THE CARBON STORY

THOUGHTS ON GLOBAL TEMPERATURES AND OTHER MATTERS

JOHN S POTTER

WAY BOOKS

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PREFACE

A dominant theme in the media and public affairs over the past several decades has been the claim that the world is heading for catastrophe as a consequence of global warming induced by anthropogenic (man-made) carbon dioxide (CO_2) emissions. When I was in school I learned that CO_2 is a tasteless, odourless and colourless gas and certainly not a pollutant nor a substance in any way dangerous to human health under normal circumstances. I also learned that CO_2 is a basic contributor in a biological process that is crucial for the survival and health of most living things - a substrate, along with water, in the photosynthetic process by which plants manufacture glucose, the main energy source in plants and higher animals. Consequently I found it difficult to accept that CO_2, even anthropogenic (man-made) CO_2, could be a pollutant and this led me to undertake some investigations into the matter. It proved an extra-ordinary journey that led me into strange pathways!

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June 2017

CHAPTER ONE

EMPIRICAL FINDINGS

Over the past two decades, the proposition has been widely promulgated that:

- Atmospheric carbon dioxide (CO_2) is a 'greenhouse gas' and increases in atmospheric CO_2 will lead to increases in atmospheric temperature. \

- Anthropogenic carbon dioxide emissions, emission due to human activity such as the use of fossil fuels, are causing increases in atmospheric CO_2 and this is the main cause of atmospheric temperatures rising.

- Climate Change is demonstrated by a greater frequency in catastrophic weather conditions and rising sea levels due to melting of the Antarctic and Greenland ice sheets.

The lobby has been so successful that there is now widespread acceptance of the notion that carbon dioxide is a 'pollutant' and action must be taken to reduce carbon emissions by all possible means. In this opening chapter I look at the empirical evidence for such claim. My investigations produced the following conclusions based on what I can observe in the world around me and the evidence presented by countless sources in the internet:

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- Weather events can be extremely variable but there is no evidence of changes in climate (long term weather patterns) anywhere in the world

- There is evidence that atmospheric CO_2 levels are steadily rising but no evidence that this is causing temperature changes.

- There is no evidence of any greenhouse effect in the troposphere; the term ‘greenhouse gas’ is a misnomer

- There is no evidence of wholesale melting of the Greenland and Antarctic ice sheets with resultant sea level rises.

- There is no evidence that the number of violent weather events have increased in recent times

- There is no evidence that increasing temperatures will increase the incidence of diseases, as some have claimed.

CHANGES IN CLIMATE

Climate is the pattern of weather experienced in a region over time. Weather is, and always has been, variable but patterns of weather in Climatic Zones remain fairly constant. Tropical areas are still exhibiting typically tropical weather with most rainfall falling in the summer; and Mediterranean regions are still enjoying cold winters and warm summers with most rain falling in the winter. Nowhere in the world do we observe changes in that regard. So, the notion of Climate Change is a misnomer.

TRENDS IN THE LEVEL OF ATMOSPHERIC CARBON DIOXIDE

There is strong evidence that atmospheric CO_2 levels are rising. Charles Keeling and his son have measured CO_2 concentrations at the Mauna Lao Observatory in Hawaii since 1958. Their records show that mean annual levels in CO_2 have steadily risen from 315 ppm in 1960 to 410 ppm in 2017 - i.e. 95ppm over 57 years - 1.65ppm per annum. The so-called Keeling Curve (www.KeelingCurve) shows a very slight tendency to parabolic shape but the line of best fit at present is undoubtedly a straight line. The squiggles in the curve represent annual cycles of CO_2 (see small graph), which Keeling suggests may be due to varying levels of photosynthesis by plants throughout the year.

Ciattaglia and Rodriguez have measured CO_2 levels at Jubany in the Antarctic from 1994 to 2009. Their records show a rise of 357ppm to 385ppm, i.e. 28 ppm in 16 years - 1.75 ppm per annum. Thus, we have data from both the Equatorial Region (19^0N) and the Antarctic Regions (62^0S) that suggest that atmospheric CO_2 levels are rising at the rate of around 1.7 ppm per annum. And it is of interest that the rise in concentration measured at Jubany is close to those measured at Mauna Loa for the same years. Hawaii and King George Island are a long way from industrial activity so we must ask where the CO_2 that is building at these sites is coming from. Ciattagalia and Rodriguez attribute the rise at Jubany to El Nino and La Nina events and changes in levels of CO_2 in the oceans. We will explore this possibility in a later chapter. Just now we need to ask whether the rise in CO_2 levels have affected temperature at these sites.

	Mean July Temperature ^{0}C	**Mean January Temperature ^{0}C**	**Mean CO_2 Levels ppm**
1961-1965	26.6	23.0	319
1066-1970	27.2	22.0	328 (9)
1971-1975	26.4	22.0	336 (8)
1976-1980	26.6	22.4	345 (9)
1981-1985	26.8	22.6	353 (8)
1986-1970	27.8	23.0	362 (9)
1991-1995	27.2	22.4	370 (8)
1996-2000	26.8	22.6	379 (9)
2001-2005	27.6	22.8	387 (8)
2006-2010	27.6	23.6	396 (9)
2011-2015	27.6	23.0	404 (8)
Mean	**27.1**	**22.6**	
Range	**26.6-27.8**	**22.0-23.6**	

Table 1: Five Yearly Mean Average Daily Temperatures for July and January at the Honolulu Airport, and Atmospheric CO_2 Levels at Mauna Loa, Hawaii
*Estimated from Keeling Curve

Daily temperature data are available from the Honolulu Airport. For our purposes here, monthly mean daily temperatures for mid-summer (July) and mid-winter (January) have been summarised as averages during five-year periods from 1961 to 2015 in Table 1. These months have been chosen because they sit on Keeling's line during the annual fluctuation of CO_2 levels. The line of best fit for both the July and January temperature data is a straight line with no slope. That is, the temperature at the Honolulu Airport showed **no trend to increase or decline** over the period 1961-2015. The maximum deviation of temperature from the mean over five years was 0.7^0C in July and 0.6^0C in January. These deviations can be attributed to varying degrees of radiance received by the planet as a result of changes in sun-spot activity over time.

These data show **no correlation between temperature and atmospheric CO_2 levels** in Hawaii during the period 1965-2009. That is, at this site, the proposition that increases in atmospheric CO_2 cause increases in atmospheric temperature is denied. And if this is the case, the proposition that CO_2 is a pollutant has no empirical support and the Climate Change ideology has no basis in fact.

THE GREENHOUSE EFFECT

The idea that CO_2 levels in the atmosphere can influence temperature was first mooted by the Swedish scientist Svante Arrhenius, drawing on the work of Joseph Fourier (Arrhenius, 1896). Arrhenius referenced the Stefan-Boltzmann Law to propose a Greenhouse Law which can be stated thus: *If the quantity of carbonic acid increases in geometric progression, the augmentation of the temperature will increase nearly in arithmetic progression.*

The simplest way of answering the question: 'what is the Greenhouse Effect', is to remind ourselves that, if we leave our car for a time with the windows wound up, when we get back we find that the interior of the car has warmed up considerably. Light is able to move freely through glass, whether it is the car window or the roof of a glasshouse. When this light energy hits the ground

or some object in the glasshouse it is transformed to energy with a longer wave length which we call infra-red energy or heat. This energy is reflected back to the glass but not all of it is able to pass through due to its longer wave length. Hence the interior of the glasshouse or car heats up, even in winter time when the outside temperature is low. I presume we all know that it is dangerous to leave a baby in a car with the windows wound up, even on a relatively cool day!

Climate Change protagonists have produced computer models that show a hot spot in the troposphere but satellite data show that the hot spot is not there. When we take-off in an aeroplane we can follow air temperature on our screen on the back of the seat in front of us. No matter where we are in the world, without exception, there is a steady drop in temperature, culminating at around -53^0C at 10 000m. The temperature drop is confirmed by ice and snow on mountains on the equator (Mt Kilimanjaro) as well as in temperate regions.

When Dr David Evans, the 'rocket scientist who devoted six years to carbon accounting and building models for the Australian Greenhouse Office', saw the data he resigned his job as a consequence (*The Australian*, January 31st, 2009). If there was a greenhouse effect (which there is not), the cause could hardly be CO_2, for CO_2 at 410ppm constitutes less than 1% of the so-called greenhouse gases in the atmosphere and a doubling of its concentration would be insignificant alongside of water vapour which at an average of 30 000ppm constitutes over 95% of greenhouse gases. (Question: is water a pollutant?).

Nuclear submarine commanders have found that a CO_2 concentration of 1000ppm in their vessel's atmosphere is the best for the health of the crew. And vegetable growers get great benefit from pumping CO_2 into their glasshouses to around 1000 ppm. There is a parabolic relationship between CO_2 levels and the rate of photosynthesis (see www.the rate of photosynthesis and concentration of CO_2).

TEMPERATURE

These days the general public is being continually bombarded by media reports that temperatures are rising. But temperature records are not necessarily reliable. Firstly, until recently, all temperature data was collected near ground level, i.e. the data is a measurement at one point in a landscape and, as has been demonstrated many times, it is crucial that the measurement site be representative of the area it is supposed to represent. Further, comparisons of data over long periods of time are problematic in that measurement technology has changed over time and the site of measurement has often been shifted for practical reasons.

When it comes to comparing data from one year to another, it is easily shown that the method of calculation is critical. In 2016 the Australian Bureau of Meteorology announced yet another record hot year. But before we accept this pronouncement we need to ask how it was calculated. Other Australian meteorologists using different methods for calculating the same data have come up with a quite different story. On close examination, the Bureau's method for calculating the hottest year is shown to be quite subjective in terms of its choice of locations, the method it uses to remodel the individual temperature series before they are combined, and how an area weighting is applied.

Marohasy & Abbot (2015) chose to use a more transparent system that involved choosing the longest continuous series, using the same series to calculate every value, and applying an area weighting based on topography and land-use without remodeling individual temperature series. From their work they concluded that Australia experienced a period of statistically significant cooling of 1.5^0C from 1887 to 1949, and a warming of nearly 2^0C from 1950 to 2013. The warmest year in their reconstruction was 2007, followed very closely by 1914.

Jaco Vlok, at the University of Tasmania, compared the Meteorological Bureau ACORN-SAT construction, Marohasy and Abbot's reconstruction and a reconstruction of his own in which the raw data from all 289 temperature series for Victoria from 1910 to 2015 are simply combined. There is a very

high degree of synchrony between the reconstructions. Vlok's approach tells us that the hottest years were all in the earlier part of the record: 1914 (hottest) followed by 1919, 1921, 1938, and 1961.

The above discussion should at least make us careful how readily we accept statements about which is the hottest year on record. These days we are being shown temperature records dating back 10 000 years. One would be very gullible to believe that these constructions are based on anything but wishful thinking. There are no continuous records of temperature dating back beyond more than several centuries; temperatures derived from ice cores are pure speculation.

EVAPORATION

The rate of evaporation has remained relatively constant over time (see www.mean annual evaporation in Australia), supporting the view that weather conditions, including temperatures, have not changed significantly.

MELTING ICE SHEETS AND GLACIERS AND SEA LEVEL RISE

There is no evidence of wholesale melting of the Greenland and Antarctic ice sheets. The mean temperature of the Greenland sheet is -25^0C and the Antarctic sheet is even colder, so a rise of 0.5^0C, or even 2^0C, will not cause any melting. The air temperature at McMurdo Base Camp, on the Antarctic coastline, gets near 0^0C for a few hours each day in mid-summer (December-January), but daily mean and minimum temperatures during those months are always below 0^0C. During the rest of the year at McMurdo, the temperature is well below 0^0C at all times (Figure 7). Nothing significant is melting!

There has been a lot of talk in the media about the Arctic pack ice melting (Figure 7). There is nothing new in this; Eskimos tell us that the pack ice has melted every year in living memory. The pack-ice is floating in the Arctic Ocean, so its temperature is never much lower than 0^0C; it melts easily when the sun is on it in the summer months but freezes again in winter. Nobody has

mentioned melting in the permafrost in Canada and Siberia to my knowledge during the Climate Change debate, presumably because it remains permanently frozen, apart from small patches where the surface melts for a few days in mid-summer to release a Mammoth corpse!

The most unsupported claim made by Climate Change supporters is that the Oceans are rising due to melting ice sheets. Alarming figures of rises of half a metre to 35m have been bandied around. Records at Port Dennison in Australia show that there is not even a suggestion of a rise. The same evidence is found at all other coastal record stations in Australia.

If 10% of the Antarctic ice sheet melted (which is will not), the oceans of the world would rise 2mm. In fact, the Ice Sheets are not melting due to atmospheric warming. There are sites where glaciers are showing signs of melting, but the heat is coming from underneath the glaciers, not from warming air (see Chapter 8).

VIOLENT WEATHER EVENTS

There is no evidence that the number of violent weather events have increased over the past twenty years. In fact, the number of cyclones and tornadoes has decreased since the 1960/70s. See www.hurricanestrikesintheUSAbydecades and www.StrongTornadoesintheUSAperannum.

INCIDENCE OF DISEASE

In the early days of the climate debate some commentators argued that diseases like malaria would increase as atmospheric temperatures rose. This was a mischievous and uninformed opinion; the incidence of malaria is not influenced by temperature. The worst malarial pandemic was on the Arctic Circle in Siberia in 1922.

SUMMARY

Every claim of the IPCC in relation to climate is denied by the evidence.

There is no *climate* change, no exceptional warming effect, no rise in sea levels, no change for the worse in dramatic climactic events; and no evidence that such trends will develop in the future. So, who is pushing this agenda and In the early days of the controversy there was some published opposition to the IPCC claims. I found one webpage that gave the names of 31 000 scientists in the USA who agreed with the facts are as I have found them and discounted the IPCC claims. That page has since been withdrawn. I also received a copy of a BBC Channel 4 program in which senior scientists and climatologists denounced Climate Change as a hoax. This program was savagely challenged, and its impact was lost on the general public. These facts suggest that powerful people are operating behind the Climate Change lobby. Controversy in science is not new but to discard the facts because they do not suit the agenda, as the proponents of Climate Change and the IPPC have been doing, is not science. In 1988, a one-time Canadian Minister for the Environment threw some light on the matter when she announced that 'the facts may be wrong, but we are going to keep on saying it because it is all in a good cause'. What cause is so good that you have to abandon reality?

To ignore the facts is bad science but to *deliberately distort the facts in order to establish a power base* is apostasy. A classic case of this is the constant display by the media of power station cooling towers whenever global warming is mentioned. Why they do this is unclear for the 'smoke' coming out of the large chimneys in the picture is steam, not CO_2. There may be a small amount of CO_2 coming out of the small chimney at the back but there is none coming out of the main chimneys. Whether the media does this out of ignorance or to deliberately mislead us is uncertain. I suspect it is the former in the case of the media, but the members of the IPCC know better, yet do nothing to correct the matter.

The more I research these matters, the more I am convinced that the Climate Change dogma is not just a fanciful opinion, but a powerful strategy aimed at pulling down and transforming civilization as we have known it. The question is: who is pushing such an agenda? Why are they doing so? And more

particularly, why are so many people called scientists identifying with and supporting the fanciful claims of the IPCC?

CHAPTER TW0

THE IPCC

The IPCC was established by two United Nations bodies: the World Meteorological Organization (WMO) and United Nations Environment Program (UNEP). A key figure in its formation was the UK Ambassador to the United Nations (1987-1990), Sir Crispin Tickell. Who is this man and why is he pushing Climate Change?

Tickell was educated at Westminster School and Christ Church, Oxford, where he graduated in 1952 with first class honours in Modern History. He did his national service in the Coldstream Guards as a 2nd Lieutenant from 1952-54 and after his discharge joined the UK Diplomatic Service. All of this seems harmless enough, but some light begins to dawn when we learn that Tickell is the son of Renée Tickell *née* Haynes, a great-granddaughter of Thomas Henry Huxley, 'Charles Darwin's Bulldog' (see Chapter 5). As a member of the Huxley family it is not surprising that Tickell has always had an interest in the environment and naturalism. In 1977 he published a book entitled: *Climate Change and World Affairs* which demonstrated beyond question that his interest in the environment has a wider purpose than saving the world's forests and a few endangered animal species. His interests are focused on population control. He is reported to have coined the phrase: 'mankind is a disease'!

Tickell became a key adviser to Margaret Thatcher during her term as UK Prime Minister (1979-1990) and it is clear that, in that position, he took the opportunity to advance his environmental ideas in high places. Thatcher had inherited a longstanding problem with UK coal miners and she also had a problem with the economic power of the Arab Oil Rich Countries. Tickell's Climate Change ideology, which included opposition to the use of fossil fuels, gave her the arguments she needed to engage with both challenges. The result was that he was appointed by Thatcher to be the Ambassador to the UN in

1987 and Thatcher made a speech on global climate change to the UK Royal Society in 1988.

It is clear that Tickell's purpose in taking the position of UN Ambassador was to advance his climate change agenda for as soon as the IPPC was in place, he resigned his position at the UN and formed the Climate Change Institute with Al Gore in Washington. Tickell remains the Chairman Emeritus of that Institute. Other posts that he has held since resigning from the UN include: Chair of John Major's Government Panel on Sustainable Development (1994–2000); President and Warden of Green College, later Green Templeton College, Oxford (1990-1997); President of the Marine Biological Association (1990-2001); and Chancellor of the University of Kent (1996-2006). He is currently Director of the Policy Foresight Programme of the James Martin 21st Century School at the University of Oxford (formerly the Green College Centre for Environmental Policy and Understanding) where he promotes his interest in climate change, population control, conservation of biodiversity and the early history of the Earth. Tickell has twenty-nine Honorary Doctoral Degrees at last count and is a Fellow of the Royal Zoological Society, despite his lack of formal scientific education.

THE IPCC

The IPCC was established to assess scientific information relevant to:

1. Human-induced climate change,
2. The impact of human-induced climate change,
3. Options for adaptation and mitigation.

From this we may assume that the founders of the IPCC held to the following hypotheses: (1) human activity is bringing about changes in climate; (2) climate change is producing negative effects on the planet; and (3) something needs to be done about it. As IPCC efforts are claimed to be scientific we might assume that the task is to provide the empirical evidence necessary to confirm or deny these hypotheses, i.e. real science. But subsequent actions by

the IPCC demonstrate that their stance is to hold these assumptions to be unquestionably true, and the IPCC's job is to persuade public managers that they needed to take action to avoid catastrophe, eliminating fossil fuels, in particular. This view is confirmed by the virulent attacks that have been launched on anybody who dares question the IPCC assumptions. .

The first Chair of the IPCC, **Dr Bert Bolin** of Sweden (1988-1997), was a major player in its development. Bolin was the Professor of Meteorology at Stockholm University from 1961 until his retirement in 1990. He was involved in international climate research cooperation from the 1960s and a leader in the use of the satellite tools in climate research. The latter project led to the formation of the ICSU Committee on Atmospheric Sciences (CAS) in 1964. With Bolin as its first Chairman, CAS started the Global Atmospheric Research Program (GARP) in 1967. GARP became the World Climate Research Program in 1980.

Bolin served on the Advisory Group on Greenhouse Gases from 1985 and, in 1987, his 500-page Brundtland Report contributed to the setting up of the IPCC. Under his chairmanship, the IPCC produced its First (1990) and Second (1995) Assessment Reports. Bolin is credited with bringing together a diverse range of views among the panel's 3,500 scientists into something resembling a consensus. The first Report led to the United Nations Framework Convention on Climate Change, and the second to the Kyoto Protocol. In November 2007, shortly before his death, Bolin published *A History of the Science and Politics of Climate Change: The Role of the Intergovernmental Panel on Climate Change*.

The second chair of the IPCC (1997-2002) was the English Chemist **Sir Robert Watson.** Watson was the Director of the Science Division and Chief Scientist for the Office of Mission to Planet Earth at the National Aeronautics and Space Administration (NASA), after which he became Associate Director for Environment in the Office of the President of the United States in the White House.

In 1996, Watson joined the World Bank as Senior Scientific Adviser in the Environment Department, and became Director of the Environment Department and Head of the Environment Sector Board in 1997. He is currently the Chief Scientist and Senior Adviser for Sustainable Development in the World Bank. He took up a position as Chair of Environmental Science and Science Director of the Tyndall Centre at the University of East Anglia, UK, in August 2007 and joined the British Government's Department for Environment, Food and Rural Affairs (DEFRA) as Chief Scientific Adviser in September 2007.

Watson was Chairman of the Global Environment Facility's Scientific and Technical Advisory Panel from 1991 to 1994, Chair of the IPCC from 1997 to 2002 and Board Co-Chair for the Millennium Ecosystem Assessment from 2000 to 2005. He was then Director of the International Assessment of Agricultural Science and Technology for Development which ran from 2005 to 2007. He has been Chair or Co-Chair of other international scientific assessments, including the IPCC Working Group II, the United Nations Environment Program/World Meteorological Organization (UNEP/WMO), and the UNEP Global Biodiversity Assessment. He is currently Director of Strategic Development for the Tyndall Centre for Climate Change Research at the University of East Anglia.

The third chair of the IPCC (2002-2015) was **Dr Rajendra Pachauri**. He was born in Uttarakhand, India but studied economics at North Carolina State University, USA, where he became an Assistant Professor and Visiting Faculty Member there in (August 1974–May 1975). He also served as Visiting Professor of Resource Economics at the College of Mineral and Energy Resources, West Virginia University before returning to India

On his return to India, Pachauri joined the Administrative Staff College of India as Director of the Consulting and Applied Research Division. He joined The Energy and Resources Institute (TERI) as Director in 1982 and was a Senior Fellow at the Resource Systems Institute (1982) and a Research Fellow at the World Bank, Washington DC (1990). Pachauri was on the Board of Governors of the Shriram Scientific and Industrial Research Foundation (from

September 1987); on the Executive Committee of the India International Centre, New Delhi (from 1985); a Member of the Governing Council of the India Habitat Centre New Delhi (from 1987); and on the Court of Governors of the Administrative Staff College of India (1979–81). From the latter position he advised such companies as Pegasus Capital Advisors, the Chicago Climate Exchange, Deutsche Bank and NTPC. He has been a Member of the Board of the International Solar Energy Society (1991–1997), the World Resources Institute Council (1992), Chairman of the World Energy Council (1993–1995), President and then Chairman of the International Association for Energy Economics (1988–1990), and President of the Asian Energy Institute since 1992. He was a part-time advisor to the United Nations Development Program in the fields of Energy and Sustainable Management of Natural Resources (1994-1999). In July 2001, he was appointed a Member of the Economic Advisory Council to the Prime Minister of India.

The fourth and current chair of the IPCC, from 2015, is **Dr Hoe-sung Lee**, a South Korean economist and currently Professor of Economics of Climate Change, Energy and Sustainable Development at the Graduate School of Energy, Environment, Policy & Technology at Korea University in the Republic of Korea. Lee received his B.A. from Seoul National University and a PhD. from Rutgers University. He was elected as the chair of the IPCC on October 6, 2015. One of his older brothers, Lee Hoi-chang, is a former Prime Minister of South Korea.

IPCC ACTIVITIES

The IPCC does not carry out original research, nor does it do the work of monitoring climate or related phenomena itself. It bases its assessment on the published literature, which includes peer-reviewed and non-peer-reviewed sources. Thousands of scientists and other experts contribute (on a voluntary basis, i.e. without payment from the IPCC) to writing and reviewing reports, which are then reviewed by governments. IPCC reports contain a Summary for Policymakers, which is subject to line-by-line approval by delegates from all participating governments. Typically this involves the governments of

more than 120 countries. The IPCC provides governments with an internationally accepted authority on climate change, producing reports which have the agreement of leading climate scientists and the consensus of participating governments. But history has shown that the IPCC is selective in the people it deals with, and teleological in producing reports that agree with its assumptions. Sceptics are held at arms-length and data contrary to the IPCC thesis is discarded.

Over its short career, the IPCC has made five Assessment Reports and a sixth is on its way. Each Assessment has three working groups, each one addressing one of the aims (above). The Fifth Report made the following statements:

Working Group I

- Warming of the climate system is unequivocal; since the 1950s, many of the observed changes are unprecedented. (*What about the Mediaeval Warming?*).

- Atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. (*Who has been measuring the concentrations of these gases over 800 000 years?*).

- Human influence on the climate system is clear. It is extremely likely (95-100% probability) that human influence was the dominant cause of global warming between 1951 and 2010. (*Where is the evidence for this statement?*).

Working Group II

- Increasing magnitudes of [global] warming increase the likelihood of severe, pervasive, and irreversible impacts. (*In the mediaeval warming they grew crops in Greenland. What was wrong with that?*).

- A first step towards adaptation to future climate change is reducing vulnerability and exposure to present climate variability. (*What does this mean?*).

- The overall risks of climate change impacts can be reduced by limiting the rate and magnitude of climate change. (*Very logical but meaningless*).

Working Group III

- Without new policies to mitigate climate change, projections suggest an increase in global mean temperature in 2100 of 3.7- 4.8^{0}C, relative to pre-industrial levels. (*How do you predict temperatures 100 years ahead?*).

- The current trajectory of global greenhouse gas emissions is not consistent with limiting global warming to below 1.5^{o}C or 2^{o}C, relative to pre-industrial levels. Pledges made as part of the Cancun Agreements are broadly consistent with cost-effective scenarios that give a likely chance of limiting global warming in 2100 to below 3^{0}C, relative to pre-industrial levels. (*What does this mean?*).

The process of developing these Reports has not been without its critics, even Robert Watson is on record as saying: "The mistakes all appear to have gone in the direction of making it seem like climate change is more serious by overstating the impact. That is worrying. The IPCC needs to look at this trend and ask why it happened". Apparently Sir Robert's scientific background 'kicked in' and prevented him from going along with crassly untrue statements made by a frenetic few. Martin Parry, a climate expert who had been Co-Chair of Working Group 2 is reported to have said on one occasion: "What began with a single unfortunate error over Himalayan glaciers has become a clamour without substance". He was referring to a statement by the World Wildlife Fund (see below) that: *Glaciers in the Himalaya are receding faster than in any other part of the world and, if the present rate continues, the likelihood of them disappearing by the year 2035 and perhaps sooner is very high if the Earth keeps warming at the current rate. Its total area will likely shrink from*

the present 500,000 to 100,000 km^2 by the year 2035. This statement had been included in the Working Group 2 Report but was deleted because it was totally untrue and went beyond the line for even strongly aligned proponents of - Climate Change.

How the Working Groups come to their conclusions is unclear, especially in the light of the evidence presented in Chapter 1. What is notable is that they have presented bald generalized statements that provide no solutions that public managers can adopt to mitigate the highlighted problems. What do the statements 'reducing vulnerability to present climate variability' (Workshop 2 above); and 'without new policies to mitigate climate change' (Workshop 3) mean? When you think of the thousands of hours and millions of dollars that have been spent by an army of people in developing these Reports, it is worrying that **the conclusions of the Fifth Assessment do nothing more than reiterate the basic assumptions stated in 1988** with no evidence presented. If that is all it can do after so much effort, what value can be given to the time and energy spent developing these reports?

Regrettably, the bulk of the population is not aware where the Climate Change dogma is leading us. Greenpeace founder, Dr Patrick Moore, is reported as saying 'the green movement has been taken over by neo-Marxists promoting anti-trade, anti-globalisation and anti-civilization'. Across the world, politicians and even industry has been led to accept the Green agenda, not realizing that it is 'a leap into space', **a recipe for the extinction of the human race**, or at least those of us who do not belong to the intellectual elite. Specifically that agenda is asking us to: (1) abandon our prerogative to rule over nature; (2) accept that we are no different and have no superior rights to the world's resources than other animal or plant species, and (3) accept that true happiness and welfare lies in a return to a bio-diverse, pristine, undeveloped world in which humans are subservient to nature. All of which is a denial of the utility of a science that seeks to manage world resources responsibly to the benefit of all creatures, including humans.

These conclusions have led me to ask three questions: (1) how has the Climate

Change dogma been developed and by whom; (2) by what strategies has the ideology gained a place of influence in human society; and (3) how can people who base their decisions on realism (facts) live in a society that is deluded into believing that CO_2, a substance essential to life as we know it, is a pollutant? I believe that the proponents of Climate Change are not neo-Marxists but neo Malthusians. I begin by examining the propositions of the Rev Thomas Malthus.

CHAPTER THREE

THE DYSTOPIAN VIEW

The Reverend Thomas Robert Malthus was born in Surrey, England in 1766. He gained an MA from Cambridge in 1791 and became a Fellow of Jesus College in 1793. In 1797 he took orders and became an Anglican country curate. In 1804, aged 38, he married his cousin Harriet and with her had three children. In 1805 he was appointed Professor of History and Political Economy at the British East India Company College in Hertfordshire (See Appendix Two); and in 1818 he became a Fellow of the Royal Society based on his treatise, *An Essay on the Principle of Population* (published in 1798).

Malthus had an early introduction to philosophy; his father, Daniel, was a friend of David Hume and Jean-Jacques Rousseau. And in his later years, through his connection with the British East India Company, he was part of an elite group that included John Mill and John Stuart Mill. His ideas were supported by people like Charles Darwin and William Pitt the Younger, Prime Minister of England; the latter withdrew a Bill to extend Poor Relief after reading Malthus's work. Other contemporaries who were inspired by Malthus's work included David Ricardo, William Paley and Francis Place, the first person to advocate contraception. In the 20th Century Malthus's work has been admired by John Maynard Keynes, Paul Ehrlich, the Club of Rome, Julian Huxley and Isaac Asimov. But Malthus has had his critics. He suffered vitriolic insults from such people as the poet Percy Bysse Shelley, and Karl Marx and Friedrich Engels. Engels described Malthus's hypothesis as 'the crudest, most barbarous theory that ever existed, a system of despair which struck down ideas like love thy neighbour and world citizenship'. Malthus died in 1834.

THE ESSAY

In assessing Malthus's Essay we need to remember that it was derived from

knowledge and experience that predated the 19th Century industrial revolution and 20th Century technological advancement. We should also remember that he was a member of the intellectual and economic elite that thought it reasonable to pontificate on the affairs of 'lesser men'. The essay was written, not for the general public, but specifically as a philosophical response to Godwin's *Avarice and Profusion* and 'remarks by M. Condorcet and other writers' - see the title page. In what follows, page numbers refer to the Essay as I received it from the internet.

Propositions

Malthus saw the great question for philosophers as 'whether man shall henceforth start forward with accelerated velocity towards illimitable and unconceived improvement or be condemned to a perpetual oscillation between happiness and misery and, after every effort, remain still at an immeasurable distance from the wished-for goal' (p.1). He regretted that 'writers on both sides of the argument had kept aloof from each other, that their arguments had not met candid examination' and saw a need for a synthesis that draws the best from each view. But it is clear that he fell away from speculations of the 'perfectibility of man', seeing too many unconquerable difficulties in the way. Drawing on Hume, Adam Smith and Wallace he presented two postulates: (1) food is necessary to the existence of man; (2) the passion between the sexes is necessary and will remain nearly in its present state (p.4). This led him to his main proposition which he saw to be axiomatic: '**the power of population is indefinitely greater than the power of the earth to produce subsistence for man**' (p.4) and the corollary: '**by the law of our nature which makes food necessary for life, the effects of these two unequal powers must be kept equal by a strong and constant check on population from the difficulty of subsistence… a difficulty that must fall somewhere and be severely felt by a large portion of mankind'** (p.5). Reading on we find that he spells out his pre-suppositions more precisely: (1) population cannot increase without the means of subsistence increasing; (2) population invariably increases where there are the means of subsistence; and (3) the superior power of population cannot be checked without producing misery and vice (p.11).

Economic Management

Malthus's choice of postulates makes it clear that his project is grounded in philosophy and not in economics. If he had been operating in economics he would have addressed the economic axiom that development requires inputs of *land, labour* and *capital* (and, we might add, '*no-how*' and *available technology*).

Identification of the means of production leads to the conclusion that the condition of the 'lowest orders of society' (p.23) may be explained by the fact that they have no land or capital and have no hope of having same; that, with only their labour to offer, they remain permanently at the mercy of the cashed up, landed minority. And, if this is the case then, Malthus's conclusion that human social structures are not the cause of human misery and vice is discounted. He may have a point when he says that handouts to the poor will raise costs, for this is supported by recent evidence whereby handouts to first home buyers in Australia have raised housing prices. And there is evidence that handouts weaken the resolve of individuals to work and maintain their independence, although we might not go so far as to agree with the opinion of master manufacturers in Malthus's day that 'high wages ruin their workmen' (p.28). To conclude from his analysis (p.24ff), as Prime Minister Pitt did, that the Poor Fund was unhelpful, was to take bread from the mouths of children who lived in hovels while the wealthy ate the best of everything in mansions. For a cleric in holy orders like Malthus, this constituted a casting aside of the care of the fatherless and widows, i.e. an abandonment of true religion (James 1:27, The Bible). In summary then, Malthus's concepts fall a long way short of being a prescription for economic management leading to an improvement in the material circumstances of the masses, a cause which his *Essay* discounts in a rather callous way.

Social Organisation

It is implicit in Malthus's writing that he accepts the class distinctions of his

day. In chapters 3 & 4 he attempts to justify his propositions by referencing a variety of macrosocial groupings: hunters, shepherds, agriculturalists, men of liberal education, tradesmen and servants. In doing so he presents no original empirical evidence and maintains a macro-social view of humanity that fails to recognize individuality and the power of human agency. On the rare occasion that he mentions an individual he is generally derogatory, e.g.: 'a labourer who marries without being able to support a family may in some respect be considered an enemy to all of his fellow labourers' and 'the labouring poor live from hand to mouth… they seldom think of the future' (p.27). No wonder Marx, Engels and Lenin were upset with him!

If one discounts human agency it is not surprising that one would hold to a pessimistic view with regard to the possibility of humans avoiding cycles of misery and vice, especially if one agreed with Malthus that we are controlled by matters greater than ourselves – the sex drive and the ability of the earth to supply our needs. Malthus saw all of this to be ordained of God so that we humans might learn the importance of industry and sexual control (p.4)!

Population Checks

Malthus saw two classes of population check: (1) positive agencies; and (2) preventative actions. In the first class he lists *war*, *famine* and *disease* and to these we may add cataclysmic events like *volcanic eruptions* and *tsunamis*. It seems to me that there is a strange, unnatural depravity in listing such agencies as 'positive' when we consider the degree of suffering they engender. The extension from Malthus's view is that starvation and sickness are a blessing; unintended perhaps, but something for which we should all be thankful. We can only conclude that Malthus's privileged class position protected him from personally experiencing the impact of such disasters. How easy it is to philosophise in an ivory tower, to pontificate at the macro level without regard for human misery at the level of the individual. How quickly in the 20th Century we forgot the impact of pneumonia, diphtheria and small pox as it existed prior to antibiotics. To accept the Malthusian view is to argue that it would be to our advantage to abandon the search for better medical solutions.

In fact, this happened in the 1970s in some developing countries in Africa where the population was expanding at the rate of 3.5% per annum; government policies focused on education and agricultural development, rather than on medical assistance.

Amongst the **preventative actions** promoted by Malthus were *postponement of marriage*, *celibacy*, *prostitution*, *abortion* and *contraception*, to which we can add *euthanasia* and *homo-sexual behaviour*. To support such actions in Malthus's time was provocative, especially as he was a Christian minister. His views are sometimes quaint compared with modern attitudes and practices, e.g. he speaks of the 'the dictate of nature and of virtue… to be an early attachment to one woman' (p.6). Francis Place is adamant that his push to develop birth control was inspired by Malthus's *Essay* and it is evident that improved methods of contraception have resulted in movement away from single partners and 'the wed'. The empirical evidence is that Malthus's presupposition that 'the population increases when there is the means of subsistence' is denied. Most sophisticated societies breed well below Zero Population Growth, while people living in undeveloped situations tend to breed at higher levels.

Abortion has been decriminalized in many countries in recent times with a marked effect on demographics. In Australia 71 773 abortions were reported in 2006, i.e. 1 380 per week. The New South Wales Right to Life believes the figure is closer to 90 000 with 46 million world-wide. But this action has not reduced population growth. Live births in Australia in 2005 were 255 820, about 1.2% of a population of 21.5 million. Concomitant with this, life expectancy in Australia is rising; in 2007 the expectancy for a male at birth was 79 years and for females 84 years. Only 137 900 people died in Australia in 2007 (6 per 1 000 = 0.6%); and of these, 1 200 were children (5 per 1 000 births, 0.5%). A baby is born in Australia every 1 minute 47 seconds and one person dies every 3 minutes 47 seconds; but one person is added to the population by immigration every 2 minutes 23 seconds – giving an overall figure of 1 person added every 1 minute and 24 seconds.

It is a sad fact that we are likely to go on murdering 46 million babies each year. We do not throw foetuses in the Tiber River as the Romans did, or throw them down pit toilets as they do in Africa under certain circumstances, but we do use them to manufacture cosmetics and little or no account is taken of the psychological consequences experienced by many women who abort a child. What is worrying for some of us is the malevolent push by some women politicians (the Emily List) whose object is to gain acceptance of abortion throughout the whole gestation period rather than limit it to the eight-week period following conception when the foetus is not fully humanoid. The battle rages and conservative forces continue to be on the back foot.

The push for acceptance of homo-sexual acts over the past thirty years has been relentless. This has been against the common-sense normative attitude with regard to sexuality and it has been critical for the homosexual lobby group that the opposition be silenced. In developed countries there is now an army of agents active in pushing for greater power to laws aimed at crushing discrimination against homosexuals. We are not supposed to say, for instance, that the bulk of HIV/AIDS patients in Australia are male homosexuals. Nor are we allowed to tell young males that practicing homosexuals leads to a regular need for anal reconstruction – the muscles of the anus being designed for excretion, not penetration. Lesbian sexual practices are equally bizarre. That such practices may be matters of personal and private choice is evident, but why are homosexuals allowed to promote their views in public and those who are strictly heterosexual required to be silent? Where is the balanced justice, the fair deal for all, in that?

The euthanasia lobby has been successful in decriminalising ‘dying with dignity’ in Holland and Oregon State, USA, in recent times, and there is a small but active group in Australia submitting bills in one or more Australian Parliament every two years or so, to establish the right of people to do away with themselves. It is easy to be in favour of euthanasia as a principle and another to be the doctor who is actually called upon to kill people. In Holland and Oregon, where euthanasia is law, elderly people tend to be afraid to submit to medical assistance for fear of being eliminated ahead of their time,

especially if they have organs that are suitable for transplanting in other individuals!

REVIEW

Malthus's propositions fall short in that they provide no ground for economic policy and management, are based on a macro view of humanity that has long been discarded by sociologists and proposes checks on human reproduction that are callous and brutally paternalistic.

Contrary to what Malthus is saying, humans are not automatons that have no control over their sex drive or the environment; they are individuals with an extraordinary capacity to devise rational strategies and take purposive action. This has been recognised by sociologists since the social science revolution of the 1960s and none have expressed it better than Anthony Giddens whose *theory of structuration* assures us that, contrary to the macro-social view, humans make the rules and submit to them only as a matter of convenience.

The inability of macro-theory to predict human agency points to the fundamental problem with Malthus's position – his approach is flawed and his conclusions figments of his philosophical imagination. This makes him dangerous. He presents himself with a sad face and a sober word: I am sorry, but wars, famine and disasters are positive agencies for our general good. And if these events are insufficient to control population we must kill our unwanted off-spring and revert to the unnatural use of our bodies for the greater good.

MODERN TIMES

That the Malthusian philosophy has its supporters in modern times is evident. Sir Paul Nurse is a Noble Prize-winning Geneticist and was the President of the UK Royal Society (2010-2015). He was also the President of Rockefeller University in New York (2003-2011) and on May 5th, 2009, the Good Club, a group of billionaires including Bill Gates, Warren Buffet, George Soros,

David Rockefeller Jnr, Michael Bloomberg, Ted Turner and Oprah Winfrey, met for three days in Nurse's New York home.

The meeting was private but a spokesperson reported that the main topic had been over-population and a consensus had emerged that the group would 'back any strategy that gave promise of a reduction in the human population'. This came as no surprise because Buffett has been a long-time financial supporter of research aimed at improving contraceptives; and Gates, Winfrey and Turner had spoken publicly against population increases numerous times. These billionaires between them are reported to have invested more money than any government in plans aimed at population reduction. All I can say is, if the billionaires are so worried about population levels, why do they not set a good example by leaving the planet! Alas, no; it is the poor that we need to get rid of, not the superior types of humanity that hold billions of dollars in their investment portfolios and use it to manage world affairs.

It is not well understood by the general public that the promotion of legislation and public attitude change with regard to contraception, abortion, euthanasia and homosexuality arise from **a common denominator – a reduced human population.** Such matters on their own remain controversial and by themselves, or even together, are unlikely to bring about universal demographic changes. The Climate Change dogma appeals as a superior strategy, holding hope of worldwide population diminution via the reduction of food supplies.

The vilification of CO_2 opens the door for an attack on the fossil fuels essential for the production and transport of grain crops; and the vilification of ruminant animals because they burp methane (another so-called greenhouse gas) is a sure way of reducing meat and milk supplies. Add to this the evil genius of cap and trade of CO_2 emissions and you have a strategy to wrench the financial control of the world out of the hands of the current Cornucopian stake holders. The modern Green movement is no longer a call to manage ecosystems responsibly, it is violent political movement bent on causing humanity to return to living in the primal state under the control of a financial

elite. Sadly, all of this is being reinforced to children in schools; every day; naïve school teachers feed children a diet of politically correct environmental misinformation and untruths, believing that they are doing us all a good turn.

CHAPTER FOUR

POPULATION MATTERS

Thomas Malthus was not the originator of the idea that there are too many people on the Earth. He drew his ideas from his contact with the philosophers of his day: Jeremy Bentham, James Mills and John Stuart Mills. It was this elite group that, in the late 1700s, began to 'slavishly plagiarizing the Venetian original', Giovanni Maria Ortes, the man who by general agreement was the originator of the population control agenda (Tarpley 1994).

Ortes (1713-1790) was a composer, mathematician, monk and philosopher and was seen as 'one of the most influential ideologues of the Venetian oligarchy in its final phase' (Tarpley, op cit.). His published works culminated with his '*Reflections on the Population of Nations in Relation to the Natural Economy*' published in 1790. Tarpley declares Ortes to be 'a charlatan, a mountebank, a defrocked Camaldolese monk and libertine'. He was born at a time when the once powerful Republic of Venice had become a state of almost total impotence; a time when the remaining families of influence in Venice developed a paranoid determination to concentrate their operations and wealth into a single line, usually the last-born son. Older sons were given free housing and moderate stipends as long as they remained celibate; they constituted an impoverished-nobility, referred to collectively as the *barnabotti*. Many girls, having no prospect of marriage, went into religious orders. In the 16th Century, 51% of the Venetian upper class remained unmarried, and this number grew to 66% in the late 18th Century when Venetians, including Ortes, became increasingly critical of Western civilization, religion and foreign trade.

Ortes believed that 200 citizens per square mile (0.8 persons per ha) was the ideal population in consideration of both human welfare and the environment. (Where he got this figure from we do not know). He noted that Italy, Holland, some German States and Switzerland had already reached this level in his time

while Spain, France, the UK, Prussia, Austria and Poland with a mean population of 72 per square mile (0.3 per ha) clearly had some space to grow their population. His calculation was that the maximum number of people that could be sustained on planet Earth was 3 billion. Presumably he either made some deductions in consideration of uninhabitable sites or underestimated the area of land in the world because much of it had not yet been discovered, because the area of the world land mass is 14.8 billion hectares and 0.8 persons per hectare would mean around 12 billion people. Taking Ortes's 0.8 persons/hectare as a benchmark let us see how the present world population is measuring up.

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CURRENT WORLD POPULATION

The population of the world in early 2017 is 7.5 billion living on land mass of 148 429 000 km^2, i.e. half a person (0.5) to every hectare. So according to Ortes we still have a little way to go, while many modern commentators are arguing that we are close to the limit that the world can sustain. Is this so?

Cornucopians would say not. Consider Kangaroo Island which lies immediately south of St Vincent's Gulf in South Australia (Map 1). It has an area of 4 405 km^2, i.e. 4.4 billion m^2 so the **total current world population** could hold a mass meeting on Australia's Kangaroo Island if we agree that $0.6m^2$ is sufficient space for a person to stand on. If we wanted more space, we could move the meeting to a larger island like Tasmania (Map 1). 'Tassy' has an area of 68 332 km^2 so **the whole of the Earth's population** could be accommodated there; each person would have about $9m^2$ to store their belongings and lay out their blow-up mattress.

The density of population varies considerably from country to country. Table 1 gives some key current figures; these show that many states have exceeded Ortes's criterion, some by a long way. The most populace states are the City and Island States (Monaco, Singapore etc.). Ignoring these, Bangladesh is the most densely populated country with 11 people per hectare and next is the Maldives, Mauritius and South Korea with 5-10 persons per hectare. Lebanon

is the most populace country in the Middle East, closely followed by Israel. The Netherlands and Belgium have the most people per hectare in Europe, while Rwanda and Burundi are the most populace states in Africa. The UK and Germany support about 2.5 persons per hectare, India has 3.6 people per hectare and Nigeria, the most populace African state, supports 1.7/ha. China, the most populace state in the world, has a population density of 1.4/ha. At the other end of the scale, the citizens of the USA and Brazil have about 3 hectares per person, while Canada and Australia are arguably under-populated.

So, what is an acceptable level of population? Ignoring the City and Island States that are sufficiently innovative to sell services for food to advantage, this will depend on the capacity of the land within a nation's boundary to provide the basic food and shelter required for life, and this in turn will be determined by both ***the amount*** of arable land and ***the technology*** that exists to render the land productive.

When Thomas Malthus wrote his Essay in 1798, he was concerned that the British population has risen to 7 million, i.e. 0.3 people to the hectare, well

Country	**Persons/hectare**
Monaco	165
Singapore	72
Bangladesh	11
Maldives	10
Mauritius	6
South Korea	5
Lebanon	4
The Netherlands	4
Rwanda	4
Israel	4
India	4
Belgium	4
Japan	3
United Kingdom	3
Germany	2

Nigeria	2
China	1
The USA	0.3
Canada	0.03
Australia	0.03

Table 1: Population Density by Country (Selected) - after Statista.com

Continent	**Area km^2 (millions)**	**Population Density Persons/hectare**
Asia	43.8	0.8
Europe	10.2	0.7
Africa	30.4	0.3
North America	24.5	0.2
South America	17.8	0.2
Australia	3.6	0.03

Table 2: Areas and Population Density by Continents – after Statista.com

below the Ortes benchmark. (This supports the view that Malthus had another agenda in writing his Essay). Today the population of the UK is 62 million, and if the combined wealth of the British was distributed evenly we would hardly say that the UK has gone backwards since Malthus's time. We see again that humans are not robots or passive behaviourists dictated to by natural laws, as Malthus would have it. On their best days humans are highly pro-active agents capable of remarkable innovation with regard to the task of improving their quality of life and, perhaps even more importantly, amazingly persistent with regard to survival. How the citizens of Bangladesh survive in their delta with its frequent floods and storms is something of a mystery to most of us, but they do survive. Mind you, it might be argued that many of them could hardly be classified as living 'the good life'. But they are not without hope, thanks to people like Nobel Prize winner Professor Muhammad Yunus (Yunus, 1998) who has cared enough to do something constructive to improve the lot of Bangladeshis. Be that as it may, eleven people per hectare

might be considered an unacceptable figure even for highly productive land like that in Bangladesh. If it were acceptable, a world population ceiling of 165 billion could be hypothesized, certainly well above a mere 7.5 billion. But the reader will be quick to argue that there is a lot of desert and un-arable mountains in the world land mass. And so there is.

POPULATION DENSITY BY CONTINENTS

Table 2 lists the population density in the continents. We see from this that the population density of Asia is right on the Ortes benchmark, while the figure for Europe is just under it. The rest of the world is a long way under Ortes's criterion.

There are some food problems in Asia presently. China is finding it difficult to maintain its food supplies, especially with the rapid rise of a new middle class. There are a million Chinese in Africa at the moment and their main interest there is growing food *for China* in places like the North West Province of Zambia. As the demand for a better life continues to rise in China we can expect this policy to continue. China has extended her borders as far as she is probably able to do so; now it will be a matter of making gifts to African governments in order to get access to their food production resources. Australia is not immune from this push either; the Chinese have recently purchased numerous properties along the River Murray and are operating them with mostly illegal immigrant labour. The Chinese experience supports the view that that 0.8 people per hectare may not be sustainable, except at a low level of economic development with a lot of people living in poverty. It has been said recently that the new Chinese middle class all want a washing machine but there is not enough nickel in the world to make the steel. But this will only be a problem if we cannot look to someone to find another labour-saving way of washing clothes effectively. The rise of technology over the past one hundred years suggests that the shortage of nickel may not be the end of the world, or the possibility of sustaining a world population at 0.8 persons per hectare.

UNDEVELOPED RESOURCES

The steady rise of population inevitably causes people and governments to look for undeveloped resources. The Chinese have not only pushed into Africa in recent times; they have for a long time been operating shops on every island in the Pacific. The Indian government has also begun developing links with African countries. And the wide-open spaces in the Americas and Australia must remain prime targets for food hungry nations; although, in the case of Australia, land without water is not very attractive for development.

Sub-Saharan Africa probably has the most immediate potential. Mozambique, with its excellent soil, climate and multiple permanent rivers located at regular intervals across the landscape, could probably feed the whole of the current African population. The potential of the rift valley lakes also remains virtually untouched. Lake Malawi is a good example. With an area of 27 600km^2 and a depth of 706m at the deepest point, this Lake contains around 8.4 million giga-litres of drinkable fresh water. The water is not run-off surface water from rainfall; it derives from 'the fountains of the great deep' (Genesis 7:11, The Bible). This was confirmed in 1979 when the Lake rose three metres overnight. A German photographer flying over the African lakes at the time took pictures with an infra-red camera; the spirals of water rising out of the rift are evident (see Readers Digest, July 1979).

There are around 250 000 hectares of flat land adjacent to Lake Malawi that could be used to irrigate food crops. The Malawi Government has a Greenbelt program in place aimed at utilizing their immense water resource. The Malawi climate is suitable for growing just about any commercial crop; rice, maize, canola, ground nuts, cotton, all kinds of vegetables and sub-tropical tree crops, etc. The land around Lakes Victoria and Tanzania has a similar potential. With these resources alone, Africa has the opportunity to contribute greatly to the world food supply; and it is not surprising that there are a million Chinese in Africa at the present time looking to do just that.

Lake Malawi at Cape Maclear, Malawi

WHAT ABOUT AUSTRALIA?

In early 2017, the Australian population is 23 million with a population density of 0.03/ha. Much of the Australian land mass is desert, suggesting Australia might not be able to rise to 0.8 persons per hectare, but 0.03 is a long way short of that.

To get an idea of just how low the Australian population is, consider the following case. If we can agree that an average household is four people, we could argue that Australians need 5.75 million houses to live in. And if we further agree that 600m^2 is a reasonable sized house allotment, we can argue that 3 450 km^2 is the area of land needed to accommodate the whole of the Australian populace. By this account we could build enough houses on Kangaroo Island to **house all Australians** and have 955km^2 (95 500ha) available for roads and other infra-structure. Further, if we were prepared to live in blocks of high-rise flats like Hong Kong residents we would have significant areas available for movement and recreation. Of course, we would have to eat mostly seals and fish, of which there are abundant supplies around the Kangaroo Island coast; but that might not be so bad - the Eskimos in the Arctic live quite satisfactorily on seals and fish. And we should not forget that

rock lobster, mussels and marron will be available for Sunday lunches. If this failed, there is always the Australian mainland, of 769 million hectares, nearby. Maybe, we could send a few folk into the wilderness from time to time, to grow other food stuffs for us.

So why are people arguing that Australia has a population problem? Maybe we have one because we prefer to live in cities rather than in the open spaces. This has had numerous side effects, like people being unaware that food comes from crops and livestock, not from a magic box in the shed behind the local super-market. Another self-inflicted problem is that we build houses on arable land. This not only reduces the potential for food production but, when the floods come, houses get washed away. These are matters that could be easily addressed by government policy makers. Australia has the potential to support many times its current population and the politicians and pontificators should stop wasting time and money arguing about it.

The above discourse, suggests that there is no validity to the argument that the human population on the Earth is too high. There is considerable room for growth even with current food production technologies. New technologies like controlled environment food production are at the door bringing hope that we can look forward to producing food on less land and with less water than at present, with no deleterious impact on the environment. What we can say relevant to the current discussion is that food will not grow without ample supplies of CO_2, and we should no longer go on maligning it!

CHAPTER FIVE

DARWINISM

One person who was greatly influenced by Malthus's Essay was Charles Darwin. It was after reading Malthus's Essay that Darwin developed his mechanism of 'the survival of the fittest'. The particular passage that influenced him is as follows:

> '…nature has scattered the seeds of life abroad with the most profuse and liberal hand… but she has been comparatively sparing in the room and the nourishment necessary to rear them. The germs of existence contained in one spot of the earth… with ample room to expand would fill millions of worlds in the course of a few thousand years. Necessity, that imperious all-pervading law of nature, restrains them within prescribed bounds. The races of plants and animals shrink under this great restrictive law. And the race of men cannot, by any effort of reason, escape from it. Among plants and animals its effects are waste of seed, sickness, and premature death; among mankind, its effects are misery and vice' (Malthus 1798).

Darwin's thought was that in such a regime: 'favourable variations' would be preserved, 'unfavourable ones' would be destroyed, and the result would be the formation of a new species; 'here then I had at last got a theory by which to work' (Darwin 1859). Note that this was pure extrapolation, there is nothing in the Malthus Essay that would suggest such a conclusion; and certainly nothing to suggest that there are superior individuals necessarily present in the seed supply, or that survival is anything other than a matter of chance, that 'some seed will fall amongst thorns and some will fall on good ground' (Matthew 13:3-9, The Bible). Gregor Mendel's genetics would argue that the formation of a new species would require a great deal more than survival across a range of growing conditions. If this is what Darwin based his theory

on, how meagre is the foundation of the 'theory of evolution'!

Charles Darwin published his book *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* in 1859. He opened his discourse by aligning himself with Aristotle's biology and concluded with the assertion that 'if there was a creator we may assume that he has not interfered with the creation since the beginning of time and that all things are going on to perfection'. In between are examples of what Darwin saw as adaptions by species to unique environments. He presented no evidence of intermediate (developing) types between species but assured us that such would be discovered in time.

Darwin was not the main person to propagate his theory. That task was taken up by Thomas Henry Huxley, who promoted evolution so ferociously that he earned the title 'Darwin's Bulldog'. Huxley declared himself an agnostic with regard to the existence of God and spent much time promoting the idea that humans were just animals and belief in God was unnecessary and irrelevant. He was President of the UK Royal Society from 1883 to 1885.

Huxley's son Leonard had two sons: Aldous and Julian. Thomas Henry took both boys under his wing and set about deliberately indoctrinating them in evolutionary thinking. The Huxley brother's world-view is outlined in Aldous Huxley's book: 'Brave New World'. But it was Julian Huxley who became the fully-fledged evolutionary activist, with a special interest in **human evolution.** Julian lived by three propositions:

1. He was an atheist who denied anything supernatural. He proposed that religion be abandoned in favour of **naturalism** (the worship of nature). To advance this cause he formed the British Humanist Society and was its first President.

2. He saw evolution producing a **race of super-humans** over time (**trans-humanism**); and he saw that this process did not have to be left to chance; humans could take charge of their own destiny: **taking control of the**

evolutionary process by getting rid of inferior types. In his book *Man in the Modern World*, Huxley declared that:

> "The lowest classes are reproducing too fast. They must not have easy access to relief or hospital treatment lest the removal of the last check on natural selection should make it too easy for children to be produced or to survive; long unemployment should be the ground for sterilisation' (Huxley, 1947).

To advance the sterilisation cause, the humanists invented **eugenics,** the study of methods by which a person having genetic defects or undesirable traits could be prevented from breeding, i.e. sterilised. Julian Huxley was a prominent member of the British Eugenics Society and its President at one time. In the early 1900s most advanced countries in the world passed legislation which permitted compulsorily sterilisation by the state. These statues are still on the books in most countries. In the late 1990s, the President of Peru sterilised over 300 000 ethnic Indians.

3. Huxley argued that **success in material development was evidence of superior genetic make-up**, and by this view, Aryan people, who had better goods, better music and art and an advanced philosophical base, were clearly **further along the evolutionary chain** than the rest of humanity. Such thinking led to the ideology of **Social Darwinism**. Dark skinned people around the world were slaughtered with impunity and their goods confiscated on the ground that such actions was helping the evolutionary process. King Leopold of Belgium slaughtered ten million people in the Congo. And in Australia, some people shot aboriginal people on Sunday afternoons for sport.

Julian Huxley gained continuing support from people of influence like Lord Bertrand Russell, Prince Philip of the UK, Prince Bernard of the Netherlands, the Club of Rome, Maurice Strong, Jacques Cousteau and the radical Australian environmentalist, Dr John Reid. In 1977, Jacques Cousteau said:

> ‘In order to stabilise world population, we must eliminate 350 000 people per day. That is a terrible thing to say but it is just as bad not to say it’, (*UNESCO Courier*)

Prince Philip made his views known when he said:

> ‘In the event that I am reincarnated, I would like to return as a deadly virus, in order to contribute something to solving over-population’ (*Deutsche Presse-Agentur,* August 1988).

Behind these major players there grew up an army of followers with the passionate view that the human population needed to be reduced. I met a person with these views in 1971, although I did not recognise it at the time. I had been a practicing soil conservationist since 1957 and from 1966 the person in charge of soil conservation extension and research, land mapping and arid zone ecology in South Australia. I mention this to make the case that I was not uninformed in environmental matters when I was invited to apply for the position of Director of the newly formed Conservation Society in South Australia. During the interview, one panel member asked me what I thought about Zero Population Growth. I replied that, as Australia was producing children under that rate, I did not see it to be a crucial issue. I could see from the questioner’s facial expression that I had given the wrong answer and that my response was at least part of the reason that I was not offered the job! It is only now that I am beginning to understand why!

In arguing that it was a principle of nature that only the fittest should survive, Darwin had opened the door for the human population to be considered ‘a herd to be controlled by a self-appointed elite group who would cull its ranks and aim to kill entire races, including the lower orders of white society, in order to advance the cause of human development’ (Anon, The New Citizen, 2009). Adolf Hitler was the master disciple of the doctrine of Aryan supremacy. He is recorded as arguing with pure Malthusian zeal that:

> “Providence has endowed living creatures with a limitless fecundity; but

she has not put in their reach, without the need for effort on their part, all the food they need. All that is right and proper, for it is the struggle for existence that produces the selection of the fittest"

Altogether, the actions of secular humanists in the 20th Century are a history of human depravity. The Second World War saw sixty million people die. Hitler declared Slavs to be sub-human and deliberately set out to eliminate them; twenty-seven million Russians, Ukrainians and Belo-Russians died (14% of the population). Hitler also killed 12 million Non-Aryan and 'lower type' Aryans in Europe: Jews 6 million (55% of the population), 250 000 disabled people and 100 000 homosexuals. Black people were sterilised and used for medical experimentation.

The Fascist Croatian Ustaše murdered 500 000 people, expelled another 250 000 and caused 200 000 to become Catholics by force during the Second World War. But this account pales into insignificance alongside of the actions of secular humanists holding to the Marxist ideology. Stalin killed twenty million people in Gulags during his thirty-year reign. And Chairman Mao killed a multitude, variously estimated to be between forty and seventy-five million, during his time in power.

It is on the criterion of reductive positivism outlined by Darwin that humans have been declared, not a special creation, just another animal species destined to conform to the dictates of nature. That this notion is naïve and contradictory is evident. Positivists continue to rationalize, despite the fact that, by their own ontological prescription, they are excluded from doing so. Evolution is a common-sense idea that has ruled the minds of some people ever since Anaximander proposed that men came from fish in the 5th Century BC. In our time, we are subjected daily to Jurassic Park symbolism by the media, presumably to keep the idea alive in the face of common observation which denies it.

POST WAR HAPPENINGS

Hitler actions made Aryan supremacy, eugenics and the idea of a coming

superman an unpopular agenda, so after World War II, Julian Huxley and his associates shifted their efforts to the environment. Huxley had himself appointed Director of UNESCO in 1946 and in 1947 he formed the International Union for the Conservation of Nature (IUCN). By this arrangement Huxley ensured that the **IUCN dictated UN policy on the environment from 1946 until the Brazil Earth Summit in 1992**.

The **World Wild Life Fund** (WWF) was founded jointly by Huxley, Britain's Prince Philip and Prince Bernhard of the Netherland and backed by the resources of Royal Dutch Shell, BP, RTZ and Unilever. It is the money raising arm of the IUCN and it has 'spawned a whole panoply of green organizations across the globe, including the Australian Conservation Foundation of which Prince Philip was president from 1971-1976' (Anon, The New Citizen, 2009).

Julian Huxley died in 1975 and the cudgels were taken up, as we have seen above, by his close relative Crispin Tickell.

CHAPTER SIX

STRATEGIES

Seventy years have passed since the ICUN was formed. Its objective of a reduced human population leading to the emergence of the Superman has not wavered. With due regard for the political environment it has skilfully advanced it agenda in three stages, involving three progressive ideological shifts.

Stage 1: Nature Conservation

Nature conservation was a popular theme at the end of the Second World War; thanks to the USA dust bowl and pollution in cities. By focusing on legitimate environmental projects like soil conservation, it was not difficult for Julian Huxley to shift his emphasis from eugenics to the environment and get eighteen governments and one hundred and seven Nature Conservation Organisations to back the formation of the IUCN in 1948. Nature conservation remained the ICUN focus until 1980. During the intervening years the ICUN was successful in developing the following UN Reports;

- The UN Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
- The Convention on World Trade in Endangered Species of Wild Fauna and Flora (1974)
- The Convention on Wetlands (1975)

Stage 2: Sustainable Development

A shift came in 1980 when the IUCN was successful in getting the UN to formulate the World Conservation Policy (WCP). This policy document emphasized the need to 'work with local people to achieve **sustainable**

development'; again, a legitimate project. To provide funding for this strategy, the IUCN formed the World Wildlife Fund (WWF) and received donations from bodies such as the Ford Foundation – a body demonstrated to be in the forefront of social manipulation in our time. The WCP fitted nicely with the aspirations of aid organizations like the World Bank, the UN Development Program (UNDP) and the UN Environment Program (UNEP). Large sums of money were provided for development programs, although much of it was spent on paying consultants and trainers rather than being spent 'on the ground', leaving developing countries with the responsibility to repay the whole amount of the loan! This policy had another outcome: it led to investors seeking ownership of things like water and genetic resources; commodities formerly regarded as 'privileged rights'. This was the first open evidence within the environmental movement of economic interests operating behind the scenes.

Stage 3: Biodiversity

A further shift came in 1982 with the adoption by the UN General Assembly of the World Charter for Nature. From this time forward 'biodiversity' became the watchword of policy shifts that moved UN actions inevitably towards the 1992 Earth Summit.

The IUCN started by saying that biodiversity was the foundation all life; complex, influenced by humans and difficult to measure. But the thinly disguised assumptions were that: (1) the greater the degree of biodiversity the greater the health of the system; and (2) a return to pristine conditions is a move in the right direction. In fact, most pristine eco-systems had a limited number of plant species and associated animal life was equally limited. Much of South Australia was covered with Mallee trees (*Eucalyptus spp*.) and anyone familiar with Mallee scrub will tell you that there is little else that grows under Mallee trees. Pristine Mulga (*Acacia aneura*) and Myall (*Acacia pendula*) eco-communities were also simple with regard to biological composition, presumably because, in the areas in which these eco-types occur, the mean annual rainfall is low (150mm) and the soil is deficient in nitrogen

and phosphorus, With regard to health, any biological pathologist will tell you that pristine eco-systems always evidence plant and animal diseases, parasites and predators. Animals in Africa survive, despite blood sucking ticks and liver flukes. It is not evident that pristine conditions exhibited a healthy state. Smallpox was a natural phenomenon until medical practitioners undertook to eliminate it. The more we look into biodiversity the more obvious it is that it is a smoke screen, to hide an extreme environmental agenda.

In the face of opposition the biodiversity concept has had to shift ground over the years. Some of the more recent statements have become farcical. In 2003, the Millennium Ecosystem Assessment insisted that 'the total number of species on the Earth is somewhere between 5 and 30 million (quite a range!), but only 1.7 to 2 million species have been formally identified' How do we know how many unidentified species there are if we have not identified them? Informed people will tell you that the statement is untrue for most classes of animals and plants. Ornithologists are familiar with 99.9% of bird species, and in South Australia, over the past one hundred years or so no one has found a plant species that is not listed Black's Flora. There are undoubtedly **a few** organisms at the bottom of the oceans that have not been fully identified, but there are certainly not millions. The MEA statement is mischievous, made to impress and confuse the ill-informed masses.

The IUCN's current priority areas are:

- Conserving biodiversity and ensuring that any use of biological resources is sustainable
- Demonstrating how biodiversity is fundamental to addressing some of the world's greatest challenges
- Tackling global warming (climate change)
- Achieving sustainable energy
- Improving human well-being, and
- Building a green economy

The IUCN has adopted sophisticated methods for gaining public support for these objectives. Not the least important strategy has been getting the ICUN 'scientific' position established in the school curriculum. It has been remarkably successful in this; masses of younger people now hold to IUCN propositions without question, especially the fallacious argument that human action is causing climate change

THE CLIMATE CHANGE STRATEGIES

The Climate Change agenda is a three-part strategy involving (1) the vilification of CO_2; (2) the introduction of emission trading schemes; and (3) maintaining relentless ideological pressure on public managers to move away from the use of fossil fuels.

Step 1 – Vilification of Carbon Dioxide

We have already noted that the first person to promote the idea that increases in atmospheric carbon dioxide will increase atmospheric temperatures was Svante Arrhenius (Chapter 1). Reading the text of his paper , though, one discovers that, on the evidence that in the Mediaeval Warming, his forefathers had farmed land that is now under an ice sheet in Greenland, Arrhenius initially saw atmospheric warming as a positive change leading to better health and increased food production. But it seems that the pro-human reduction team were persuasive in getting Arrhenius to change his mind. In 1909 he became a member of The Swedish Society for Racial Hygiene (Eugenics). **A significant ideological shift!**

In 1922 Arrhenius became actively involved in the development of the State Institute of Racial Biology in Uppsala, Sweden, an Institute responsible for providing a scientific basis for compulsory sterilization programs in countries such as Canada, the Czech Republic, Germany, Sweden and twenty-seven States in the USA. Thus the **connection between the vilification of CO_2 and eugenics** is well established in Arrhenius's life and work. Arrhenius was a member of the Nobel Committees for Physics and Chemistry. He himself

received the Nobel Prize in 1903 for his paper on CO_2. Al Gore and the IPCC received the Nobel Prize jointly a century or so later for their success in promoting the Climate Change Dogma.

In his Nobel Prize acceptance speech, Al Gore gave credit to Roger Revelle the oceanographer who with Hans Suess published a paper in 1957 claiming that the oceans were incapable of absorbing CO_2 quickly enough to prevent it becoming an influence on global warming - the *Revelle resistance* factor. In his later years, Revelle was head of the Harvard Centre for Population Studies (!). It was here that Al Gore came under his influence. Revelle was not a rabid promoter of forced population reduction; he promoted the idea that education would lead to better fed communities and a natural trend to fewer children – a prediction that has empirical support. Al Gore has not pushed the population reduction concept publicly either; his interests seem to be more in line with making money. He is chairman of Generation Investment Management, a group managing funds from pension groups, foundations, endowments and *high net worth individuals*. He is also a partner in Kleiner Perkins Caulfield and Byers, a venture capital company in which Gore heads up the climate change solutions group. Needless to say Gore's involvements in these companies have made him extremely wealthy.

The proposition that there is a connection between CO_2 levels and atmospheric temperature has never been empirically validated. In recent times the hypothesis has been introduced and promulgated by people with little or no scientific background who have been successful in persuading the media and some practicing scientists to join their team. The latter seem to have abandoned their scientific integrity; did they do this in order to obtain the funding they needed to keep their laboratories open, or did they just want to join the 'band wagon'? It is uncertain whether they understand that their cooperation is helping to ensure that human population is depleted.

Step 2 - Emission Trading Schemes

The Kyoto Protocol, enacted in 1997, called for nations to take action to

reduce their 'greenhouse' gas emissions from the year 2005 and to work towards imposing emission limits on all industries for the period 2008-2011 via a mechanism that has come to be called Cap-and-Trade (CAT). CAT schemes are a means whereby the State can take greater control of economic affairs and provide market investors with another way to make money out of money.

So far, the UK, the European Union (EU), Canada and Japan (in that order) are the only nations that have made a serious move towards implementing an emissions trading scheme (ETS). The results have been mixed. In 2016, President Obama indicated that the USA agrees with the implementation of a CAT scheme *in principle*, but the rest of the world remained silent. President Trump sees a CAT scheme as a hindrance to business and is unlikely to pursue a CAT scheme or any other strategy to control CO_2 emissions.

In 2003, the EU announced its intention to implement an experimental CAT scheme in the period 2005-2007. The first step was to ask participating nations to establish National Allocation Plans (NAPs). To test the system, only heavy polluters (12 000 companies) were engaged; these together contributed 45% of the total EU emissions in the year 2003. An emissions target was set for each individual company's operation and 'allowances', i.e. carbon credit certificates (CCs), were issued by each government to each company for the period under test. The idea behind the certificates was that companies had a choice: (1) reduce their emissions below the cap and sell-off (trade) excess allowances; or (2) buy CCs and continue to emit emissions at a level above the cap. The purpose of this extra-ordinary arrangement was that it *put a price on carbon and opened the door for Carbon Trading*. One metric tonne of carbon was chosen as the unit of trading; it was anticipated that the unit trading price would be €20-€25/tonne of CO_2.

The EU scheme began with fifteen participating nations. The prior existence of a UK scheme meant that market traders were already in place to trade Carbon Credits. In the first year, 362 million tonnes of CO_2 were traded for a sum of €7.2 billion. Futures and option trading were quickly built into the

market and by April 2006 the unit price had reached €30. But some countries let it be known, that they were likely to give their industries such generous caps that there was no need to take emission reduction seriously. The trading price fell to €10/unit in May 2006, €1.2/unit by May 2007, €0.10 in September 2007 and €0.03 (3 cents) by December of that year! Further, when the results came in at the end of the period (June 2007) it was shown that, of the twenty-four EU nations, only eleven had reduced their emissions and most of them by only small amounts. Of the rest, emissions had risen by between 0.2% (Italy) to 28.5% (Finland). UK emissions rose by 5.8%. Overall, emissions in the EU rose by 2%. Thus, while the participating nations had lowered their emissions marginally, the trading of allowances had failed dismally after the first year's rake-off by the financiers running the exchanges. Al Gore's Generation Investment Management Group did quite well we understand!

The Canadian government gave a Notice of Intent to establish a CAT scheme in 2005. But the scheme failed to materialize because by 2008 the Provinces had imposed carbon taxes and were threatening to join a CAT scheme being developed in some states of the USA. In the 3 years 2005-2008, Canadian emissions rose 25% with prospects of a further rise of 24% by 2011. Clearly CAT schemes are not as easy to manage as their designers have supposed. In Canada there is now a move on the part of the National Government to allow the Provinces to run CAT schemes and to introduce an *emissions intensity* system at Federal level whereby emission cuts will be measured against units of output. It seems that each level of government there is going to work hard to ensure that they have access to the 'cash cow'!

The Japanese Government made a formal statement of intent to form a CAT scheme in May 2008 but no action has been reported to date. Despite these false starts, Carbon Trading is still being mooted. Barclays Bank sees it set to become the world's biggest commodity market.

Step 3 – Ideological Pressure

The Climate Change agenda was introduced subtly at first but by 2006 its

promoters felt it timely to increase ideological pressure on National Governments. They attempted to do this by releasing a Review of the Economics of Climate Change by Baron Nicholas Stern. Stern is the Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE) and Chair of the Centre for Climate Change Economics and Policy (CCCEP) at Leeds University.

Stern's document was presented as a report from 'experts whose opinions are beyond criticism'. But its findings were simply a repeat of what we had heard before from the Climate Change lobby, **unsubstantiated gazes into the future**, viz:

- All countries will be affected by climate change, but the poorest countries will suffer earliest and most.
- Average temperatures could rise by 5^{o}C from pre-industrial levels if climate change goes unchecked.
- Warming of 3-4^{o}C will result in many millions more people being flooded. By the middle of the century 200 million may be permanently displaced due to rising sea levels, heavier floods and drought.
- Warming of 4^{o}C is likely to seriously affect global food production.
- Warming of 2^{o}C could leave 15-40% of plant and animal species facing extinction.
- The level of CO_2 in the atmosphere should be limited to 450-550ppm.
- Deforestation causes greater problems than the use of fossil fuels.

To deal with these threats, Stern recommended that governments urgently adopt five elements of policy:

- Carbon pricing, through taxation, emissions trading or regulation. (Stern saw this to be necessary to show people the full social costs of their actions. He advocated a global carbon price across countries).
- Support for energy research and development should be doubled; support for low-carbon technologies should be increased five times.
- International product standards should be developed.

- Large-scale international pilot programs should be implemented to explore the best ways to curb deforestation.

In Stern's view, if action was not taken, climate change could cost the world at least 5% of GDP each year and possibly as high as 20% of GDP. His other prescriptions included the following:

- The cost of reducing emissions could be limited to around 1% of GDP if people could be charged more for carbon-intensive goods.
- Each tonne of CO_2 we emit causes damages worth at least $85, but emissions can be cut to a cost of less than $25 a tonne.
- Shifting the world to a low-carbon path could eventually benefit the economy by $2.5 trillion a year.
- By 2050, markets for low-carbon technologies could be worth at least $500 billion.
- What we do now can have only a limited effect on the climate over the next 40 or 50 years, but what we do in the next 10-20 years will have a profound effect on the climate in the second half of this century.

Government Responses

The Stern Report caused the Australian Government to call for a further report from Professor Ross Garnaut, a Nicholas Stern disciple.

This led to the issuing of a Green Paper, a White Paper and the submission of a Carbon Pollution Reduction (CPRB) Bill to the Australian Parliament in May 2009. The objectives of the CPRB were stated as follows:

Object 1: To give effect to Australia's obligation to the Climate Change Convention and the Kyoto Protocols.

Object 2: To support the development of a Global response to Climate Change

Object 3: To reduce greenhouse gas emissions by 5-15% by the year 2020 and by 60% by 2050.

The Bills were passed by the Australian House of Representatives in May but defeated by the Senate in August 2009. Political resistance to the introduction of an emission trading scheme arose from several factors. Politicians showed ambivalence towards including rural food producers in such a scheme, because they feared a back lash from the general public if food prices rose drastically in an economy that was already under stress. Conversations with a cross section of the Australian community suggested that the older generation has a strong conviction that the whole Climate Change business is a scientific non-event and a money-making scam. There was support for emissions trading amongst the less politically active younger generation, who had been indoctrinated with Climate Change misinformation throughout their school life and had accepted the Dogma with the same naivety as previous generations accepted Darwin's theory of evolution. In between, were the hard working economically active people who are too busy making ends meet to ask questions about a subject over which they see they have no control.

But to take the threat lightly may be a mistake. Professor Bob Carter has estimated that the cost of carbon sequestration, based on a price of $30/tonne of CO_2 could be around $3054 per annum for the average family. Ross Garnaut has said that it will cost $250/tonne to remove carbon dioxide for re-cycling or permanent sequestration; at that rate the expected cost per family would be $22 455 per annum, all for a *possible* reduction in temperature of 0.0001^{o}C/annum! In addition, there would be hidden costs: (1) unemployment caused by replacing coal-fired power plants with wind power; (2) transitional costs, estimated to be 1% of GDP; (3) contributions to off-set losses experienced by developing countries, a further 1% of GDP; and (4) economic growth would be foregone, estimated by the Australian treasury to be 1.8% of GDP.

The greatest success of the Climate Change lobby is that most people these days believe that CO_2, which along with water is about the most valuable

commodity on the planet, is a pollutant. This insanity begs the question, whether we humans have entered a bizarre make-believe world from which we might not recover.

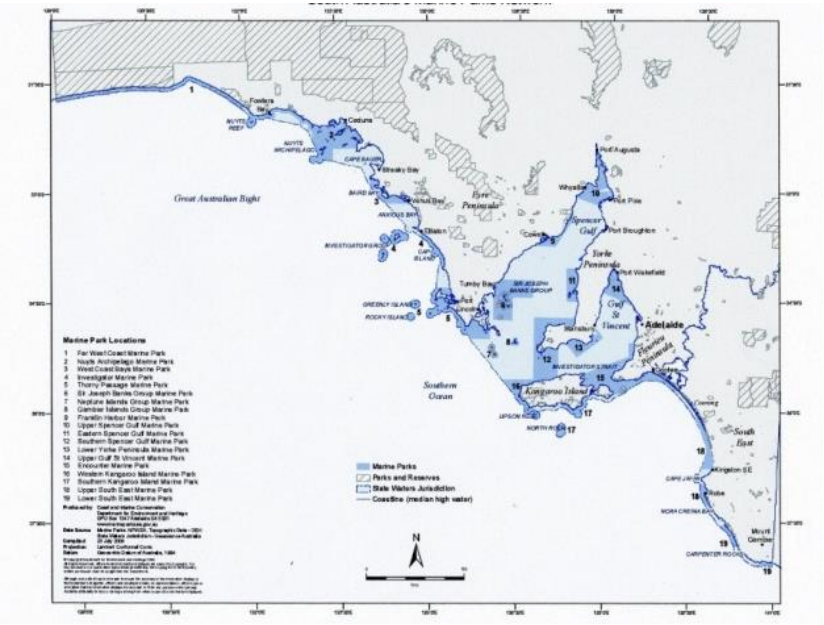
The challenge for the developing world is that the Climate Change Dogma will exclude them from developing electricity services based on coal power. The attack on fossil fuels also necessarily impacts on international trade. Kenyan vegetable growers have had a lucrative market in Europe and the UK; but this has now been sabotaged by European governments insisting that their products be marked *eco-unfriendly* when they are displayed in super market shelves because they have been transported to Europe by aircraft using fossil fuel. Kenyans are losing their businesses and some members of the European public have had to resort to digging up their back yards to grow food; at least some of them have, these days most urban dwellers do not have a back yard. The world price of rice went from $140/ton to $1100/ton in the latter half of 2008. This effectively meant that a large percentage of the people for whom rice is the staple diet were no longer able to buy it. All of which suggests that a world-wide famine is a definite possibility in the near future. The Malthusians must be encouraged.

Some nations in the Pacific, whose land mass is sinking slightly due to slumping in the volcanoes on which they are established, are seeing talk of rising sea levels opening up possibilities for more aid but they may be disappointed in this. There has been some excitement in Africa re the possibility that they may participate in Carbon Credit Payments but the collapse of the market in the EU suggests that they may be overly optimistic. It is hard to see any advantage for the developing world arising from a Greener world. As Bob Carter has said, we should be more concerned with seeing that the populace in the developing world has clean water and electricity than making sure that speculators have yet another way of making money without work.

CHAPTER SEVEN

MARINE PARKS

So far we have seen that the 'powers that be' are focused on reducing food supplies and reducing the human population by the Climate Change strategy. Their attack on food supplies grown in the world's land masses has been subtle. Their attack on food found in the world's oceans has used a more conventional conservation strategy based on the propagation of misinformation. I refer to the introduction of marine parks. I shall use the South Australian case as an example of the process because I am more familiar with it than cases elsewhere and because South Australia has been duped to implement marine park policies to a greater extent than anywhere else in the world.



Map 2: Marine Parks in South Australia (SA Govt. Map)

In 2009, the South Australian Department for the Environment and Natural Resources created nineteen Marine Parks in accordance with the provisions of the South Australian Marine Parks Act of 2007. These parks are located in waters under State jurisdiction. Exact figures are not available, but a rough estimate suggests that the Parks cover around 30% of State waters and 75% of the South Australian coastline (Map 2); the light blue areas are the State waters and the dark blue areas are the Marine Parks. Note the almost continuous dark blue line around the coastline and the integration of all offshore islands into Park reserves.

The initial reaction of fishermen to the creation of Marine Parks was surprise and dismay. One commenter saw them as a 'cruel hoax' and it did not escape the notice of week-end anglers that the reserved areas were located on the best fishing grounds. But this reaction was nothing to that which was generated in 2011 when the Department asked Parliament to designate 25% of the Parks as **exclusion zones**, i.e. totally out of bounds to the fishing and boating fraternity. On the 5th April 2011 a protest meeting attracted 1400+ people, all of whom were sufficiently riled to pass motions of no confidence in the Government and to plan radical demonstration rallies in the streets of Adelaide.

It was pointed out at the meeting that not only would the Government's proposed action have serious implications for South Australia's commercial fishing operators but go a long way to eliminate recreational fishing, by far the biggest and most important recreational pastime in the State. Further, a member of the Real Estate Institute of South Australia predicted that exclusion zones would sound the death knoll for twenty-nine small coastal towns in South Australia as these centres were dependent for their survival on regular visits from tourists who were drawn to them because they were good fishing sites. And it would not only be local people who would lose equity; on York Peninsula, 45% of rate payers live in the capital city (Adelaide) but own houses in coastal towns for weekend relaxation purposes – fishing in particular. The picture drawn was that exclusion zones would render the South Australian coastline virtually uninhabited. And not the least concern was that recreational boat fishermen would be tempted to travel out to sea, beyond the

Marine Park limits, at risk of life and limb, in order to pursue their favourite pastime.

The South Australian waters are renowned for fish of high quality. Species like King George Whiting (*Sillaginodes punctatus*), Snapper (*Pagrus aratus*), Blue-spotted Flathead (*Platycephalus bassensis*) and Garfish (*Hypohaniplius melanochir*) have no peer as table fish anywhere in the world. South Australia is also renowned for its Australian Rock Lobster (*Jasus edwardsii*), the South Australian Southern Blue Fin Tuna (*Thunnus maccoyii*) and abalone (*Haliotu-spp.*). Industries based on these species have established links with lucrative markets in Asia/ The marine park proposal threatens the survival of these businesses.

PAST ACTIONS

South Australian fish stocks have been monitored conscientiously over many years by the South Australian Department of Fisheries. And the Department has received good cooperation in this project from commercial fishing operators (who are interested in the long-term viability of their industry), and recreational fishermen who have accepted bag and fish size limits and observing closed areas and closed seasons without complaint. The industry as a whole is quick to argue, from good grounds, that the South Australian fishing operation is the best managed in the world. And if that is true, the question needed to be asked: why the South Australian State Government was bent on introducing such a socially negative policy as exclusion zones in Marine Parks? Had the Government's case been scientifically and economically justified, for the projected cost in terms of State income, private equity loss, negation of food supplies and social disruption would be considerable?

THE DEVELOPMENT OF MARINE PARK POLICY

The history of the development of Australian Marine Park Policy helps us understand the methodology employed by the population reduction lobby

group to meet its aims. These people operate over long periods of time; their strategies include: (1) gaining the support of people of influence in high places and unthinking bureaucrats who can push the agenda forward; and (2) developing pseudo-scientific misinformation and distributing it by any and every means to a populace that is too busy or too ill-informed to recognise the contradictions being promulgated.

It comes as no surprise to learn that the motivation for Marine Park policy in Australia came directly from the United Nations Convention on Biological Diversity presented at the Earth Summit held at Rio de Janeiro in 1992. This document has been prepared by the Ad Hoc Working Group of Experts on Biological Diversity appointed by the United Nations Environment Program (UNEP) in November 1988. This Group was asked to explore the need for an international convention on biological diversity. It completed its work with a Conference for the Adoption of the Agreed Text on the Convention of Biological Diversity held in Nairobi, Kenya in 1992 and its recommendations were accepted by the UNEP in the same year. The Convention was opened for signatures on the 5th June 1992 at the Earth Summit and remained open until the 4th of June 1993 by which time 168 countries had signed up as Parties. The first session of the Conference of the Parties was held in late 1994 in the Bahamas. Australia ratified the Convention in June 1993 and since that time the Australian National Environment Department has been active in supplying the Convention with regular updates on its actions taken within Australia to advance the Convention's objectives.

The stated objectives of the Convention are:

- The conservation of biological diversity
- The sustainable use of its components
- The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The Australian EPBC Act 1999

In line with its commitment to the Convention, the Australian Parliament

passed the Environment Protection and Biodiversity Conservation Act in 1999. The Australian Department of the Environment described this Act as 'the Australian Government's central piece of environmental legislation'. The Act aimed to provide a legal framework to protect and manage 'important flora, fauna, ecological communities and heritage places defined in the Act as matters of national environmental significance'. The important but ill-defined word here is *'significant'*; it was included to satisfy landholders that they had nothing to fear from Government controls and 'witch-hunts'. An important addition was the conferring on the National Department of 'jurisdiction over actions that have a *significant* impact on the environment outside of the eight matters of *significance* listed in the Act' (my emphasis). This provision has seen the National Department acting well outside of its normal boundaries. In 2009 wood cutting was prohibited along the Murray River plains because a parrot, claimed to be a threatened species, was understood to not like to fly over open ground. Over 2000 people lost their employment and income.

Since the Act has been in place, the Australian National Department of the Environment has set up numerous committees and working groups and published a large number of reports and fact sheets. Some of the more significant reports include[5]:

- The National Biodiversity and Climate Change Action Plan 2004-2007 (issued in 2004)
- The Implications of Climate Change for Australian Fisheries and Agriculture (issued in 2008)
- A National Approach to Addressing Marine Biodiversity Decline (issued in 2008).

The South Australian Marine Parks Acts 2007

The power of Commonwealth agencies is limited by the National Constitution so the National Department of the Environment encouraged all Australian States to pass legislation which would advance the objectives of the EPBC Act at State level. This led the South Australian Government to pass the South

Australian Marine Parks Act of 2007. The objective of this Act is to protect and conserve marine biological diversity and marine habitats by declaring and providing for the management of a comprehensive, adequate and representative system of marine parks which will assist in:

- The maintenance of ecological processes in the marine environment
- The adaptation to the impacts of climate change in the marine environment
- Protecting and conserving features of natural or cultural significance
- Allowing ecologically sustainable development and the use of marine environments, and
- Providing opportunities for public appreciation, education and enjoyment of marine environments

No specific park sites were listed, and no specific management strategies were promoted in the Act. Those details were determined by Regulations developed by the Minister for the Environment, outside of Parliamentary control and influence.

The Australian National Biodiversity Strategy Review Task Force

Central to the UN Convention and the Australian National Environment Act is the concept of 'biodiversity'. The International Union for the Conservation of Nature (IUCN) describes biodiversity as 'a term used to describe the wide variety of ecosystems and living organisms' that are:

- The foundation of life on earth
- Extremely complex
- Dramatically influenced by human activities
- Difficult to measure precisely

Other authors have presented biodiversity as a measure of ecosystem health, the implication being that *the greater the biodiversity* the *better the health of the system*. And yet another definition is given by the authors of the 2008

Australian National Approach to Addressing Marine Biodiversity Decline:

> 'Biodiversity is the variation of life at all levels of biological organization. It refers to plants, animals and micro-organisms, the genes they contain, and the ecosystems and ecosystem processes they form. It is typically considered at three levels: genetic diversity, species diversity and ecosystem diversity'

In 2010, the Australian National Biodiversity Strategy Review Task Force Group provided 'an over-arching and high-level strategic national policy framework for biodiversity conservation and sustainable use'. This was based on the following premises:

- Biodiversity is essential for our existence
- Biodiversity is of value in its own right
- Biodiversity is best conserved in its natural state
- The state of biodiversity reflects the state of the nation
- Natural Systems have a finite capacity to respond to changes in their biodiversity
- We should apply a precautionary approach to biodiversity conservation
- All Australians have a stake in biodiversity and should contribute to its well-being
- Our efforts to conserve biodiversity must respect the values of indigenous peoples
- Biodiversity should not be further degraded by the actions of the current generation.

These premises were taken directly from the IUCN report: The Economics of Ecosystems and Biodiversity (TEEB) Study. The foreword attributed the inspiration for the study to the Millennium Ecosystem Assessment (2005) and the Review of Climate Change by Nicholas Stern (2006).

In 2008, the Marine Biodiversity Decline Working Group provided the Australian Minister for the Environment with a Report on Trends in Australia's Marine Biodiversity. The report was **highly contradictory**. On

one hand it insisted that 'the past 200 years of human activity have had substantial impacts on marine environments' and 'expert opinion… suggests that there is continuing decline occurring in Australia's marine biodiversity and ecosystems.' On the other hand it recognized that the lack of baseline information on the current state and trends in the marine environment makes it difficult to make definite statements for 'we still know very little about Australia's marine biodiversity' (!). Presumably the writers had two competing objectives: (1) They wished to claim that marine biodiversity was declining (with no data to substantiate this view); and (2) being researchers, they wished to make a case for more research funds to be provided for their laboratories!

The Report identified five issues which the Working Group saw as the most significant, broad-scale threats to marine biodiversity:

- Climate change
- Resource use
- Land-based impacts
- Marine bio-security, and
- Marine pollution

Climate Change

Six possible effects of 'climate change' were listed and examples given to show that there was 'mounting evidence' of the impact of climate change on marine systems. The examples included:

- Coral bleaching
- Shifts pole-wards in species distribution due to warming
- Alteration in the timing of biological events like phytoplankton bloom.

Clearly, Marine Parks can have **no effect or control** of climate and any of the listed effects. And not having walls, they cannot prevent fish species moving southwards!

Resource Use

The marine resource mentioned were: fishing, aquaculture, dredging, mineral/oil/gas exploration and extraction, shipping and tourism. Of these resources, the only one influenced by Marine Parks is **fishing**, which is clearly the real object of the Report which states dogmatically: 'as Australian waters are low in productivity, fishing… must be maintained at low levels to provide ongoing access to these resources'. No action is suggested against mineral exploration and extraction or shipping. In fact, at the same time that the Report was tabled the government granting exploratory licences for companies to drill for oil in the middle of the Great Australian Bight National Park, and two ports were approved for development in South Australian waters, one for the export of iron ore and the other to service a new explosives factory at the head of the St Vincent's Gulf; in both cases shipping would be need to travel to and from these ports through Marine Parks..

Land Based Impacts

Types of pollution listed were hydrocarbons, pesticides, heavy metals, pathogens, nutrients, sediments, and litter. There are continual reports of such materials being washed in to ocean along the South Australian coast but it is quite clear that Marine Parks **will have no impact** on such problems.

Marine Biosecurity

Of concern here were marine pests that attach themselves to boat hulls and anchor chains. The examples mentioned were the Northern Pacific sea-star in Tasmania and Victoria (which is seen as a threat to South Australia, Western Australia and New Zealand); New Zealand screw shells (*Maoricoplus reseus*); and the black-striped mussel outbreak in Darwin. Two things can be said about such problems: (1) the threats come from international shipping, not local recreational and commercial fishing boats; and (2) Marine Parks are **not in any way a solution** to such problems. As it happens international shipping destined for Adelaide must pass through a Marine Park, either that located

between York Peninsula and Kangaroo Island or that between Cape Jervis and Kangaroo Island but there has been no suggestion that international and interstate shipping operations should cease. Marine Park Exclusion Zones are aimed at local commercial and recreational fishermen, not potential bio-security problems.

Marine Pollution

The main pollutants listed were: oil, sewage, pesticides, industrial wastewater, antibiotics, metals and radioactive waste. The main culprits were seen to be shipping, boats, oil and gas exploration teams, storm water run-off and poor land management practices. Clearly, Marine Parks can have **no influence** over such pollutants either.

In summary, we may say that the case for Marine Parks to conserve marine biodiversity in South Australia is not established. Firstly, there is no substantial evidence of any wide-scale biodiversity decline; fish stocks have been well managed by commercial operators and recreational fishers under the direction of the Fisheries Department for a long time. Secondly, Marine Parks are a mismatch, totally **incapable of averting the defined threats**. This analysis leads to the conclusion that the real aim of the environmental agenda is to reduce fish supplies to the local market.

One fishing community, known for its good management of the local marine environment, asked the Department of the Environment what people were going to do if they could not fish on weekends. They were advised to set up a Whale Watching Club! Clearly there is a social dichotomy in South Australia, being created by vested interests that have no regard for the economic and social consequences on South Australian citizens. And the South Australian Government has fallen for it!

MARINE BIODIVERSITY DECLINE SCIENCE

The current state of scientific knowledge in relation to biodiversity decline in

South Australian marine environment is not uncertain; the state Fisheries Department has years of records with regard to fish stocks. Yet the Australian State of the Environment Report (2006) concluded that:

> 'we cannot… even in the **rare cases where we know changes are happening**, be sure whether changes in either the extent of the elected habitats, or in populations of particular species, are indicative of healthy or unhealthy changes...'. (my emphasis).

The 2008 report of the Marine Biodiversity Decline Working Group also confirmed that 'large gaps exist in our knowledge of Australia's marine environment' Nevertheless, in response to persistent questioning in the Parliament, the South Australian Department of the Environment issued a Fact Sheet in 2010 assured us that 'marine parks are internationally recognized as an effective tool to manage and conserve marine resources and biodiversity' and 'there have been **many scientific studies** on the effects of sanctuary zones which show positive benefits… including increases in overall biomass; increased ability to reproduce; a spill over of larvae and adults into unprotected areas; and improvements in ecosystem and habitats'. Twenty-eight references were provided; eight were concerned with eco-system changes, six with fish stock contributions of reserved areas to adjacent areas, one with the effects of trawling and dredging and eleven with changes in fish populations. The Fact Sheet was not universally welcomed, especially by the fishing fraternity. Professor Emeritus Bob Kearney, Chairman of the Board of the (Australian) Fish Centre at the time found it 'exaggerated… and biased' (*The Advertiser*, 8th March 2011).

Overall it appeared that there was limited scientific evidence of marine biodiversity decline available at the time these Reports were issued. This is not surprising as prior to the year 2000 Marine Parks were simply amenity areas set aside for the use of tourists and the scuba diving fraternity. This being so, advocates of marine parks were obliged to call on the opinions of so-called 'experts', pro-Marine Parks people who told us they had seen '**some** evidence of decline in **some** places' and argued that this was sufficient evidence to

support the view that there was a serious decline in Australian's marine biodiversity'. A large conceptual jump indeed!

On close inspection, the push for Marine Parks is found to be based on the same arguments as those driving the Global Warming/Climate Change debate, which is not surprising as they are both creations of the IUCN. The case for Marine Parks has been built on misinformation, presented with calculated stealth to achieve a given end, viz. the reduction of human food supplies. The result in 2017 is that Australia, with abundant supplies of fish in its extensive waters, now imports 80% of the fish it eats.

CHAPTER EIGHT

GLOBAL WARMING

Dr Michael Mann is a Palaeo-Climatologist, currently located at Pennsylvania State University in the USA. In 1999 he published a paper with Bradley and Hughes from the University of Arizona which included a graph of temperature anomalies dating from the year 1000 to 2000 (see www.Maannhockeystickgraph). Because of its shape the graph became known as the Hockey Stick Graph. The IPCC said this graph made a major contribution to their receiving of the Nobel Prize.

Thermometers were invented in the 18th Century. Prior to that, atmospheric temperatures **were not recorded**. So how did Mann and his colleagues develop their graph? They did it by addressing such things as tree rings of old trees, lake sediments, ice-caps, corals and historical records. The science behind such reconstruction is highly debateable, e.g. temperature is not the only factor controlling tree ring width. And the graph itself has problems; the large extension upwards in the years 1999 and 2000 was clearly guess work in 1988! Numerous authors have published temperature graphs for similar period and all of them show no hockey stick. One author has published sixty graphs that are at variance with the Mann Bradley and Hughes graph.

There is also evidence that some contributors have been fudging their results to make sure they get a graph that shows the desired image, e.g. the NASA graph of 2016 removed the warm spot prior to 1880 shown in their 1999 graph. NASA declared 2015 to be the warmest year on record, and we are getting a similar story from Meteorological Bureaux across the world. It seems like every year lately is the warmest on record. But Climatologist Roy Spencer of the University of Alabama sees a problem with these pronouncements. NASA, he says, ‘used data from ground thermometers to make their claim; they ignored satellite and radiosondes (weather balloons) temperature

measurements which have shown little or no warming over the past eighteen years'. So which method of measuring temperature is the best?

Thermometers measure near-surface temperature. They are located in Stevenson Screens and measure temperature at one very small site to represent a whole region. The location of the thermometer is crucial; measurements are greatly influenced by the proximity of walls and pavements that reflect heat. In many places, the site of the Screen has been shifted, sometimes several times, during the time that records have been taken. This can markedly affect trends.

Satellites and radiosondes measure the average temperature of a deep layer of the lower atmosphere. Based upon our understanding of how the atmosphere works, the deep layer temperatures are supposed to warm (and cool) somewhat more strongly than the surface temperatures. In other words, variations in global average temperature are expected to be magnified with height, say through the lowest 10 km of atmosphere. We see this during warm El Nino years (like 2015) and cool La Nina years. Since their introduction, satellites and radiosondes – two very different types of measurement system – have tended to agree with each other and this gives us cause for confidence in their results. Since 1979, satellites and radiosondes have measured 50% less of a warming trend than surface thermometer data. Spencer says:,

> 'no matter which temperature monitoring method we use, the climate (computer) models that global warming policies are based upon have been, on average, warming faster than all of our temperature observation systems. If 'global warming' is occurring, (1) it is weaker than expected, based upon independent satellite and weather balloon measurements; (2) it has been overestimated with poorly adjusted and poorly located surface-based thermometers; (3) it has a substantial natural component (sun spots); and (4) it is likely to be more beneficial to life on Earth than harmful'.

WHAT CONTROLS GOBAL TEMPERATURES

Before we get carried away by Climate Change propaganda we need to review what we know about the facts that affect our weather.

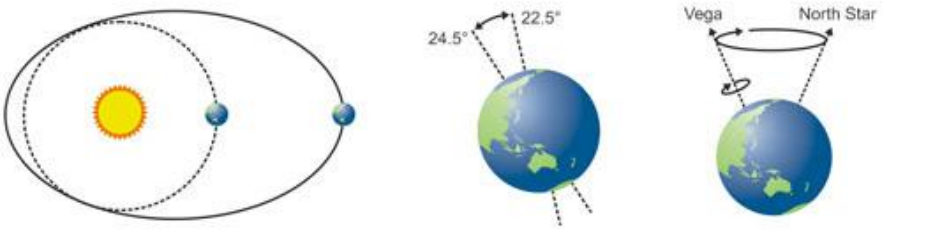
The Sun

Gregg Thompson ((2011) reminds us that the Sun is by far 'the major driver of our climate', providing almost all of the heat energy that controls our weather. We know this because every evening when the earth turns away from the sun, the temperature drops anything up to twenty degrees. The sun's heat is also by far the main cause of thermal updrafts which constantly mix the atmosphere. It is also the cause of lightening, storms, hurricanes, tornadoes and the heating of ocean currents, and has a large impact on cloud formation.

The energy reaching us from the sun varies due to the development of Sun-spots ('cooler' spots) in cycles and Sun-storms (eruptions of gas, atomic particles and radiation. Our atmosphere protects us form the effects of solar radiation and has a modifying effect on the variations in the amount of heat reaching us. The result is that the sun's influence on us is relatively stable; in the shorty term atmospheric temperatures only rise or fall less than half a degree. However, over longer periods the sun's radiance can cause increases or decreases of a few degrees, and if this is sustained a little ice age may occur.

The Earth's Orbital Variation

The Earth's orbit around the sun is not constant. It varies due to (1) Eccentricity - changes in the shape of the Earth's orbit; (2) Obliquity – changes in the tilt of the Earth on its axis; and (2) Precession – wobbles in the Earth's axis.



Eccentricity Obliquity Precession

Figure 16: Milankovitch Cycles (source: Skeptical Science.com)

***Eccentricity*:** This refers to changes in the shape of the Earth's orbit, from circular to elliptical. The changes are thought to be due to gravitational forces exerted on the Earth by the larger plants, Saturn and Jupiter. When the orbit is elliptical the Earth moves further away from the sun at times, with resultant cooling.

Obliquity: The angle of the Earth's axis can vary from 22 to 24 degrees over time. The result is varying degrees of melting of Arctic ice.

Precession: When the Earth's axis wobbles, seasons are affected. When the orbit is elongated the weather is may be more extreme

Terrestrial Impacts on Climate

There are a number of terrestrial factors which have a direct influence on climate.

Continental Drift: Continental drift is occurring and, clearly, over time it could result in an area of land being shifted from one climate zone to another. And there is evidence that some regions have so moved in the remote past.

The current rate of drift is somewhere between 0.6cm and 10cm per annum, so its impact on climate over short periods of time is minimal.

Oceanic Currents: The ocean currents carry both cold and warm water around the planet, and the effect of this on climate is considerable. If it were not for the Gulf Stream in the Atlantic, the east coast of the USA, the UK and Western Europe would be much colder than they are today.

Cloud Formation: The effect of cloud cover is significant from day to day. In winter, frost develops more readily when the sky is clear. Cloud cover usually means warmer nights.

Oscillations: The Southern Oscillation, El Nino and La Nina pattern affects the weather significantly, El Nino events cause increased cyclone activity in the Pacific Ocean, flooding in Peru and drought in Indonesia and Aust5ralia.

Human Influence

To argue that human activity can override the immense natural forces

influencing the Earth's climate is sheer fantasy. We are simply not that good!

OCEAN WARMING AND ACIDIFICATION

The evidence against the Hockey Stick graph has been so strong that Climate Change lobbyists have turned their attention to the oceans, which they say are warming due to atmospheric warming, and acidifying due to absorption of CO_2 from the atmosphere. To support this view, they have focussed our attention on processes (pumps) by which the oceans take CO_2 from the atmosphere and deliver it to deeper levels in the ocean, some as calcium carbonate (in shells, etc.), some as plant residue (photosynthesis) and some as the bicarbonate ion derived from the carbonic acid which forms when CO_2 combines with water. Climate Change propaganda emphasises the impact of

oceanic acidification on such things as coral growth. The reality is that quantity of CO_2 in the atmosphere at 400 ppm is miniscule while there is another source of CO2 in the oceans which far outweighs it. I refer to the vast quantities of CO_2 emitted by sub-marine volcanoes.

By far the greatest numbers of volcanoes on the Earth are under the sea. Just how many there are is hard to say because they are not easy to detect. At depths greater than 2 200m, water pressure exceeds 22MPa and water can no longer boil. If there is no boiling sound, volcanoes cannot be detected by hydrophones. One estimate is that there are 4 000 volcanoes per million km^2 under the oceans (University of Oregon). The area of the oceans is 510 million km^2, so by this estimate there are just over 2 million volcanoes under the sea. But this figure is conjectural, so the University of Oregon has suggested we assume the figure to be at least one million.

Under-sea volcanoes mostly occur at plate margins – both constructive and divergent tectonic plates (Figure 17). Because of the immense pressure exerted by the head of water, the products of undersea volcano eruptions tend to remain at the bottom of the ocean. Magma released under water rapidly cools and solidifies to form a solid crust.

Some 75 000 of the underwater volcanoes are over 1km high. Some have reached the surface and become islands, e.g. the Hawaii Islands. One of the biggest is Piton de la Fournaise in the Reunion Islands. It is 6 600 m tall and has a base of 220km.

The principal components of volcanic gases are water vapour (60%), **CO_2 (10-40%)** and sulphur as sulphur dioxide (SO_2) or hydrogen sulphide (H_2S). In the light of these facts, we may say that any CO_2 transported to the bottom of oceans by pumps is insignificant, especially as recent research has discovered huge lakes of liquid CO_2 at great depths under the oceans that has been unable to escape due to water pressure. These lakes form when CO_2 interacts with the cold water to form carbon dioxide hydrate. This substance forms a cap in the

sediment that traps additional CO_2. Figure 18 shows diagrammatically how this occurs.

At depths less than 3 000m, liquid CO_2 rises to the surface, eventually bubbling into the air as gaseous CO_2. The phase diagram suggests the change from liquid to gas would happen at about 100m depth (11 bar).

A million volcanoes constantly erupting under the surface of the oceans around the world must have an effect on sea temperature and CO_2 concentrations in sea water over time. At depths below 3 000m CO_2 is probably permanently trapped. But the average depth of submarine volcanoes is 2 600m so a great many volcanoes, possibly more than half a million, are less than 3 000m deep and must be major contributors to oceanic warming and carbonic acid formation in the seas. Once again, the strong suggestion is that the climate change dogma is denied.

CHAPTER NINE

BACK TO SANITY

When I began my venture into the Climate Change debate, all I wished to do was look at the facts. Facts such as sea levels over time are available to everybody on the internet. I spoke to an elderly woman recently who was complaining about sea level rises. I said: 'do not worry, the sea is not rising; go to the beach and have a look'. She said: 'I do not believe my eyes; I believe what the scientists tell me'. From this reply we may assume that Descartes is alive and well. But for me, a good description of madness is 'living in unreality'. And if that be so, we must ask if this woman's position is not a form of insanity.

During my investigations I have become aware that there are major forces operating behind the ongoing promotion of the Climate Change dogma, the Illuminati families and Venetian Black Nobility in particular. I have little factual information to back this claim, other than the clear evidence that the world's super rich families massively influenced the actions of the British East India Company from the mid-18th Century, turning it into their arm to control the world trade in drugs, opium in particular. I refer to this in Appendix Two because it was undoubtedly this new order that was the spring of action for Malthus to produce his Essay in 1798.

Fortunately, the influence of the world super financial powers is finite and ordinary human agents can still, to some degree, take rational purposive economic action to advance the welfare of themselves and their families. In what follows I make some suggestions as to how sane people can continue with their lives in the middle of the Climate Change dogma insanity. If we listen to the media, it would appear that the pro-ideological battle over Climate Change is established. Thankfully some brave souls are still active in making the sceptic case. And President Donald Trump's recent announcements and actions have clearly encouraged these people to continue with that task.

The wake-up call me is to recognise that our opponents have been quietly laying the ground work for their position over two and half centuries while most of us have been asleep. 'Climate change' and 'carbon pollution' are now politically correct notions and genuine empirical science has become widely disregarded.

THE ONE CHILD POLICY

Before we consider what actions we can take to defend ourselves against the Climate change onslaught, let us remind ourselves that the reduction of human population is not as easy to achieve as some have naively supposed. No-one to my knowledge (certainly not the IPCC) has addressed the question: what is the impact of reducing population in practice? Thanks to the actions of the Chinese Government in introducing a one-child per family policy we have some actual experience that addresses the matter.

The first thing we note is that the Chinese one-child per family policy has been **unsuccessful** in holding the population level let alone reducing it. China had a population of 565 million with a growth rate of 6.2% when the one child per family policy was introduced in 1979. At last count (2013) the Chinese population was 1.36 billion, so the annual growth rate has still been 1.7%. The problem has been that, while the birth rate has diminished considerably, life expectancy in China has lifted from 40 years in 1950 to 81 years in 2009. These are overall figures; various ethic groupings have varied somewhat in their growth patterns. Since 1979, the predominant Han people have grown by 21%, Tibetans by 40% and the Manchu by 148%. By 2050 China is expected to have 1.45 billion people, not exactly what the environmentalists were hoping for!

The second thing we learn from the Chinese one-child policy is that it has precipitated three serious social problems. Firstly, because families prefer to have a son rather than a daughter, and because infanticide by exposure continues to be practiced, there are now many more young men than young women of marriageable age in China. By some estimates the discrepancy is 32

million but a figure of 60 million has been quoted. The Population Reference Bureau sees the disparity varying with the ethnic grouping; the overall figure for China (male babies/female babies) in 2008 was 120/100 but in Tibet it was 135/100 and in Xinjiang 138/100. The result is that many men cannot find a wife in their home territory. What the full consequences of this is we can only guess at. One consequence has been an increased use of prostitutes with a resultant spread of AIDS. By 2012 fourteen million people in China had AIDS. The Malthusians will no doubt be happy to hear that!

A second problem is that children are being abducted regularly. One estimate suggests that more than 200 children are stolen on any given day; and the sadness and sense of loss felt by parents is not helped by a police force rendered indifferent by the incredible difficulty of finding a child in the massive Chinese population.

A third problem is the challenge of caring for the aging population. Traditionally, the aged were cared for by family members; now family members are faced with an almost impossible task because under the one child per couple policy each economically active couple must care for two sets of parents and four sets of grandparents. A recent Australian Broadcast Commission report revealed that Shanghai Province has some 22 million people over 60 years of age but only 33 000 places in geriatric facilities; and from the visual evidence presented, it is certain that no Westerner would tolerate the conditions provided in the centres that are available. Since the beginning of time, a main reason that people have had children is to ensure that they are cared for in their old age. This is no longer a reasonable expectation in modern China.

Clearly, the one child policy does not work to anybody's benefit, and certainly not in the way that the Social Darwinist-Malthusians were looking for. It is for this reason that they have now focused their attention on what they see as a superior strategy: starving the masses by preaching Climate Change and the vilification of CO_2. But this may not work either. Western countries may be caught up in the ideological debate and breeding at low levels, but other

nations are ignoring it. India is reproducing at the rate of 2.8% and is expected to reach 1.5 billion by 2050; and the Islamic population is currently averaging 6 children per couple, a growth rate of 8%. Some Western commentators are seeing the migration of Muslims into Europe and the USA as a problem. White groups in Europe are reproducing at rates well under 2%: France 1.8%; UK 1.6%; Greece 1.3%; Germany 1.3%; Spain 1.1%; simple mathematics suggests that some European countries could become Islamic States by 2050! The population growth rate for Muslims in the USA is similarly 8%, compared with 1.6% for other races.

WHAT CAN WE DO?

The alternatives seem to be:

1. Get on the bandwagon by taking up the position of the Canadian Minister for the Environment who said: 'The science may be wrong but we are going to keep on saying it because it is all in a good cause'

2. Join in the scramble to make money on carbon credits and let our children live a lie.

3. Continue to proclaim the facts by any and every means.

I am choosing the latter position because I prefer to live in reality and go on proclaiming the empirical facts, even if nobody is listening. In this project I see that we have a number of things working to our advantage.

Firstly, I note that there is something built into nature that when survival is threatened plant and animal species will instinctively increase their breeding. This is as true for humans as for orange trees that are about to die. I recall the testimony of a doctor in Italy; when many people were dying during a cholera epidemic the survivors became unusually sexually active. He surprised himself one day by spontaneously kissing the Matron of the Hospital (a Mother Superior) in the midst of an operation!

Secondly, I see that macro population trends do not concern the masses. The thing on most peoples' minds is the awareness that later in life they will lose their physical capacity, and this makes it imperative that, at that time, there are young people to support them; otherwise their plight will become desperate. In the sophisticated West we look to the government to look after us but this is a mirage; the government is nothing more than a costly middle man who needs economically active people to pay taxes to supply the funds needed to service society's expanding health needs. In the developing countries the relationship is more direct. Ask any African subsistence farmer or a Chinese peasant and they will give you the same answer as to why they need children: they need children to look after them in their old age. That is the way it has always been and the relevance of such thinking has been confirmed recently in north-western Zambia and south western Malawi where the land has become unoccupied because the HIV/AIDS pandemic left a population composed entirely of very young and very old people. These people found that they were unable to support themselves and had to move to areas where there were people of economically active age. Similarly, in the West the 'baby boomer' population bubble has been recognized by political administrators to be a problem because they foresee that there will be insufficient people of economic age to support the 'boomers' in their old age, especially as people are living longer these days.

The real population managers are not bureaucrats; they are individual couples working out their destiny in a hostile and largely dysfunctional world. The number of children regarded as sufficient to ensure the care of the aged varies with the circumstances, for the death rate is not determined solely by the aging processes. Couples settle on a reproduction rate consistent with their expectations with regard to the future. In Australia in the 1970s we worked on the hypothesis that a mean birth rate of 2.4 babies per couple would be sufficient to keep our numbers stable. This figure was based on the vastly improved life expectancy we were enjoying as a result of the discovery of antibiotics, and the relative peace and harmony we were experiencing within our borders. At the same time in Sub-Saharan Africa north of the Limpopo River, 40% of babies were dying to disease before they reached 5 years of age,

so a zero-population growth birth rate for African people was somewhere between 4 and 8 children. As a risk strategy, it is interesting that all groups tend to produce slightly more children than necessary. It is hard to have 2.4 children – to meet this goal requires that you have at least three children!

It is not true that reproduction is always a haphazard process as Malthus has suggested, even in the developing world. African women do not resort to Western methods of contraception, despite the push from the West for them to use condoms. They have traditional practices available to them whereby they are able to maintain a strict code of producing babies at two year intervals until the required quota of children is reached. Apparently they have some means of preventing conception that the West has forgotten about for, in the time of the Slave Trade, slave women were regularly raped but never conceived. I find African people remarkable in that they have been able to sustain their numbers even in the face of a disaster like the HIV/AIDS pandemic. What is critical for the present debate is that no amount of persuasion from the promoters of population reduction is going to change traditional reproductive practices, unless they can be starved out by war and famine.

FOOD SECURITY

Several commentators have suggested that the next wars will be fought over food and water. But the challenge to food security is more subtle than that. We should stop planting houses on our best arable land. And we need to value people in our communities who know how to grow food commercially and see that they are replaced as they grow older. We also need to protect our arable land from foreign investment. The Chinese have taken over large areas of Africa to grow food for China and are intent on buying properties in Australia for the same purpose. The Indian Government has a **food security** policy to make sure that good agricultural land is not used for non-food producing purposes. We need to introduce something like that in Australia before all of our agricultural land is turned over to mining. Thirteen hundred Coal Seam Gas mining leases have already been issued on the Darling Downs in Queensland alone.

PROMOTING SELF SUFFICIENCY

With regard to food supply, I have always been in favour of practicing self-sufficiency before chasing export markets. Unfortunately, this strategy has never been supported by Australian food producers; farmers tend to chase the 'quick buck', not realising that over time this may be a sure way of trading themselves out of business.

Australia is a great place to grow food. Most of our farming regions are capable of becoming **self-sufficient** for a large range of food stuffs. Perhaps we need to organise to do this with serious intent. Bartering between regions could ensure that every region has an even wider choice of goods. Farmer's markets are presently springing up and attracting good patronage, but the process could be expanded to advantage.

FREE TRADE – DO WE NEED IT?

A troubling fact with regard to Free Trade is that it was originally promoted by the Venetian Black Royalty families. Australian Governments have proliferated Free Trade agreements recently but nobody has explained to me how they help us. I can see that they have an initial common-sense appeal for exporters but history has shown that the main effect has been for good businesses to move off-shore to take advantage of cheap labour. Further, it is clear, as John Maynard Keynes told the Bretton Woods economists in 1944, that in a Free Trade environment it is a mathematical certainty that every country cannot make a profit. On the other hand it is clear that every country can be a debtor, for this is now a reality; every country is in debt, some seriously so. Maybe we need to ask who is holding the purse strings?

I can see too how importers might appreciate not having to pay import duty but I can also see that Free Trade can lead to serious competition for farmers and manufacturers serving the local market. If supermarkets buy tomatoes from Vietnam because they are cheaper, sooner or later local growers will go

out of business – and that will be the end of the tomato growing in Australia because there will be nobody who knows how to do it successfully. It is the same with fishing. Australian is importing 80% of its fish supplies currently, when we have ample fish stocks around our own extensive coastline, sufficient to feed us on a continuing basis. And allowing multinationals to come into our country to plunder our natural resources is never helpful. Australia has huge supplies of gas and has permitted foreign interest to mine and export it. The off-shore price is higher than that in Australia, so the Australian populace is not only facing gas shortages, because we have not taken care to ensure that local demand is met but paying higher prices for domestic gas in line with export prices. What is the sense in that?

These matters have arisen because the Australian people have left such decisions to politicians and bureaucrats. Strong bureaucratic control has developed because the common mood has been, when we have encountered a problem, to demand that 'the government must take action'. I think it is time for us to take action at the individual and local community level to look after ourselves, as the UK and President Trump have signalled in recently. Fifty years ago European nations rushed to hand over their sovereignty to the European Union, thinking this action would solve their financial needs. But the bureaucratic nightmare that followed has persuaded a majority of UK folk to vote to get out of the partnership. If we close our eyes and trust the system, we should not be surprised when someone comes along preaching climate change and maligning our good friend carbon dioxide, with the intent that we should become slaves to the insatiable money-making ambition of the world's financial elite.

FOOD DISTRIBUTION

The number of people in the world who are chronically undernourished is about 11% (1 in 9). There are a number of reasons why people do not have enough food: wars, lack of start-up capital, lack of no-how, etc. But there is plenty of food in the world, so the problem may be seen as a problem of

distribution. In extreme cases of poverty and hunger the United Nations takes action, but this is purely a stop gap action.

The problem is that redistribution of a commodity is not a simple matter. Even if you take away economic and political restraints, a Simple Equality redistribution system whereby equal quantities of resources are handed over to every citizen will not work. The hand-out to Australian aborigines in remote areas is a case in point; everyone receives the same amount of money on pension day but by week's end all of the money is in the hands of the local store-keeper.

Walzer (1983) has proposed a Complex Equality approach under girded by a theory of goods which he sees located in an ideal economy in which goods are conceived, created an distributed within coherent human groups, neighbourhoods and political entities. (Note: This is equivalent to my self-sufficiency model, above). Within such groups he argues for a social definition of goods derived from and contributing to a collective conscience. His central position is that there is no single good but a multiplicity of goods, with no single access, no single medium of exchange and no single set of creative or distributive agents. This proposition supports my belief that the primary objective of any coherent, interactive human reference group should be to satisfy its own needs first before rushing into the export marketing of products. It is, in a nutshell, a Cornucopian view that would see the supply of essential goods created and distributed to all through the application of human rational purposive action in a site of mutual inter-dependence. That is the way it has always been done in primal communities and the way it will go on being done if we can find some way to eliminate practices of domination which some humans seem determined to submit to despite past bad experiences. The cry that 'the government must do something' is a sad commentary on a people who have lost the power to take action on their own behalf.

MODERN ENVIRONMENTALISM

Malthusian environmentalists have promoted the idea that development is a

relentless process whereby eco-systems are destroyed with no regard for animal and plant populations or the future. And in some cases they are right; the ongoing destruction of forests in Papua New Guinea is disgraceful. We can agree that development needs to be monitored and controlled, but not move from one extreme position to another. In the immediate post Second World War years, agricultural scientists treated land degradation as a serious threat and went about developing solutions on the assumption that *there was a means of using land that would both preserve the resource and produce an economic outcome*. And in this we were very successful. Today's population control environmentalists have moved to a preservationist position that wants to exclude humans from at least some sites altogether and sees the remnant population subsisting on land reconstituted to pre-development conditions.

This is not hearsay. The Adelaide University took over a parcel of land south of Adelaide recently. They decided to develop part of the property for housing to generate funds for developing the bulk of the land as a vegetation reserve. They were refused planning permission for housing by the local authority and told that they must re-plant the whole area to its *pre-colonial* condition (*Messenger Press*, Adelaide). What is being over looked here is that this extreme form of conservation is nothing more than a 'rich man's hobby'. Why would the University of Adelaide wish to pay money to return a piece of land to its prior condition purely as an act of benevolence? On local television we are shown gardens full of pristine indigenous plants, birds and other animal species. Such projects receive our praise, but it is clear that the resources that paid for these developments did not come from the land on which they are located.

Another point of concern is that the environmental lobby tends to be carried by people holding to common sense views based on misinformation and hysteria rather than facts. The River Murray is a case in point. The Murray, like many other river systems in Australia, is an ephemeral stream – water only flows when there is sufficient rainfall in the catchments. When European settlers arrived in Australia they found that they could drive their horses and buggies across the Murray in the dry season and could operate river boats only

during spring flows. In the 1930s, State Governments built weirs across the Murray to store water for use in the dry part of the season. The result was that the river now consists of a number of stagnant pools which, to the uninformed, make it appear to be a permanent stream. Unfortunately, State Governments have over allocated the stored water supplies and there is now insufficient water to go around. The Commonwealth Government is currently buying back water licences and the environmentalists have gained access to the action by inventing the term *environmental flows*. There have never been any environmental flows. What happens during a major flood is that a line of Eucalyptus trees may germinate and grow into saplings at the edge of the flooding water; and unless there is another flood in a reasonable time after the first one, the young trees will die (as Mr Malthus has reminded us in his Essay!). This is not due to people taking water from the river for irrigation; it is just nature's way. Another case in point is the South Australian Government paying $3 million per annum to have sand in the Murray Mouth dredged out when it is patently obvious that there is no utility, either economic or environmental, in allowing fresh water to flow out to sea; especially as the Southern Ocean re-fills the mouth with sand as soon as it is dredged. It is agreed that we need to care for the environment but let's do it in a manner that gives due consideration to informed opinion and reality.

FINAL THOUGHTS

In this journey we have seen that Malthus's position is ignorant of basic economic axioms, operates in a macro social view that ignores human agency, treats disasters as blessings and fails to recognize that the main driver of human reproduction is the recognition that a person needs children to support them in their later years. Perhaps the main sadness of Malthus's Essay is that it came from a man of the cloth, for the Judaeo-Christian position is definitely Cornucopian. The Hebrew scripture tell us that the first command of the Elohim God to humans was:

> 'Be fruitful and multiply; fill the earth **and subdue it; have dominion**

over the fish of the sea, and over the fowl of the air, and over every living think that moved upon the earth' (Genesis 1:28).

Scofield sees the word subdue (Heb. = *kabash*) as the 'divine Magna Carta for all true scientific and material progress… (asking humans) to acquire knowledge and mastery over the material environment' (Scofield, 1967). This position was reaffirmed to Noah after the world-wide deluge (Genesis 9:1) and to Christians operating under the New Covenant (Ephesians 2:10). From this perspective Malthus's position is not only antisocial but anti-God; especially his insistence that the misery and vice experienced by the masses was God's plan!

Having said that, we do recognize that world population is increasing while the available land resources remain constant. We also note that there is still misery in the world; the times have changed, but the question remains: 'how will we feed ourselves if the population continues to grow'. The Malthusians say, reduce the population but this is easy to say and not so easy to implement. So, what about Malthus's preventative measures, are they working? No, in Australia, we are breeding at just over 1% of population annually despite a high rate of abortion, contraception and the Gay Mardi Gras.

Those promoting the Dystopian view see reducing food supplies as the answer to an increasing population. They believe that the billionaire's club in the USA and the elite in the UK will survive on low food supplies (because they have the money) but believe that 'ordinary folk', particularly the aged on fixed incomes, will have no alternative but to scratch out an existence as best they can in the primal manner, if in fact they can find some land on which to farm.

After all of our discussion, we come back to Malthus's original question: should humans continue to back a Cornucopian agenda at 'an accelerated velocity towards illimitable and unconceived improvement' or back the Dystopian view that condemns us 'to a perpetual oscillation between happiness and misery and, after every effort, remain still at an immeasurable distance from the wished-for goal'. My money is on a human agency that

continually strives for excellence and the discovery of things unknown; and manages this planet in a way that ensures that all creatures live richly in harmony. I agree that it takes some optimism to see such a project flourish, especially in consideration of the ongoing record of human depravity. But I prefer to walk in that way than to sink into a pessimism that sees only a world of hopelessness requiring that inferior types are eliminated to the ongoing benefit of some self-appointed elite.

APPENDIX ONE

CARBON FACTS

WHAT IS CARBON?

Carbon is a chemical element. We represent it by the symbol 'C'. Each atom of carbon has six electrons, six protons and generally six neutrons. Thus, its atomic number is 6 and the atomic mass of its most common isotope is 12.011.

Elemental carbon is found in nature as graphite, carbon black and diamonds. It is also found in gases, including carbon monoxide (CO – in car exhaust fumes) and carbon dioxide (CO_2). Carbonic acid (H_2CO_3) is a liquid form of carbon compound; and baking powder and calcium carbonate are solids containing carbon. Calcium carbonate is found extensively in soils, in the shells of shell-fish and the bones in animals. Carbon makes up 18.5% of the mass of the human body.

CARBON DIOXIDE

Carbon dioxide (CO_2) is a tasteless, odourless and colourless gas. We know this because the air around us contains CO_2 and we cannot taste it, smell it or see it. The carbon dioxide molecule contains 1 atom of carbon and 2 atoms of oxygen; CO_2 is its scientific shorthand formula.

Humans have used CO_2 in various ways. We use it to make the bubbles in soft drinks (we drink this and it does not hurt us) and we freeze it to make dry ice (which we can touch without it doing us any serious harm). But the place of CO_2 in the biological scheme of things is much more significant than these relatively trivial uses. There exists a **magnificent living symbiotic relationship** between the plant and animal kingdoms and in this process **CO_2 is a crucial contributor**.

.PHOTO-SYNTHESIS

Plants have the ability to trap sunlight and make it available as chemical energy for fundamental life processes in plants and animals. We call this process photo-synthesis because it involves the use of **photo** (light) energy in the **synthesis** (building up) of the basic food stuff glucose from CO_2 and water (H_2O).

Plants 'breathe in' CO_2 through holes in their leaves called *stomata* and take up water through their roots and translocate it to the leaves via the xylem (a vessel in plant stems).

In the leaves of many plants is a substance called *chlorophyll* which has the ability of trap sunlight energy and make it available for the plant to synthesize glucose, with oxygen as an important by-product. We can write the photosynthesis story this way:

[Carbon Dioxide + Water + Sunlight Energy] produces [Glucose + Oxygen]

In chemical terms: trapped light energy causes six molecules of carbon dioxide to combine with six molecules of water. The result is one molecules of glucose and six molecules of oxygen. The oxygen passes out of the stomata into the atmosphere. Photosynthesis is by far the main way that the oxygen we breath is replaced in the atmosphere. Writing this reaction in symbols we get:

$$6CO_2 + 6H_2O + (E) \rightarrow C_6H_{12}O_6 + 6O_2$$

Glucose is the most basic form of substances we call sugars or carbohydrates, because they contain carbon, hydrogen and oxygen. There are other sugars like sucrose (which we get from sugar cane and sugar beet), fructose and maltose. Glucose is the substance from which most life forms get their **energy for life**. Plants use some of the glucose they produce for their own use but store the rest in their leaves, roots and stems in complex forms like cellulose and starch.

RESPIRATION

Glucose and oxygen are the essential ingredients in the human body for a process called **respiration**. Respiration is the oxidation of glucose to form carbon dioxide and water **and** the release the energy essential for processes in the body. When animals and humans eat carbohydrates they are broken down in the gut to basic glucose. Glucose is absorbed from the gut into the blood stream and transported around the body as 'blood sugar'. Animals and humans store excess glucose in the liver in a complex form called glycogen for later use. If we eat too much carbohydrate, it will be stored in the body as fat. The body draws on the supply of glycogen in the liver continually over time, changing it back to glucose and transporting it via the arteries, along with the oxygen that we breathe in through our lungs, to every cell in the body. The CO_2 produced in the cells is carried back to the lungs by the veins, where it is expelled into the air when we breathe out; excess water (H_2O) produced by the respiration process is carried to the kidneys and excreted in the urine.

We express respiration as follows:

[Glucose + Oxygen in the cells] produces [Carbon dioxide + Water and Energy]

$$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + (E)$$

Note that respiration is the exact opposite of photosynthesis. Photosynthesis is nature's way of entrapping energy from the sun so that it is available to the cells of living plants and animals. Respiration is the process by which glucose is broken down to release the energy needed by living cells.

CO_2 is not a pollutant. On the contrary, along with water, it is a vital contributor to the on-going health and functioning of living creatures.

APPENDIX TWO

THE BRITISH EAST INDIA COMPANY

The East India Company (EIC), also known as the British East India Company and informally as John Company (1600–1874) was a company chartered by Queen Elizabeth I for trade with Asia. The original object of the group of merchants involved was to break the Dutch monopoly on the spice trade with the East Indies but the company ended up trading mainly with India and China. Over time, the company rose to account for half of the world's trade, particularly basic commodities like cotton, silk, indigo, salt, saltpetre, tea and opium.

In 1661, Charles II granted the East India Co. the power to make war, and it eventually came to rule large areas of India with its own private armies, exercising military power and assuming administrative functions. Company rule in India effectively began in 1757 after the Battle of Plassey and lasted until 1858.

From what we read, prior to the 1770s the company's operations were reasonably ethical and legitimate. But, from the late-18th Century, its operations changed dramatically due to a metastasis of Venetian power and thought from Venice to London. The United Kingdom had been suffering major problems in its colonies; e.g. it lost its major colony to the USA in the American War of Independence (1775-1783). Funds were urgently needed to promulgate British business interests, so the time was right for Venetian Black Nobility money to assist the British East India Company reconstruct the British Empire. Undoubtedly, the fact that the company had the power to make war made it an attractive proposition for the world super powers.

The Company eventually became the Black Nobility's instrument for wrestling control of the world opium trade out of the hands of the Moguls. The Company was responsible for the Bengali Famine in 1770 when ten million people starved to death due to the company's policy of taking 60% of the farmer's produce as tax and forcing them to grow opium poppy instead of food. Later the company forced its way into China to sell opium, with the result that forty million people died as a result of opium addiction. The company made it illegal for Indians to mill cloth, forcing them to buy inferior cloth produced in England from cotton grown in the West Indies and Southern USA with slave labour. The slave trade was introduced by another arm of the Black Nobility (the Guelphs) in the late 17th Century. The slavers were also pirates. Trinity Church, London, whose leading vestryman later was J.P. Morgan, was originally known as "the church of the pirates". Capt. William Kidd provided the material to build it in 1697, and a pew was reserved for him. He was arrested and hanged in chains at Newgate but in 1711 but a slave market was set up on Wall Street near the church and functioned there for many years.

The Malthus's Essay was clearly a push back by the Company against the work of William Wilberforce which began in earnest in 1797, one year before Malthus published his Essay. That's such a push back existed is evidenced in the fact that while Wilberforce's Slave Trade Act was passed in 1807 but the Slavery Abolition Act was delayed in the English Parliament until 1833. It is also not stretching things to argue that the pragmatic purpose behind Malthus's Essay was to justify the taking by the Company of the assets of countries which 'breed too much'. This view is supported by a comment from Abraham Lincoln's economic adviser, Henry Carey; he described the British East India Company as 'the greatest private monopoly in human history, inventing the lie of over-population to cover the devastating effects of its international system of free trade'.

In the early years of the 19th Century, the Company established training colleges in the UK to prepare staff to conduct its various operations. The East India Company College, located at Hailey, Hertfordshire, nineteen miles north

of London was set up in 1806 to provide general and vocational education for young gentlemen of sixteen to eighteen years old, who were nominated by the Company's Directors to writer-ships (administration positions) in the overseas civil service. Thomas Malthus was apparently a foundational staff member of this College, having been appointed in 1805. This College's counterpart for the training of officers for the company's armies was Addiscombe Military Seminary in Surrey.

In the mid-19th Century, East India Company merchants were instrumental in turning an incidence of potato blight in Ireland into the *An Gorta Mór* (The Great Hunger) of 1845 to1852. One million people died and one million only survived because they emigrated to the USA and Australia. These consequences were neither inevitable nor unavoidable; British merchants continued to export food from Ireland at the time of the famine to advance their objective of facilitating population control in Ireland. The Irish Famine was clearly 'an epic of English cruelty', a deliberate action to promote 'mass starvation in Ireland'. Curtis in his book *Apes and Angels: The Irishman in Victorian Caricature* identifies the justification for such action as social Darwinism. For a colloquial account see the book *Brendan Behan's Ireland*.

Following the Indian Rebellion of 1857, the British Crown passed the Government of India Act 1858 and the British Raj assumed the Company's governmental functions and absorbed its armies. This essentially rendered the Company vestigial, powerless, and obsolete. It experienced recurring problems with its finances and was dissolved in 1874 as a result of the East India Stock Dividend Redemption Act. However, it is notable that in 2012, Queen Elizabeth II received a gift of sixty diamonds from none other than the British East India Company; apparently the Government takeover of 1874 did not see the end of the entity!

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