wth: political activi/m

by Michael Jackson, a grad student researching issues of national science policy in Canada.

Clearly it would be silly and dangerous if ecological and environmental problems were to be neglected. Equally silly and dangerous is "ecological determinism" which leads to faulty analysis, incorrect predictions and the advocacy of unjustified and counter-productive economic and social policies. It has happened before.

MALTHUS WAS WRONG

About 130 years ago Thomas Malthus said that population tended to grow geometrically while agricultural production tended to grow arithmetically. Therefore, he concluded, overpopulation would result. War, famine and disease, these alone could resolve overpopulation thought Malthus.

By 1860 agricultural productivity in the USA increased geometrically over 100 years in real terms, at 6-7% a year. Malthus was wrong.

Regardless of Malthus' intention, his prediction allowed many people a clear

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conscience in the face of disaster to others. The Irish potato famine in 1840 was in fact the result of British mismanagement and exploitation. Ireland was starved while England grew full. Malthus' "law" diverted attention from England's "Irish Policy" to the inevitable "forces of nature." Policies can be changed, but the forces of nature cannot. If the forces of nature are responsible for the Irish famine then there is nothing to be done. This was the supposition. Nothing was done.

Today's example might include "Let's keep the foreigners out of Canada, there are too many people here already" and "Higher unemployment rates are necessary to preserve the environment."

The main tenet of our environmentalist school is that infinite growth is impossible on a finite planet. If economic and demographic growth continue at present rates, then by the end of the century the world will be near to asphyxiation, death by overcrowding and the exhaustion of resources. Thus, it is necessary to change present values and policies. To stop population growth. To stop economic growth.

It is a compelling thesis which is receiving widespread attention. It is also a misleading and false thesis.

POPULATION

Are there too many people? It is important to distinguish the problem of the developing world from that of the developed world. The population problem of the developing countries is well known. It has little to do with ecology. It has to do with capital accumulation for development when there is a rapidly growing population. have a problem. Both can support populations immensely greater than those of the present. France is thought by its present government to be underpopulated. Yet it has a population density four times that of the USA. (Canadian comparisons are misleading due to our strip-like

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population dispersion.) This is the same France to which Canadian tourists flock to take in the sights. The densities of Belgium and Holland are 14 times that of the USA, those of Switzerland and the UK are 7 times that of the USA.

The environmental contrast amongst these European nations is instructive.

With the same population densities, Holland is reported to be far cleaner than Belgium, as is Switzerland compared to the UK. Politics, not population, is the difference.

Policies and practices of land use, conservation, public investment, taxation and industrial regulation are more important factors in environmental quality than population growth or density. These are factors which can be legislated and enforced, unlike population. These are factors that are legislated and enforced in many other countries, but not in Canada.

Moreover, of especial interest to Canada is the fact that Holland and Switzerland with great population density and strong environmental regulations also have technologically advanced and internationally competitive industries, high levels of employment and currencies stronger than the North American dollar.

There is no long-run economic justification for delaying environmental improvement in Canada.

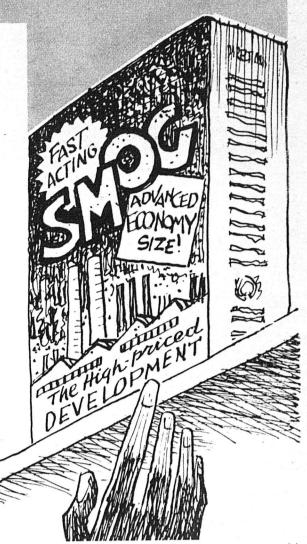
Further, the relationship of quality of life and environment is not so clear as suggested by one current pseudo-theory which alleges a correlation between population density and violence. In spite of its higher population density Europe is a less violent society than is Canada as measured by crime statistics. The facility with which guns can be obtained is a more important factor in violence than population density.

RESOURCE DEPLETION

According to the gloom and doom ecologists, e.g. in The Limits to Growth, if economic and demographic growth continues apace, the raw materials will soon be depleted. Growth, including economic growth in the developing world, must stop.

Of course the developing world has been complaining recently that demands for its raw materials have been falling off due to technological changes in the developing world. This is the cause of the widening gap between have and have-not nations.

To suggest, as dismal ecologists have, that a body be established to "manage" the world's resources is naive. At a time when developing countries are seizing control over their own resources they are not prepared to give them up to "the world's best interest" as seen from the Northern Hemisphere, no matter how well intentioned that view. Most of the world is developing and the developing world is starving for smog. It wants development at any price.



growth, the redistribution of existing wealth must be undertaken. This is not a very likely prospect. It has never happened even within one country let alone around the world. Leaders of the third world will not swallow so big a story as all that.

Resource depletion arguments are based on unrealistic and restrictive assumptions. They ignore the possibility of economizing on scarce resources through re-cycling and technological innovation.

Specifically, most of the data on reserves of non-renewable resources in The Limits of Growth comes from the US Bureau of Mines. The Bureau says that 80% of its estimates have a confidence level of less than 65%. Error is more prevalent in these data than truth.

Many of the estimates are dated. Some of those for the People's Republic of China are from 1913.

Reserve estimates are constantly changing. For example, between 1954 and 1966 those for iron ore increased 5 times. Naturally, Albertans remember the Prudhoe Bay find.

Confusion is brought to reserve estimates because extractive corporations tend to underestimate reserves for tax and price purposes. Corporations tend to overestimate reserves for export license purposes. Natural gas reserves in Alberta have gone through more than one such fluctuation.

Reserves can be increased at a higher price of refinement.

At a time when developing countries are seizing control over their own resources, they are not prepared to give them up to the "world's best interest' as seen from the Northern Hemisphere, no matter how well intentioned that view.

Taking a non-North American perspective, it is difficult to see that Canada, or the USA,

To persuade the developing world of zero



The five fold increase in all reserves over the next 100 years allowed in The Limits to Growth in conservative.

The concept of resource is dynamic. As it changes so too do reserves. With technology resources change. Oil and uranium were once not resources. Now they are.

With the use of atomic energy the concept of resource seems likely to be even more dynamic in the future than it has been in the past, a possibility ignored by ecologists.

Finally, the vast resources of the sea becs of the world have yet to be estimated, let alone tapped. When they are the whole resource picture will change once again.

Changes in the assumed values for the resource variables in The Limits to Growth analysis such as implied above would considerably delay doomsday. More importantly, this added time would be like an added second to a car driver in a traffic emergency. It would not simply delay the catastrophe. It would allow instead for the time to transform the whole situation.

continued on page 8

7