SAVING THE ENVIRONMENT; DO YOU REALISE WHAT IT WILL TAKE?

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Just about everyone assumes that we can solve the environment problem without having to give up our high "living standards". They think that if we do things like use smaller cars, recycle our drink cans, start a compost heap, reuse grey water, buy an energy-efficient fridge and a rainwater tank, don't take plastic bags from the supermarket, install a solar hot water heater…then these kinds of actions could cut resource use and ecological impact down to sustainable levels without any need for us to reduce the amount we buy, or interfere with the growth of GDP.

This is totally mistaken. The environment problem, along with other major global problems such as Third World poverty and peace, cannot be solved without huge and dramatic reduction in the amount of producing and consuming going on, and therefore change to an economy which has a far lower GDP than at present, and which has no growth at all.

This prospect is so shocking to people in consumer-capitalist society, including politicians, economists and ordinary consumers, that everyone flatly refuses to even think about it – despite the fact that for 40 years many scientists and others have been telling us that there are "limits to growth" and that we are exceeding them.

Why is there an environment problem? The ecosystems of the planet are being destroyed simply because the volume of producing and consuming going on is far beyond sustainable levels. It is crucial to recognise how big the overshoot is how far beyond sustainable levels. Consider the following figures.

The magnitude of the overshoot.

Resources; Our way of life involves consumption of vast quantities of resources. Each American consumes about 20 tonnes of new materials every year. Many resources are in very short supply, and becoming scarcer, World fisheries are being depleted, water scarcity could be the most serious resource problem this century, tropical forests are being reduced by 20 million ha each year mainly because rich countries want the timber and the forests are being cleared to supply them with beef. The most disruptive resource problem ahead is likely to be brought on by a peak in petroleum supply before 2020.

But most of the resources are being consumed by the 20% of the world's people who live in rich countries. The rest of the world's people get very few of them.

This is because the global distribution system is a market economy and that inevitably and automatically allocates most resources to the few who can pay most for them. Thus rich countries get most of the oil. Even worse, that kind of economy ensures that most of the productive capacity of the Third World is geared not to producing what its people need, but to what will maximise the profits of the corporations via supplying rich world supermarkets. If all the world's people today were to consume resources at the per capita rate we in Australia do, supply would have to be more than 6 times as great, and if the 9 billion we will have on earth soon were to do so it would be about 10 times as great.

It is obvious therefore that in an economically just and ecologically sustainable world we in Australia would have to live on a small proportion of the resources we now consume per capita.

Footprint. The per capita area of productive land needed to supply one Australian with food, water, settlements and energy, is about 7-8 ha. The US figure is closer to 12 ha. But the average per capita area of productive land available on the planet is only 1.2 ha.

Footprint analysts are saying that we are already taking 30% more biological resources from the planet than it can provide continuously. We are doing this by consuming our "ecological capital", e.g., by cutting down the forests faster than they are growing, mining the ground water and destroying the fisheries.

When the world population reaches 9 billion later this century the per capita area of productive land available will be only .8 ha. In other words if it was to be a world where resources were shared equally we would all have to get by on about 10% of the biological resources Australian people average. Nothing like that is possible in a consumer capitalist society obsessed with affluence and growth.

The greenhouse problem. This is the most powerful and alarming illustration of the overshoot. The atmospheric scientists are telling us that if we are to stop the carbon dioxide content of the atmosphere from reaching twice the pre-industrial level we must cut global carbon emissions and thus fossil fuel use by 60% in the short term, and more later. If we made only a 60% cut and shared the remaining energy among 9 billion people each Australian would have to get by on less than 7% of the fossil fuel they now use.

That target, twice the pre-industrial level, is far too high. A more sensible target would require reduction to about 2% of present per capita fossil fuel use, i.e., we should almost shift entirely off coal, gas and oil.

These have been some of the lines of argument showing the huge magnitude of the overshoot. We must make enormous reductions in our resource use if we are to solve the environment problem, and this is not possible in a society that is committed to the affluent lifestyles that require high energy and resource use, let

alone a society that insists on constant and limitless increase in production and consumption.

Faulty systems are the main cause of the problem.

Saving the environment is usually thought of only in terms of "what individuals can do in their households to reduce environmental impact", such as switching unused lights off. These things typically involve just changing to buying "green" products, not buying less. No need to consume less, just need to buy the "ecologically sustainable" brand. No need to reduce consumption or GDP, just produce as much as before but in "ecologically sustainable" ways.

Again this is a seriously mistaken assumption. Firstly all of the actions of this kind that a person can take add up to a negligible effect, (at best an 8% reduction in domestic energy consumption according to one study.) If you buy an energy-efficient fridge you will cut your annual energy use by about .1%, when we might have to cut our total national energy consumption by something like 70%.

The significant reductions can only be made by changes in our society's systems, not households. Several of our systems force us to use a lot of resources. For example…

- Most people have to own a car and drive a lot, because our cities have been built to run that way. Public transport accounts for only 8% of trips in Sydney. There's no point telling people to take public transport, because most people can't get to work that way.

- Individuals have no choice but to throw away all the soil nutrients contained in food, because our settlements have sewer systems. A sustainable society is not possible unless we recycle all those nutrients back into the soils that grow our food, and that is not possible unless food is grown very close to where we live. In other words a sustainable society must be restructured to have a local agriculture.

- The average piece of food in the US is produced in very energy intensive ways, then packaged and then transported 1000-2000km. Those energy costs can only be cut if we shift to a very different system, obviously again whereby food is grown within and close to our settlements.

- The most faulty system we have is the economy. The ecosystems of the planet cannot be saved while we have an economy based on maximising the amount of producing and consuming going on, and increasing these as fast as possible without limit. Nor can they be solved in an economy that allows market forces a great deal of power to determine what is done (i.e., which allows corporations maximum freedom to produce and sell what will

maximise their profits, and allows consumers maximum scope for purchasing goods and services.)

We have to cut production and consumption dramatically if we are to get those resource and ecological impacts down to a sustainable level from the huge overshoot at present.

Now consider the absurdity of economic growth.

The present amount of producing and consuming going on is far beyond sustainable levels, yet all economists and politicians want at least 3% increase in the amount of output every year. That means output doubles every 23 years. By 2070 the economy would be churning out 8 times as much every year…and if all the 9+ billion people the world will probably have by then were to rise to the "living standards" we would have then at that growth rate, total world economic output would be 60 times as high as it is now! Obviously any commitment to growth is absurdly incompatible with saving the environment.

But can't technical advance and more conservation solve the problem?

The dominant view assumes that more conservation effort and technical advance can reduce the problems sufficiently, without any need for us to reduce consumption or "living standards" or GDP. But the above points show that the overshoot, the degree of unsustainability is far too great for this.

The most optimistic 'tech-fix" theorists, such as Amory Lovins, claim that we could reduce environmental impact per unit of GDP by a factor of 4; i.e., to one quarter of their present levels. It is easily shown that this is far from sufficient. If we are going to multiply world economic output by 60 while we cut ecological impact, let's say in half, then impact per unit of GDP would have been cut by a factor of 120. Obviously a factor 4 reduction would be no where near big enough to enable and just and sustainable world.

Can't we change to renewable energy?

Central in the faith that no significant change from consumer-capitalist society is needed is the never-examined assumption that we can move from fossil fuels to renewable energy sources such as the sun and the wind. Springer will soon publish my book Renewable Energy – Can't Save Consumer Society. It details the technical reasons why it will not be possible to derive from renewables the quantity of energy consumer society demands.

The situation is most clear with respect to liquid fuels. Even if very optimistic technical assumptions are made the per capita amount that could be produced from biomass would be less than about 5% of the amount rich countries consume

now. There is also a strong case that we will never have a ”hydrogen economy”, in view of the significant costs and energy losses involved in dealing with the small and light hydrogen atom. (Chapter 6 of the book.) Many regions will be able to get a lot of electricity from sun and wind, but the major problems set by the variability of these sources makes it very unlikely that they can supply a large fraction of the electricity we now take for granted.

None of this is an argument against renewable energy sources. We must move to them as fast as possible, but they cannot sustain the high “living standards” that go with consumer-capitalist society.

Conclusion

To repeat, these simple facts and arguments show that there is no possibility of bringing environmental impacts down to sustainable levels unless we dramatically reduce the volume of producing and consuming going on, that is, undertake very radical social change, especially involving abandoning commitment to high material living standards, high incomes and high GDP and the commitment to constantly increasing all these as much as possible and as fast as possible without any end in sight.

Our society’s general attitude was recently stated elegantly by President Bush when he said, “The American way of life is not negotiable”. The fundamental cause of the whole range of alarming global problems now threatening to destroy Western society is simply over-consumption. This is the direct cause of Third World poverty (because we in rich countries are hogging most of the world’s wealth), and war (because control over resources is the main cause of armed conflict) as well as of resource depletion and environmental destruction.

Our society professes concern about the problems, but refuses to think about their fundamental cause. This astounding situation raises serious doubts about the capacity of our society to save itself. Despite being highly “educated”, having large numbers of experts and well funded bureaucracies and institutions, and billion dollar communications and educational systems, rich countries refuse to think about the possibility that their fundamental structures and goals are catastrophically mistaken. They show almost no capacity to respond to the gigantic challenge confronting us. Most people know our society faces very serious problems, and some expect breakdown in coming decades with the possible die-off of billions. For instance 480 million are fed via irrigation powered by petroleum pumps. Even more are alive only because of nitrogenous fertilizers which are produced from fossil fuels. Yet all flatly refuse to even think about the fact that ecological sustainability is incompatible with consumer society.

The hypocrisy/delusion of “ecologically sustainable development” rhetoric.

There is a great deal of talk about “Ecologically Sustainable Development”, but just about all of it is based on the delusion that sustainability can be achieved without any threat to affluence and growth, via technical fixes, more conservation effort, etc. Firms, governments and environmental agencies congratulate themselves for reducing the impacts of production and consumption, but steadfastly avoid any suggestion that there might be a need to reduce production and consumption.

What ESD means in consumer-capitalist society is merely trying to do the same thing, to produce and sell as much as possible, while making some effort to reduce the associated resource and environmental impact. Thus a corporation can say it is making its operations “more sustainable”, even though it might be producing wasteful luxurious items and even though a similar effort from all corporations would still leave the total volume of resource use and waste far above tolerable levels. The “limits” analysis shows that a sustainable world is not possible unless there is a huge reduction in the amount of production, factories, investment, trade etc. now going on.

But why aren’t peak environmental agencies such as the ACF saying these things

Almost no environmental agencies put forward the argument being summarised here. Certainly the peak agencies never suggest that ecological sustainability is incompatible with affluence or growth. The reason is simply because if they began saying this they they’d instantly be ignored and lose all their subscribers. It’s hard enough for them to get people to think about saving Koalas and trees, which threatens nothing. So they content themselves mostly with campaigns like saving the whale that (are noble but) can make no difference whatsoever to the fate of the planet. They can make no difference because they do nothing to get people to even think about the possibility that affluence and growth are the fundamental causes of the environment problem and the other alarming global problems.

Most if not all of the campaigns carried out by the “peak environmental agencies” actually do more harm than good because they reinforce the assumption that there is no need to question the commitments to affluence and growth. They give the impression that all we have to do is recycle, buy “green energy etc., while we all go on consuming voraciously and getting richer without limit.

For the same reasons governments have refused to raise the possibility that affluence and growth must be rethought, knowing that this would be electoral suicide.

The ideological problem.

What we are up against here is a powerful ideological phenomenon, a mentality of denial and delusion, a steadfast refusal to face up to our potentially fatal situation. For more than 40 years now many scientists and authors have been documenting the "limits to growth" analysis of our global situation sketched above, but this has made no impact whatsoever on governments or publics. Large numbers of environmental campaigns and governmental inquires are conducted without any recognition that if we are serious about sustainability we must at least think about the possibility that it is not compatible with consumer society. But this is not done. There is now a vast sustainability industry, there are hoards of politicians, bureacracies and educators and journalists professing concern for the environment, but almost none of them ever even thinks about any need to question the fundamental, cherished values of consumer society – material wealth and getting more of it all the time. The record provides strong support for the conclusion that this society does not have the wit or the will to save itself –because it refuses to even acknowledge its situation and its causes.

What then is the solution?

Any realise that there is a way out of this predicament, one that would solve the enormous problems of Third World poverty and of armed violence in the world as well as the environmental problem. It would be very easily established – if we wanted to do that, and it would yield all people a much higher quality of life than they have now even in the richest countries

A sustainable and just world is not possible unless we make the transition to The Simpler Way. This is a society in which we live well with non-affluent lifestyles, with high levels of self-sufficiency in households and regions and nations, and in which we therefore have mostly small local economies meeting needs from local resources, mostly via cooperative and participatory systems (involving voluntary committees, working bees and community commons supplying many free goods), and some very different values. (The general model was elaborated in my The Conserver Society, Zed Books, 1995. For a more recent outline see, http://www.arts.unsw.edu.au/tsw/12b-The-Alt-Sust-Soc-Lng.html)

In other words, there has to be significant cultural change, away from a mentality driven by competition, selfishness and greed. Households must derive satisfaction from frugal and self-sufficient ways, growing and making and repairing. Most of us would have far less need for money than at present, meaning we might need to work in a paid job only one day a week. We would therefore have much time for community affairs, arts, crafts, festivals and learning things. None of this implies any need to reduce the quality of high tech activities that are important, such as medical research. In the above mentioned account of the Simpler Way it is argued that it would probably enable our footprint to be cut to 10% of its present value. There is no possibility of achieving the transition without huge and radical change to a quite different kind of economic

system, one in which market forces did not have a major role and in which there was no growth at all.

It is of course not at all likely that people in consumer society will opt for The Simpler Way. Yet there are many groups around the world within the Global Eco-village Movement pioneering The Simpler Way. Our fate depends on whether they can develop enough impressive examples to persuade people in the mainstream not just that The Simpler Way is the only way to solve the environment and other global problems, but that it is a much more rewarding way to live. Our task is to have in place a sufficient number of illustrative alternative settlements so that when the big problems impact, such as a major and lasting petroleum scarcity, people will be able to see around them instances of a much more sensible way.

The most important goal for anyone who want's to save the environment is to help us get this radically critical perspective onto the agenda of public discussion, to at least get people to think about the possibility that affluence and growth are the basic causes of the global predicament. Inquiries such as this one being conducted by the House of Representatives should at least ensure that the perspective sketched above is identified as one that should be considered.