The Inaugural Julian Simon memorial lecture, Liberty Institute, New Delhi, 9 December 2000

THE NEW CULTURAL IMPERIALISM:
The Greens and Economic Development

by

Deepak Lal

James S. Coleman Professor of International Development Studies,
University of California, Los Angeles

UCLA DEPT. OF ECONOMICS WORKING PAPER No.: 814

Abstract
This paper argues that environmentalism has become a new secular Western religion which threatens world disorder as well as the prospects of alleviating poverty in the Third World. It critically examines the Green agenda in terms of a number of prospective international environmental treaties: the Kyoto protocol, the Basle convention, the POPs treaty, and the Biodiversity convention, and shows how these pose serious threats to the prospects of alleviating poverty in India.

JEL classification: Q01, O13, O19, Z12

Address:
8369 Bunche Hall,
UCLA, 405 Hilgard Ave.,
Los Angeles CA 90024
Tel: 310-8254521
Fax: 310-8250528
email: dlal@ucla.edu

November 2000
INTRODUCTION

I am delighted to be able to inaugurate this memorial lecture series in honour of a personal friend and highly original economist- Julian Simon. I got to know him very well when we spent some years in Washington in the 1980's and fondly remember the numerous Jewish 'sedas' at which the chosen texts for part of the service were from the writings of the great classical liberals- Adam Smith and David Hume. Given their views of organised religion I am not sure there shades would have been altogether happy at this use of their work.

In the second edition of his monumental "The Ultimate Resource", Julian explains how, with a desire to do something about the seemingly burgeoning population of the world, he visited the USAID office in Washington in 1969 to propose a project to lower fertility in the Third World. "I arrived early for my appointment" he writes, "so I strolled outside in the warm sunshine. Below the building's plaza I noticed a road sign that said 'Iwo Jima Memorial'. There came to me the memory of reading a eulogy delivered by a Jewish chaplain over the dead on the battlefield of Iwo Jima, saying something like, How many who would have been a Mozart or a Michelangelo or an Einstein have we buried here? and then I thought: Have I gone crazy? What business do I have trying to help arrange it that fewer human beings will be born, each one of whom might be a Mozart or a Michelangelo or an Einstein- or simply a joy to his or her family and community, and a person who will enjoy life?"

Thereafter, he spent his professional life collecting data and producing analyses which showed that there was no evidence that rapid population growth harmed economic development. The
plausibility of the contrary view in the public mind is just due to an arithmetic relationship, as per capita income (which is usually taken as a measure of a country's economic welfare) is defined as the ratio of GDP to population. So that with no change in the numerator, a rise in the denominator will arithmetically reduce per capita income. But as I noted in The Hindu Equilibrium, the absurdity of this view can be seen from the fact that if a cow has a child per capita income goes up, but if born to a human it goes down. But, as Julian Simon eloquently argued, men are not merely receptacles for output, they are also producers.

As the crude Malthusian fears subsided, with the growing recognition that the burgeoning populations in the Third World were part of a 'demographic transition', similar to what had exorcised the Malthusian scepter in the industrialized countries, the doomsters changed tack. Beginning with the infamous Club of Rome's The Limits of Growth, the argument became that even though the world's population might stabilize, as economic growth in the Third World led parents- as it had in the West- to choose quality over quantity in their desired family size and thence lower fertility, the expected world population- with the high standard of living which would have triggered the demographic transition- was unsustainable, as the natural resources which were required to provide this higher global income would run out.

Julian Simon then was wily nily pushed into the environmental debate. Again, as in all his work, based on careful empirical analysis he made a simple point, namely that if the doomsters were right then we should see a sustained rise in the prices of these natural resources. He famously wagered Paul Ehrlich (one of the leading doomsters) that resource prices would be lower at the end of the 1980's than at the beginning despite rapid increases in world population and output. Simon was right and Ehrlich paid up- but Julian never cashed the cheque, framing it as a memento of his victory.

This did not stop the Greens from announcing various other
doom laden scenarios. They were thus playing on an ancient human fear of the Apocalypse. In the Ultimate Resource, Simon has a 5 page list of the environmental resource scares which were subsequently disproven beginning with the ??? BC scare that the world was running out of flint, to the 1993 scare that cellular phones cause cancer. But the ones which have stuck concern what is now anthropomorphically called 'the environment'. They have even led to public action in the form of various transnational treaties—many of which India has signed—and continuing Green agitation for more. They pose a serious threat to the economic health of Third World countries, in particular India and China, and that is the subject I would like to discuss in this lecture in memory of Julian Simon.

I

I got involved fortuitously in debates on the environment when I was preparing the 1990 Wincott lecture, whose major theme was the illegitimacy of using arguments based on 'pecuniary' externalities for international macroeconomic and exchange rate co-ordination, as pecuniary externalities being mediated through the market mechanism are Pareto-irrelevant (see Buchanan and Stubbelbine). For balance, I hoped to argue that, the 'global warming' which was then making the headlines was a 'technological' externality which was Pareto-relevant and would require international action. Wanting to read up about global warming I got in touch with Julian Simon who sent me a reading list as well as put me in touch with a scientist—Fred Singer—who though a respected atmospheric physicist was skeptical that there was any evidence of man-made global warming which needed to be countered. Having read the scientific literature I was appalled at how the scientists—like Stephen Schneider—openly admitted they were creating alarm for a phenomenon which they themselves recognized was highly speculative. My lecture not surprisingly also ended up as an attack on this scientific attempt to bamboozle the public.
My friend John Flemming who was then chief economist at the Bank of England, and also chairing a subcommittee of one of the UK's research councils, told me on reading the lecture that I would get nowhere by taking on the scientists who, at a meeting he attended to distribute funds for climate research, had explicitly said that they were not going to behave like economists by disagreeing with each other! Of course, the cornucopia of research funds that the climate change scare has generated provides a baser rent-seeking motive—well-known to economists—for thus closing ranks. It would take me too far afield to describe the shenanigans of the International Panel of Climate Change, but just judging from its flip-flopping around about even the likely extent of global warming, I think it is fair to say that the scientific basis of any great global catastrophe following from the undisputed increase in greenhouse gasses which has and will accompany economic growth is highly insecure.\(^1\)

But the Greens had found a cause which resonates with the public, with any hurricane or flood being easily sold as a sign of global warming—as witness the statements by British politicians about the recent heavy autumn rains and flooding in the UK. But despite this, openly Green parties which have contested elections in the public arena—outside Germany and some of the Scandinavian countries—have not had much public support. They have, therefore, adopted another tactic to push their agenda. Organised into non-governmental organizations (NGOs) who are the self-proclaimed voice of an international civil society, they have sought to push their agenda through various transnational organizations like UNEP, and increasingly the World Bank and the WHO.

Their aim is to push through international treaties and conventions sponsored by these organizations to regulate various

---

\(^1\) The best and most comprehensive cost-benefit study of global warming is Nordhaus (1994), who finds that 'laissez faire' dominates policies to stabilise or cut CO2 emissions.
aspects of economies—particularly of the Third World. The following international treaties have either been concluded or are under negotiation: the biodiversity convention; the Basle convention; the convention to combat decertification; the POPs treaty; and of course, the Kyoto protocol. In all these cases the Green NGO's having failed—by and large—to gain political legitimacy for their viewpoint through the ballot box, are attempting to legislate it through the unelected bureaucracies of transnational institutions. The big prize they seek and which is still not in their grasp is the WTO, where they would like to see trade sanctions being used to further their agenda.

So what is their agenda? Even though their shifting scares have been countered by rational and scientific arguments, it has had no effect on the Greens. For those who need the evidence which disproves the various Green scares till 1993, Julian Simon's The Ultimate Resource, provides a comprehensive compilation. But, as he himself came to see, at the end of a lifetime of trying to engage the Greens in rational debate, their position is not based on reason but is a new secular religion. Take just one example. Presented with evidence that some purported environmental threat is extremely unlikely and uncertain, they resort to a stock argument— the precautionary principle: 'it is better to be safe than sorry'. This has some resonance with the public, as it has echoes of Pascal's famous wager about the existence of God, viz. if God did not exist one would only have eschewed the finite pleasures from forsaking a sinful life, but if he did exist a sinful life would lead to damnation and the infinite pain of Hell. In expected utility terms (as economists would call it), it was better to give up the finite pleasures from a sinful life for even an infinitesimally small probability of burning forever in Hell.

But as Julian Simon points out in his riposte to the Ehrich's well-known restatement of this wager: "If I'm right we'll save the world by curbing population growth. If I'm wrong, people
will still be better fed, better housed and happier, thanks to our effort [all the evidence suggests he is wrong. JLS] Will anything be lost if it turns out later that we can support a much larger population than seems possible today". But says Simon, note "Pascal's wager applies entirely to one person. No one else loses if she or he is wrong. But Ehrlich bets what he thinks will be the economic gains that we and our descendants might enjoy against the unborn's very lives. Would he make the same wager if his own life rather than others' lives were at stake?" (Simon, 1996, p.xxxiii). So it does come down to a question of values after all- not facts or logic.

II

Sometime after my foray into the snake-pit of the environmental debate it became clear that what we are witnessing here is another crusade, reminiscent of those which led to Western imperialism in the past. Recently, the Sarsangchalalalk of the RSS, K.S.Sudarshan attacked the Christian church and fundamentalist Islam as agents of destabilisation of India, This was misplaced for two reasons.

Leaving aside the question of Islamic fundamentalism, the attack on the Christian church seems to have been provoked by Pope John Paul II's address in India last year, in which he declared that, in the third millennium the Church's aim would be to evangelize the whole of Asia as it had Europe in the first and the Americas and Africa in the second. But this is an old objective of the West. In his still relevant book on "Asia and Western Dominance", the late K.M.Panikkar had charted this aspect of the encounter between the old Eurasian civilizations and the newly resurgent West, and shown how despite repeated attempts at converting the people of Asia- even with the aid of gunboats and diplomatic pressure- the Christian missionaries failed in their evangelical mission. Whatever converts they made were from the
lower social classes and were looked down upon by their compatriots—being contemptuously labelled as 'rice Christians' and 'secondary barbarians' by the Chinese. Even when the Chrisitians tried various forms of syncertism by claiming their religion was compatible with local traditions, the indigenous cultures were too strong and did not accept the cultural superiority of the West. So, if, even at a time these missionaries could count on State support for their operations, they failed, it is difficult to see that they are likely to succeed today, when the playing field is more level. The Pope's hopes of converting Asia are likely to be as frustrated as those of St. Francis Xavier who died on a rocky island off the Kwangtung coast in 1552, attended only by his Chinese servant, trying vainly to get to Beijing in the hope of repeating the early Church's victory in the Roman empire through the conversion of Constantine. As Panikkar remarked, even in Goa, where conversion by force was undertaken, "the attempt to Christianize was not a complete success,...[as] the majority of the population after 430 years of Portuguese rule is still non-Christian".

Second, as I have argued in my Unintended Consequences, with the death of the Christian God in the minds of many in the West, the Christian cosmological beliefs have found expression in many different secular religions which they are now seeking to impose on Asia. It is these, and not the overt strictly religious evangelism, which pose the threat of a new Western cultural imperialism. Like many generals Sudarshan seems to be fighting the last war!

The ecological movement is the latest manifestation of the various secular religions in the West once the Christian God died for so many with the Scientific and Darwinian revolutions.

First, note that Western cosmological beliefs—to the extent they are coherent and commonly shared—are still deeply rooted in Christianity, particularly its theological formalization in St. Augustine's "City of God". There are a number of
distinctive features about Christianity, which it shares with its Semitic cousin Islam, but not entirely with its parent Judaism, and which are not to be found in any of the other great Eurasian civilisational religions, past or present. The most important is its universality. Neither the Jews nor the Hindus or the Sinic civilizations had religions claiming to be universal. You could not choose to be a Hindu, Chinese or Jew, you were born as one. This also meant that unlike Christianity and Islam these religions did not proselytize. Third, only the Semitic religions being monotheistic have also been egalitarian. The others have believed in Homo Hierarchicus\(^2\) An ethic which claims to be universal and egalitarian and proselytizes for converts is a continuing Christian legacy even in secular Western minds, and is the basis for the moral crusade of 'ethical trading'.

It would take us too far afield to substantiate this argument in any detail but since Augustine's "City of God", the West has been haunted by its cosmology.\(^3\) From the Enlightenment to Marxism to Freudianism to Eco-fundamentalism, Augustine's vision of the Heavenly City has had a tenacious hold on the Western mind. The same narrative with a Garden of Eden, a Fall leading to original Sin and a Day of Judgment for the Elect and Hell for the Damned keeps recurring. Thus the philosophes displaced the Garden of Eden by classical Greece and Rome, and God became an abstract cause—the Divine Watchmaker. The Christian centuries were the Fall, and the Christian revelations a fraud as God expressed his purpose through his laws recorded in the Great Book of Nature. The Enlightened were the elect and the Christian paradise was replaced by Posterity (See Becker). By this updating of the Christian narrative the 18th century philosophers of the Enlightenment thought they had been able to salvage a basis for morality and

\(^{2}\)The title of the famous book about the Hindu caste system by Louis Dumont.

\(^{3}\)see C.L.Becker (1932)
social order in the world of the Divine Watchmaker. But once as a result of Darwin he was seen to be blind, as Nietzsche proclaimed from the housetops at the end of the 19th century, God was Dead, and the moral foundations of the West were thereafter in ruins.

The subsequent attempts to found a morality based on reason are open to Nietzsche's fatal objection in his aphorism about utilitarianism: "moral sensibilities are nowadays at such cross purposes that to one man a morality is proved by its utility, while to another its utility refutes it" (Nietzsche 1881/1982: p.220). 4 Nietzsche's greatness lies in clearly seeing the moral abyss that the death of its God had created for the West. Kant's attempt to ground a rational morality on his principle of universalisability- harking back to the Biblical injunction "therefore all things whatsoever ye do would that men should do to you, do even so to them"- founders on Hegel's two objections: it is merely a principle of logical consistency without any specific moral content, and worse it is as a result powerless to prevent any immoral conduct that takes our fancy. The subsequent ink spilt by moral philosophers has merely clothed their particular prejudices in rational form.

The death of the Christian God did not however end variations on the theme of Augustine's "City". It was to go through two further mutations in the form of Marxism and Freudianism, and the most recent and bizarre mutation in the form of Ecofundamentalism. As both Marxism (in its post-modern form) and Eco-fundamentalism provide the ballast for ecological imperialism it is worth noting their secular transformations of Augustine's Heavenly City. 5

Marxism like the old faith looks to the past and the future. There is a Garden of Eden -- before "property" relations corrupted

4A point only reiterated by reading the contributions in the edited volume by Sen and Williams.

5That Freudianism follows the same narrative is argued by Gellner (1993) and Webster (1995).
"natural man". Then the Fall as "commodification" leads to class societies and a continuing but impersonal conflict of material forces, which leads in turn to the Day of Judgment with the Revolution and the millennial Paradise of Communism. This movement towards earthly salvation being mediated, not as the Enlightenment sages had claimed through enlightenment and the preaching of good will, but by the inexorable forces of historical materialism. Another secular "city of God" has been created.

Ecofundamentalism is the latest of these secular mutations of Augustine's "City of God" (Lal (1995)). It carries the Christian notion of contemptus mundi to its logical conclusion. Humankind is evil and only by living in harmony with a deified Nature can it be saved.

The environmental movement (at least in its "deep" version) is now a secular religion in many parts of the West. The historian of the ecological movement Anna Bramwell notes that in the past Western Man was

able to see the earth as man's unique domain precisely because of God's existence... When science took over the role of religion in the nineteenth century, the belief that God made the world with a purpose in which man was paramount declined. But if there was no purpose, how was man to live on the earth? The hedonistic answer, to enjoy it as long as possible, was not acceptable. If Man had become God, then he had
become the shepherd of the earth, the guardian,
responsible for the oekonomie of the earth. (Bramwell, p. 23)

The spiritual and moral void created by the Death of God is, thus, increasingly being filled in the secular Western world by the worship of Nature. In a final irony, those haunted natural spirits which the medieval Church sought to exorcise so that the West could conquer its forests (see Southern), are now being glorified and being placed above Man. The surrealist and anti-human nature of this contrast between eco-morality and what mankind has sought through its religions in the past is perfectly captured by Douglas and Wildavsky who write: "the sacred places of the world are crowded with pilgrims and worshippers. Mecca is crowded, Jerusalem is crowded. In most religions, people occupy the foreground of the thinking. The Sierra Nevada are vacant places, loved explicitly because they are vacant. So the environment has come to take first place" (p. 125). The guilt evinced against sinning against God has been replaced by that of sinning against Nature. Saving Spaceship Earth has replaced the saving of souls!

But why should the rest of the world subscribe to this continuing Augustinian narrative cloaked in different secular guises?

III.
TOWARDS WORLD DISORDER

There are ominous parallels between the last decades of the 19th and the present century. In both periods it seemed that a world increasingly closely knit through foreign trade and capital flows would bring universal peace and prosperity. This dream came to an end on the fields of Flanders. The First World War (which has been aptly described as a wholly unnecessary war) put an end to the first Liberal International economic order (LIEO) created under British leadership. It took nearly a century to resurrect a new LIEO under the US.

One of the causes of the First War was the imperial competition for colonies. This imperialism was fuelled by the territorial imperative as well as the "white man's burden" - to save the heathen souls. In 19th century India, as Stokes demonstrated, there was an unholy alliance of Evangelicals - with their belief in the Gospels, and Utilitarians and Radicals - with their faith in reason, who believed in the superiority of Western ways -religious and secular. Their attempts to transform Indian "habits of the heart" led to the nationalist backlash of the 1857 Mutiny. Today we see a similar alliance between some scientists and the eco-fundamentalists with a similar imperialist form though differing content. But history never repeats itself. Whereas the 19th century battles for "hearts and minds" were fought within and between 'nation-states' the arena for today's imperialist project are various transnational organizations. It is instructive to see how this has happened and its likely consequences.
Stephen Toulmin's (1990) brilliant reconstruction of the origins of the "modernity" project, provides the necessary clues. Toulmin argues that there were two strands in modernity. The skeptical humanism of the late Renaissance epitomized by Montaigne, Erasmus and Shakespeare, and the rationalism of the late 16th century epitomized by Descartes search for certainty, which underpinned the triumphs of the scientific revolution as well as the methods of mechanistic Newtonian physics as the exemplary form of rationality. Toulmin's most original insight is that the rationalist project was prompted by the Thirty Years War that followed the assassination of Henry IV of France in 1610.

Henry's attempt to create a religiously tolerant secular state with equal rights for Catholics and Protestants mirrored the skeptical humanism of Montaigne. Henry's assassination was taken as a sign of the failure of this tolerant Renaissance skepticism.

With the carnage that followed the religious wars in support of different dogmas, Descartes set himself the project of overcoming Montaigne's skepticism -- which seemed to have led to such disastrous consequences by defining a decontextualized certainty.

This rationalist project, which created the scientific revolution, found resonance argues Toulmin in the coterminous development of the system of sovereign nation states following the peace of Westphalia. The ascendancy of these two "systems" continued in tandem till the First World War. But chinks were appearing in the armor of the rationalist Cartesian project with its separation of human from physical nature with the developments
in the late 19th century associated with Darwin and Freud. Despite the replacement of Newtonian physics by the less "mechanistic" physics of Einstein and his successors, the political disorder of the 1930s led as in the 1630s to a search for certainty and the logical positivist movement was born.

The final dismantling of the scaffolding of the rationalist project begun with the peace of Westphalia, according to Toulmin, occurred in the 1960s -- with Kennedy's assassination being as emblematic as Henry IV's. With many hoping that Kennedy was about to launch a period ending the Age of Nations and beginning one of transnational cooperation through transnational institutions. Thus since the 1960's the world has been trying to reinvent the humanism of the Renaissance that was sidelined by the rationalist Cartesian project of the 16th century. As he writes:

By the 1950s there were already the best of reasons, intellectual and practical for restoring the unities dichotomized in the 17th century: humanity vs. nature, mental activity vs its material correlates, human rationality vs. emotional springs of action and so on.

He then goes on to argue that the post war generation was the first to respond: "because they had strong personal stakes in the then current political situation." The Vietnam war shocked them into rethinking the claims of the nation, and above all its claim to unqualified sovereignty. Rachel Carson had shown them that nature and humanity are ecologically interdependent, Freud's successors had shown them a better grasp of their emotional lives, and now disquieting images on the television news called the moral wisdom of their rulers in doubt. In this situation, one must be incorrigibly obtuse or morally insensible to fail to see the point. This point did not relate to particularly to Vietnam: rather what was apparent was the superannuation of the modern world view that was accepted as the intellectual warrant for
"nationhood" in or around 1700. (Toulmin, p. 161)

This is the place to introduce the insights of Douglas and Wildavsky concerning the cultural and political characteristics of the environmental movement. They define a hierarchical center which has been characteristic of the nation state—much as Toulmin does. Opposing this have been what they call "border" organizations. They comprise "secular and religious protest movements and sects and communes of all kinds" (p. 102). They argue that: the border is self-defined by its opposition to encompassing larger social systems. It is composed of small units and it sees no disaster in reduction of the scale of organization. It warns the center that its cherished social systems will wither because the center does not listen to warnings of cataclysm. The border is worried about God or nature, two arbiters external to the large-scale social systems of the center. Either God will punish or nature will punish; the jeremiad is the same and the sins are the same: worldly ambition, lust after material things, large organization.

(p. 123)

Like Toulmin they see the Vietnam war, and Watergate undermining support for the center in the U.S., and giving greater legitimacy to the border — particularly to the segment which emphasizes Nature. There are various more complex reasons — which we cannot go into on this occasion — why the moral authority of the center in many Western states has been undermined. This has given rise to sources of moral authority outside the hierarchical structure of the nation state, which echoes a return to pre-modern Western medieval forms. As Toulmin notes:

One notable feature of the system of European Powers established by the Peace of Westphalia ... was the untrammeled sovereignty it conferred on the European Powers. Before the Reformation, the established rulers ... exercised their political power under the moral
supervision of the Church. As Henry II of England found after the murder of Thomas a Becket, the Church might even oblige a King to accept a humiliating penance as the price of its continued support. (ibid p. 196)

With the undermining of the moral authority of Western nation states, Toulmin notes that this moral authority is increasingly being taken over by non-governmental organizations (NGO's) like Amnesty International, and in many cases the environmental NGO's. This unravelling of the Westphalian system and a partial reversion to the world of the Middle Ages, poses in my view the real threat of eco-imperialism, modelled less on the model of the 19th century scramble for Africa, than the Crusades.

For whilst the West may be turning its back on modernity and its associated untrammelled sovereignty of nation states, the Rest have no intention of giving up the latter and are eagerly seeking to adopt the technological fruits of the former, without giving up their souls. Hence even religious fundamentalists in the Rest recognize the need for economic progress, if for no other reason than to acquire the ability to produce or purchase those arms which they feel are essential to prevent any repetition of the humiliation they have suffered at the hands of superior Western might in the past. As the Indian defense minister is reported to have said when asked about the lesson he learned from the Gulf War: "Don't fight the United States unless you have nuclear weapons" (cited in Huntington, p. 46). Numerous developing countries for good or ill have, or are rushing to acquire this new
countervailing power. The attempts by the eco moralists to curb
their development of the industrial bases of this power, to save
Spaceship Earth will be fiercely resisted.

This has ominous consequences for the various transnational
organizations like the United Nations, the World Bank and the
World Trade Organization. As Huntington notes, currently:
global political and security issues are effectively
settled by a directorate of the United States, Britain
and France, world economic issues by a directorate of
the United States, Germany and Japan ... to the
exclusion of lesser and largely non western countries.
Decisions made at the U.N. Security Council or in the
International Monetary Fund that reflect the interests
of the West are presented to the world as reflecting
the desires of the world community. The very phrase
"the world community" has become the euphemistic
collective noun ... to give global legitimacy to
actions reflecting the interests of the United States
and other Western powers. (p. 39)

It is not surprising therefore that the ecologists should
seek to influence the agenda of these international organizations
-- see above. But as I have argued given the globally divisive
nature of their agenda, how long will it be before the frictions
it causes will destroy these institutions?

IV

WHAT SHOULD INDIA DO?

The time has surely come to take on these new cultural
imperialists. The first point of resistance is to recognise what
they are seeking to do. Bluntly, they would like to perpetuate the
ancient poverty of the great Eurasian civilizations - India and
China - with, as they see it, their burgeoning unwashed masses
increasingly emitting noxious pollutants as they seek to make their people prosperous, and achieve parity with the West.

For as economic historians have emphasized it was not till the Industrial Revolution that mankind found the key to intensive growth -- a sustained rise in per capita income -- which, as the example of the West and many newly industrializing countries have shown, has the potential of eradicating mass structural poverty -- the scourge which in the past was considered to be irremediable (pace the Biblical saying that the poor will always be with us). For in the past most growth was extensive -- with output growing in line with (modest) population growth (Reynolds, 1983). As pre-industrial economies relied on organic raw materials for food, clothing, housing and fuel (energy), whose supply in the long run was inevitably constrained by the fixed factor, land, their growth was ultimately bounded by the productivity of land. For even traditional industry and transportation -- depending upon animal muscle for mechanical energy, and upon charcoal (a vegetable substance) for smelting and working crude ores and providing heat -- would ultimately be constrained by the diminishing returns to land that would inexorably set in once the land frontier was reached. In these organic economies (Wrigley, 1988), with diminishing returns to land conjoined with the Malthusian principle of population, a long run stationary state where the mass of the people languished at a subsistence standard of living seemed inevitable. No wonder the classical economists were so gloomy!
But even in organic economies there could be some respite, through the adoption of market "capitalism" and free trade defended by Adam Smith. This could generate some intensive growth as it would increase the productivity of the economy as compared with mercantilism, and by lowering the cost of the consumption bundle (through cheaper imports) would lead to a rise in per capita income. But if this growth in popular opulence led to excessive breeding the land constraint would inexorably lead back to subsistence wages. Technical progress could hold the stationary state at bay but the land constraint would ultimately prove binding.

The Industrial Revolution led to the substitution of this organic economy by a mineral based energy economy. It escaped from the land constraint by using mineral raw materials instead of the organic products of land. Coal was the most notable, providing most of the heat energy of industry and with the development of the steam engine virtually unlimited supplies of mechanical energy. Intensive growth now became possible, as the land constraint on the raw materials required for raising aggregate output was removed.

Thus the Industrial Revolution in England was based on two forms of "capitalism", one institutional, namely that defended by Adam Smith -- because of its productivity enhancing effects, even in an organic economy -- and the other physical: the capital stock of stored energy represented by the fossil fuels which allowed mankind to create in the words of E.A. Wrigley:
a world that no longer follows the rhythm of the sun and the seasons; a world in which the fortunes of men depend largely upon how he himself regulates the economy and not upon the vagaries of weather and harvest; a world in which poverty has become an optional state rather than a reflection of the necessary limitations of human productive powers.

(Wrigley, 1988, p. 6)

The Greens are of course, against both forms of "capitalism" - the free trade promoted by Smith, as well as the continued burning of fossil fuels -- leaving little hope for the world's poor.

(a) **Kyoto Protocol**: India along with China is therefore to be commended for standing firmly at Kyoto against any restriction of their CO2 emissions. With the recent collapse of the negotiations for a Climate Change treaty at the Hague- largely because of differences between the US and Europe- this is perhaps an issue which the Greens will no longer be able to exploit. But India has already signed various international ecological treaties inimical to her interests.

**Basle Convention**: Thus, for example, India is a signatory to the Basle Convention, which by defining various metals as 'hazardous,' controls trade in waste, scrap and recyclable materials. Greenpeace is using the treaty to organise a total embargo on trade with developing countries, excluding them from global scrap metal markets. This is already having deleterious effects. There are press reports that a recently highly profitable industry- shipbreaking- at Alang in Gujarat is likely to fall foul of this convention.

Shipbreaking was till the 1970's performed with cranes and heavy equipment at salvage docks in big ship yards. When labour
costs and environmental regulations made this uncompetitive, the industry shifted to Korea and Taiwan. But in the 1980's, enterprising business men in India, Pakistan and Bangladesh realised that to wreck a ship they did not need expensive docks and tools; they could just drive the ship up onto a beach as they might a fishing boat and tear it apart by hand. The scrap metal obtained can be profitably sold in South Asia with its insatiable demand for low-grade steel, mainly for ribbed reinforcing bars used in constructing concrete walls. These rods are produced locally from the ships' hull plating by small scale re-rolling mills of which there are close to a 100 near Alang alone. Today nearly 90 per cent of the world's annual of 700 condemned ships are wrecked on South Asian beaches, nearly half of them at Alang. The economic effects are substantial. "Alang and the industries that have sprung from it provide a livelihood however meager for perhaps as many a million Indians" (Langewiesche (2000)). This industry is sought to be destroyed by Greenpeace under the auspices of the Basle Convention. India should walk away from this convention, just as many influential people in Australia are arguing for it to do so.

**POPs and DDT:** Among the two other treaties currently under negotiation, which India should have nothing to do with, are the POPs treaty and the Biodiversity convention. These are attempts to ban DDT and GM food. As both are of vital interest to India's future, it maybe worth saying something more on these.

The Persistent Organic Pollutants (POP's) framework convention is being negotiated under pressure from environmental groups, who want a binding treaty to ban 'persistent organic pollutants': defined as pesticides, industrial chemicals and their by-products. DDT is sought to be banned under the treaty. If India foolishly signs this convention it will seriously damage the nation's health.

For DDT is the most cost-effective controller of diseases spread by bugs like flies and mosquitoes that has ever been
produced. The US National Academy of Sciences estimated it had saved 500 million lives from malaria by 1970. In India, effective spraying had virtually eliminated the disease by the 1960's, so much so that the mosquito nets which were ubiquitous in my childhood had disappeared from urban houses by the time I was at University in the late 1950s. DDT spraying had reduced the number of malaria cases from 75 million in 1951 to around 50,000 in 1961, and the number of malaria deaths from nearly a million in the 1940's to a few thousand in the 1960's. But then in the 1970's largely as a result of an environmental scare promoted by Rachel Carson's book *Silent Spring*, foreign aid agencies and various UN organizations began to take a jaundiced view of DDT, and the use of DDT declined. Not surprisingly, the mosquitoes hit back and endemic malaria returned to India. By 1997 the UNDP's *Human Development Report 2000* estimates there were about 2.6 million malaria cases.

The same story of a decline and rise in disease with the increase and decrease in DDT spraying can be told about *kala-azar*, which is spread by the sand fly. DDT largely rid India of *kala-azar* in the 1950's and 1960's. But, with the subsequent decline in DDT use it has come back. The State minister of health in Bihar recently informed the Assembly that, 408 people had died, and 12,000 were afflicted with the disease in 30 districts of Northern Bihar.

So why did DDT fall out of disfavour despite its demonstrated merits? It was Rachel Carson in 1962 who started the DDT scare with her claim that its use had devastating effects on bird life particularly those higher up the food chain. It was also claimed it caused hepatitis in humans. Numerous scientific studies showed these fears to be baseless. It was shown to be safe to humans, causing death only if eaten like pancakes! In 1971 the distinguished biologist Philip Handler as president of the US National Academy of Science said "DDT is the greatest chemical that has ever been discovered". Commission after commission,
expert after Nobel prize winning expert has given DDT a clean bill of health. (see E.M. Whelan (1985): Toxic Terror).

Yet in 1972, President Nixon's head of the US Environmental Protection Agency, William Ruckelshaus banned DDT against all the expert scientific advice he had been given. He argued that, the pesticide was "a warning that man maybe exposing himself to a substance that may ultimately have serious effect on his health." Most developed countries followed the US and banned the chemical for all uses. Many developing countries followed suit by banning the pesticide in agriculture, and some for all uses. USAID which along with the WHO had been at the forefront of the mosquito eradication programs based on house spraying with DDT, now turned their backs on DDT. USAID has maintained that, as DDT is not registered by the EPA for use in the US, foreign assistance is not available for programs that use DDT. Thus despite the WHO's Malaria Expert Committee's ruling that DDT is safe and effective for malaria control, since 1979 the WHO itself has championed a strategy which ignores the causal link between decreasing numbers of houses sprayed and increasing malaria, by emphasizing curative and de-emphasising preventive measures. Instead of fighting malaria by the only effective method known, the WHO is spending its limited resources instead on politically correct and highly dubious campaign against smoking (see Lal 2000).

The decline in house spraying, created DDT resistant mosquitoes. But even then, when DDT was vigorously used, as in Mexico, malaria rates declined despite the increasing DDT resistance of mosquitoes. Moreover, DDT is now increasingly needed as the Anopheles mosquito has become resistant to the pesticides currently used—synthetic pyrethroids.

The favoured WHO strategy of distributing pesticide impregnated mosquito bed nets, and using chloroquine to treat the disease is vitiated by two factors. First, distributing and monitoring the use of bed nets is even more complicated than house spraying, and likely to be much less effective. Second, the
chloroquine resistance built up by mosquitoes in the 1960's in South East Asia and South America, has subsequently spread to most malarial countries around the world. There are some promising new drugs on the horizon, but the hope of a malaria vaccine is at least 7 years away. While clearly curative measures must continue to form part of a malaria control program, preventive measures are just as important, and for this, killing the mosquitoes with DDT remains the most efficient and cost-effective measure. (see www.malaria.org).

If both the science and economics favours DDT, why has this growing ban on DDT spread? Ruckelshaus' reasons for his unscientific decision to ban DDT in the early 70's provides the clue. The environmental movement's supposedly key concept is 'sustainable development'. This was endorsed by the World Commission on Environment and Development's report, Our Common Future whose chair was, the then Norwegian Prime Minister, Gro Harlem Bruntland, who now of course heads the WHO. The notion of sustainability - at least in its strong form- asserts that natural capital, such as forests, wildlife and other natural resources cannot be substituted by manmade capital. As pesticides are assumed to have adverse effects on natural capital they are inconsistent with sustainable development. Hence, instead of using them to control bugs, the alternatives of bed nets and drugs to fight the disease should be used.

The argument that, there is no scientific evidence that DDT spraying to kill mosquitoes damages natural capital is once again countered by the so-called "precautionary principle". Once again, the environmentalists are willing to ban DDT because they are willing to sacrifice human lives for those of birds.

This underlying misanthropy of the environmentalists is explicitly brought out by the following statement by Ehrlich about India: "I came to understand the population explosion emotionally one stinking hot night in Delhi...The streets seemed alive with people. People eating, people washing, people sleeping,
people visiting, arguing, and screaming. People thrusting their hands through the taxi window, begging. People defecating and urinating. People clinging to buses. People herding animals. People, people, people".

Not surprisingly many environmentalists have argued since the 1950's that, in the words of one: "it maybe unkind to keep people dying from malaria so that they could die more slowly of starvation. [So that, malaria may even be] a blessing in disguise, since a large proportion of the malaria belt is not suited to agriculture, and the disease has helped to keep man from destroying it- and from wasting his substance on it". Or more recently: "some day anti-malarial vaccines will probably be developed, which may even wipe out the various forms of the disease entirely, but then another difficulty will arise: important wild areas that had been protected from the dangers of malaria will be exposed to unwise development" (cited in Tren and Bate: When Politics Kills: the political economy of malaria control, IEA, London).

Biodiversity and GM Foods:
The recent scare about GM food equally needs to be resisted. The Green Revolution having disproved the doomsters predictions that the world would not be able to feed a burgeoning population, they are now attempting to stop the next stage in the agricultural revolution offered by bio-technology. As the father of the Green revolution Norman Borlaug has recently noted: though "the Green Revolution is [not] over, [as ]increases in crop management productivity can be made all along the line: in tillage, water use, fertilization, weed and pest control and harvesting, however, for the genetic improvement of food crops to continue at a pace sufficient to meet the needs of the 8.3 billion people projected to be on this planet at the end of the quarter century both conventional technology and biotechnology are needed" (Borlaug (2000)).

In 1995 there were 4 million acres of biotech crops planted, which had risen to 100 million in 1999. In the US 50 per
cent of the soybean crop and more than one third of the corn crop were transgenic in 1999. These GM crops provide major economic benefits as they have reduced pesticide applications, higher yields and lower consumer prices. (Krattiger (2000). They have been readily adopted where they have been introduced. Yet, particularly in Europe, the Greens- again led by Greenpeace- have created mass hysteria about these crops, labelling them as Frankenstein foods.

But if GM crops are the creation of a Frankenstein, so is virtually everything we eat. Any method that uses life forms to make or modify a product is biotechnology: brewing beer or making leavened bread is a 'traditional' biotechnology application. As Borlaug states: " The fact is that genetic modification started long before humankind started altering crops by artificial selection. Mother Nature did it, often in a big way. For example, the wheat groups we rely on for much of our food supply are the result of unusual (but natural) crosses between different species of grasses. Today's bread wheat is the result of the hybridization of three different plant genomes, each containing a set of seven chromosomes, and thus could easily be classified as transgenic. Maize is another crop that is the product of transgenic hybridization. Neo-lithic humans domesticated virtually all of our food and livestock species over a relatively short period 10,000 to 15,000 years ago. Several hundred generations of farmer descendants were subsequently responsible for making enormous genetic modifications in all of our major crop and animal species. To see how far the evolutionary changes have come, one only needs to look at the 5000-year-old fossilized corn cobs found in the caves of Tehuacan in Mexico, which are one-tenth the size of modern maize varieties. Thanks to the development of science over the past 150 years, we now have the insights into plant genetics and plant breeding to do what Mother Nature did herself in the past by chance. Genetic modification of crops is not some kind of witchcraft; rather it is the progressive harnessing of the forces
of nature to the benefit of feeding the human race." For what biotechnology merely does is to isolate individual genes from organisms and transfer them into others without the usual sexual crosses necessary to combine the genes of two parents.

Nor is there any danger to health or the environment from GM food as has been repeatedly noted: by a 2100 signatory declaration in support of biotechnology by scientists worldwide, by the US National Academy of Science, by the US House of Representatives Committee on Science and by a Nuffield Foundation study in the UK. Since 1994, more than 300 million North Americans have been eating several dozen GM foods grown on more than 100 million acres, but not one problem with health or the environment has been noted. (Whelan (2000)). Yet the hysteria continues. To see the misanthropy at its heart, there is no better example than that of the miracle 'golden rice'.

Scientists from the Swiss federal Institute of Technology (Zurich) and the International Rice Research Institute (Philippines) have successfully transferred genes producing beta-carotene—a precursor of vitamin A—into rice to increase the quantities of vitamin A, iron and other micronutrients. As the GM rice produces beta carotene it has a bronze-orange appearance, hence its name 'golden rice'. It promises to have a profound effect on the lives of millions suffering from vitamin A and iron deficiencies which lead to blindness and anemia respectively. It has been estimated that more than 180 million children, mostly in developing countries suffer from vitamin A deficiency, of whom 2 million die from it each year. About a billion people suffer anemia from iron deficiency. The new golden rice is being distributed free of charge to public rice breeding institutions around the world. Millions will be able to reduce their risks of these disabling costs at little or no cost.

Yet as the inventor of 'golden rice' Professor Porfyrkus has noted, though it satisfies all the demands of the Greens they still oppose it. As he notes, the new rice has not been developed
by or for industry; benefits the poor and disadvantaged; provides a sustainable, cost free solution, not requiring other resources; is given free of charge and restrictions to subsistence farmers; can be resown each year from the saved harvest; does not reduce agricultural biodiversity; does not affect natural biodiversity; has no negative effect on the environment; has no conceivable risk to consumer health and could not have been developed with traditional methods.

But, notes Prof. Potrykus: "the GMO opposition is doing everything to prevent 'golden rice' reaching the subsistence farmer. We have learned that the GMO opposition has a hidden, political agenda. It is not so much the concern about the environment, or the health of the consumer, or the help for the disadvantaged. It is a radical fight against technology and for political success" (Potrykus (2000)).

CONCLUSIONS

There we have it. The Green movement is a modern secular religious movement engaged in a world wide crusade to impose its 'habits of the heart' on the world. Its primary target is to prevent the economic development which alone offers the world's poor any chance of escaping their age old poverty. This modern day secular Christian crusade has exchanged the saving of souls for saving Spaceship Earth. It needs to be firstly resisted.

First, by standing up to the local converts- the modern day descendants of what the Chinese called 'rice Christians' and 'secondary barbarians'- the Arundhati Roy's, Vandana Shiva's and Medhka Patkar's of this world. Their argument that their views are in consonance with Hindu cosmology are reminiscent of those used by the proselytizing Christians promoting a syncretised Christianity in the 19th century, and are equally derisory.

Second, by refusing to accept the transnational treaties and conventions which the Greens are promoting to legislate their ends. As many of the environmental ministries have become outposts of their local converts, the economic ministries
must play a central role in resisting this Green imperialism, by insisting on having the last say on any transnational treaty India signs. As China has shown, through its continuing production and use of DDT and continuing development of GM technology, there is no need to given into this latest manifestation of Western cultural imperialism, and in this fight, as the shining example of Julian Simon shows, there are still many in the West itself, who have not been infected with this secular Christian religion, and will join in showing up the Greens and their agenda as paper tigers, much as the Christian missionaries found in the last phase of Western imperialism.

REFERENCES

C.L. Becker (1932): The Heavenly City of the 18th century Philosophers, Yale University Press, New Haven


August 2000.


