*", Stockholm Environmental Institute, Stockholm.

Austria: Hochreiter, H., B. Obermayr, K. Steiner and E. Stockhammer (1995), *Der Index of Sustainable Economic Welfare (ISEW) - Eine empirische Studie zur Wohlstandsentwicklung in Österreich von 1955 bis 1992*, Interdisziplinäres Institut für Umwelt und Wirtschaft, Wien.

Italy: Guenzo, G. and S. Tiezzi (1996), *An index of sustainable economic welfare for Italy*, Fondazione ENI Enrico Mattei, Milano.

The Netherlands: Rosenberg, D., T. Oegema and M. Bovy (1997), (to be published in Diefenbacher/MacGillivray): *A Pilot ISEW for the Netherlands - Preliminary results and some proposals for further research*.

Sweden: Jackson, T. and S. Stymne (1996), *Sustainable Economic Welfare in Sweden - A Pilot Index 1950-1992*, Stockholm Environment Institute - Centre for Environmental Technology, University of Surrey, Stockholm.

Denmark: Jespersen, J. (1994), *A Welfare Index for the Danish Economy*, unpublished discussion paper, Roskilde Universitetscenter.

11. Wiardi Beckman Stichting (1997), *De inrichting van Nederland*, Uitgeverij De Arbeidspers, Amsterdam.