

**Memo 38/07**

## **Open letter to the British High Commissioner**

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**Monday 27 August 2007**

The attached open letter to the British High Commissioner is extremely important. It sets out the whole climate change issue. It exposes the political motivations that attempt to suppress all research that questions anthropogenic causes of global warming. On this basis attempts are being made to force developing countries to adopt economically damaging and fruitless measures to reduce greenhouse gas emissions.

There is an urgent need for healthy discussions at national and international level, failing which the situation can only continue to deteriorate. I have made some constructive suggestions at the end of the letter. It will be very interesting to see the High Commissioner's response, if any.

Please distribute this memo as widely as possible so that everybody can appreciate the importance of the issue to the future prosperity of this country, as well as to the other countries of the world with their struggling economies.

For those of you who sent me copies of the invitation, please forward this memo to other members on your distribution lists who received invitations.

If the need arises I will also send copies to the press.

Kind regards

Will

27 August 2007

## **Open letter to the British High Commissioner**

From WJR Alexander

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Dear Sir

### **Re Invitation to discussions with senior British scientists**

I refer to your circular invitation to South African engineering institutions and others to attend the discussions here in Pretoria on 5 September. The subject of the discussions is *The Science of Climate Change: Challenges and Solutions*. The presenters are Sir David King, Chief Scientific Adviser to Her Majesty's Government and Sir Gordon Conway, Chief Scientific Adviser to the Department for International Development. Both are senior civil servants.

A copy of the invitation was forwarded to me by the South African Institution of Civil Engineering. I am obliged to bring the following to your attention in order to forestall the inevitable embarrassment to the British Government and the visiting scientists during and after the discussions. I have kept it as terse as possible.

This is an open letter. I will distribute it to others who may attend the discussions. I also intend distributing it further afield in view of its national and international importance.

### **Purpose**

The coincidence of the discussions with the South African government's recent decision to continue constructing a mixture of coal-fired and nuclear power stations will not go unnoticed. It will lead to the obvious conclusion that the purpose of the discussions is an attempt to persuade our government to change its mind. This will be construed as yet another example of the unwarranted interference in our affairs.

I am sure that you are aware that the primary objectives of the developing countries, including South Africa, are to raise the living standards of their people to the same level as those enjoyed by the citizens of the wealthy nations. I am also sure that you are aware of the appalling conditions experienced by tens of millions of people on the African continent who do not have even basic amenities of access to electricity, clean water and sanitation. The vagaries of climate from whatever cause, are the least of their concerns.

These countries and their peoples will not look kindly on the efforts to persuade them to adopt costly greenhouse gas emission reduction measures that must inevitably delay their progress towards prosperity. In the process, this will give increasing trade advantages to the developed countries including the UK.

The visit of your leading scientists will be interpreted in this light.

## The science of climate change

The subject of the discussions relates to the science of climate change. I am obliged to inform you that for a number of reasons, knowledge on this subject is further advanced in the applied sciences in South Africa than in the UK and other northern hemisphere countries that experience milder climates.

During the past 100 years there have been a number of high level, multi-disciplinary commissions of enquiry into climate related matters. Their principal objectives were to determine the causes of the recurrent droughts that resulted in severe damage to national agricultural production. Without exception they concluded that there was no evidence of any adverse trends in climate-related processes. There has not been a single national enquiry that questions this conclusion.

On the contrary, in 1970 after an exhaustive study, the South African Commission of Enquiry into Water Matters identified variations in solar activity as possible causes of adverse climatic variations. The commission recommended that research be conducted on the role of variations in solar activity and that a climate prediction model be developed. I successively occupied the posts of Chief of the Division of Hydrology and Manager of Scientific Services in the South African Department of Water Affairs in the years that followed. The latter post was the equivalent of those of your two visiting scientists. Together with my staff, I carried out research on this difficult issue. Now, 38 years later, my professional colleagues and I have quantified the role of solar activity and developed a multi-year mathematical climate prediction model. The validity of the model has been verified on two occasions.

Your scientific advisers must surely be aware that a synchronous linkage exists between variations in solar activity and the recurrent famines in India that were observed and reported by British scientists 150 years ago. The continued refusal to acknowledge this linkage is a matter of deep concern and growing suspicion.

## The advancement of science

Towards the end of the last century many senior, experienced international scientists noted the growing compartmentalisation of research. Again I am sure that your scientific advisers must be aware of the UNESCO/ICSU Budapest (1999) ***Declaration on Science and the Use of Scientific Knowledge***. They should be familiar with the following excerpts. *Today, there is a need for vigorous and informed democratic debate on the production and use of scientific knowledge. Greater interdisciplinary efforts, involving both natural and social sciences, are a prerequisite for dealing with ethical, social, cultural, environmental, gender, economic and health issues. The practice of scientific research and the use of knowledge should always aim at the welfare of humankind.*

Why has the Royal Society flagrantly followed the opposite course and made every effort to suppress and vilify all research and researchers who do not acknowledge human causality of climate change? Do the visiting scientists expect us to ignore the requirements of the Budapest Declaration and follow the totally unacceptable scientific practices adopted by the Royal Society?

The UK has every right to follow any course that it wishes, but has no right at all to attempt to impose this unacceptable scientific policy on other countries. The UK is seen to be taking advantage of the shortage of experienced scientists in developing countries to enforce its views of exclusive human causality. Again, this bullying tactic is meeting increased resistance. It is damaging the esteem and reputation of scientific impartiality that UK scientists once held.

There is now the very serious view that the UK scientists, including the two visitors, are succumbing to political pressures and losing their scientific independence. The following is an important example.

### **Solar linkage**

There are only two possible mechanisms for sustained climate change. The first is the consequences of steadily increasing levels of discharges of undesirable greenhouse gas emissions into the atmosphere. The second is the influence of natural variations in solar activity. Undesirable greenhouse gas emissions are theoretically controllable. Solar activity is not.

The global economic and political consequences of greenhouse gas emissions control measures are very high indeed. For this reason alone it was imperative that research on the influence of variations in solar activity should have been given at least the same encouragement and priority as human causality. It was very important that the truth be established through research and not by denigration of the research efforts of others. The IPCC failed its responsibility to do this. There is mounting evidence of the dominant role that variations in solar activity play in synchronous variations in climate over wide regions of the globe. This research was undertaken in defiance of international pressures.

Together with colleagues I have demonstrated, beyond reasonable doubt, that a causal, predictable, synchronous relationship exists between variations in solar activity and the hydrometeorological processes in Africa in particular, and elsewhere in general.

I refer your scientists to the following recent publications that demonstrate the synchronous linkage to a degree that more than meets the requirements of scientific endeavour. There are many other examples.

***Rhodes Fairbridge and the idea that the solar system regulates the Earth's climate.***

Mackay (2007) with 102 references, 64 of which were published in 2000 or later.

***An assessment of the likely consequences of global warming on the climate of South Africa.*** Alexander (2005) with 51 references. Submission to the Stern Review.

***Is solar variability reflected in the Nile River?*** Ruzmaikin, Feynman and Young (2006) with 38 references.

***Sunspots, El Niño, and levels of Lake Victoria, East Africa.*** Stager, Ruzmaikin, Conway, Verburg and Mason (2007) with 95 references.

***Linkages between solar activity, climate predictability and water resource development.***

Alexander, Bailey, Bredenkamp, van der Merwe and Willemse (2007) with 46 references.

Note that the latter four studies were based on analyses of data published by national agencies. The analytical methods are reproducible by anybody with experience in these fields. Are we expected to believe that the UK, the Royal Society and the IPCC were unaware of these and many other research publications that addressed the causal linkage between variations in solar activity and the earth's climate?

As you are aware, a few months ago the Royal Society ignored one of the basic tenets of science that encourages vigorous debate, and intervened. In a press release it stated: *At present there is a small minority, which is seeking to deliberately confuse the public on the causes of climate change. They are often misrepresenting the science, when the reality is that the evidence is getting stronger every day.* This statement is itself demonstrably false.

Once again, the motives of the Royal Society are increasingly suspect.

Their remaining argument is that variations in received solar energy are too small to be the cause of global climate variability. I am obliged to inform you that Dr Bredenkamp, one of my co-authors, has addressed this issue. Briefly, he has demonstrated the following, based on studies of published South African data of rainfall, river flow and groundwater levels. His paper is now in the peer review and publication process.

He demonstrated that during dry periods surplus incoming solar energy is stored in the oceans. Triggering mechanisms associated with variations in solar activity initiate the sudden release of this energy into the atmosphere via enhanced evaporation processes. These then initiate sub-continental scale atmospheric energy redistribution processes. These processes result in above average rainfall and floods. They continue until the excess energy stored in the oceans is depleted and conditions return to normal, after which the process is repeated.

There is abundant evidence of this oscillatory behaviour in the data. It fully explains the magnification of variations in received solar energy and well-founded observations made during the past 150 years. If your scientists continue to reject the solar connection they should be prepared to provide a convincing alternative explanation for the well documented observed synchronous linkages. They will not succeed.

We have demonstrated (not postulated) that the strong linkage between variations in solar activity and climatic responses is well beyond reasonable doubt. Contrast this with the failed predictions of climate change scientists.

### **Failed predictions**

Climate alarmism grew in strength after the publication of the 2001 IPCC reports. Scientists in the natural sciences developed complex mathematical computer prediction models based on process theory.

Despite alarmist predictions to the contrary based on inadequate global climate prediction models, sub-continental Africa has just experienced two successive good years. There were beneficial, widespread heavy rainfalls during this period. Rivers flowed strongly and dams filled. The countryside in our arid regions was wetter and greener than at any time in recent memory. There were no signs of the predicted desertification of this region. There were no losses of our unique indigenous plant and animal species.

Together with colleagues I have demonstrated that claims that human activities have had an adverse effect on rainfall, river flow, floods and droughts with consequent adverse effects on the natural environment, have no substance. There is no measurable, regional scale, synchronous, multi-process, multi-site evidence to support the alarmist claims. None at all.

Arising from these failed predictions the public, especially the farming community, are rapidly losing faith in climate change science and those who propagate it.

The reason for the complete failure of the alarmist predictions is their reliance on uncalibrated and unverified mathematical models. On the other hand South African engineers are very familiar with the development of mathematical computer models. These are in daily use in water resource and flood frequency applications. They are based on observation theory. Nowhere in the world are the design and operation of water resource development systems or structures exposed to climatic extremes, based on process theory or climate models. Engineering computer models intended for practical applications, are subject to rigorous calibration and verification procedures. They are far superior to the failed climate prediction models.

### **The Stern Review**

I sincerely trust that the visiting scientists will not quote from the findings of the Stern Review to support their position on global warming. I suggest that they obtain a copy of the 93-page constructive comment that I conscientiously submitted to the Review team in response to the call for contributions. It was completely ignored in favour of unsupportable alarmist predictions. My comments on the review were published in a subsequent edition of the Cambridge Conference Net newsletter. I suggest that the visiting scientists obtain copies of my submission and subsequent comments in CCNet so that they will be prepared to respond to any criticisms of the Stern Review that they may receive from the floor.

### **Global warming**

I have no wish to enter into details but again I am sure that your scientists are aware of NASA's recent admission that 1998 was not the highest temperature on record in the USA. The 1934 temperature was the highest on record. This was long before the exponential increase in global greenhouse gas emissions. Your own national weather service has also just acknowledged that global temperatures are flattening off.

These two acknowledgments completely undermine global warming theory and all its consequences. The claimed link between rising global discharges of greenhouse gasses and increasing global temperatures no longer exists.

It has now become obvious to even the most casual observer, that the failure of the alarmist predictions was because the foundation on which they were built – human causality of global warming – has no substance.

### **Natural disasters**

The United Nations established the International Decade for Natural Disasters for the decade 1990 to 2000 and a Scientific and Technical Committee (STC) to operate it. This

was in parallel with the IPCC but these two United Nations institutions never exchanged views. The fundamental difference in the constitution of these two United Nations bodies was that the STC members were experienced practitioners with international standing, while the IPCC members were principally academic scientists with little or no practical experience in this field.

In the early 1990s I volunteered to assist resolve the problems faced by thousands of people living on the floodplains and within the river channels in Alexandra and Soweto. I reported that these people were living in conditions that no human beings on this planet should have to endure. My work resulted in my appointment by the UN Secretary General as a member of the STC from 1994 to the end of the decade.

The highest priority of the STC throughout its existence was to determine whether or not the rising deaths and damage to property resulting from natural disasters (principally floods, droughts and earthquakes) were the consequence of increases in the occurrence of the hazards or increasing vulnerability to the hazards arising from population pressures. It was found that there was no evidence of increases in the hazards. I was commissioned by the UN Secretariat to undertake a study titled *Risk and Society – an African perspective*. I have copies of my report. It was financed by the South African Department of Foreign Affairs.

I was subsequently appointed to a committee established to advise the Mozambique government on flood disaster mitigation measures. Again, there was no evidence of an increase in the frequency of damaging floods.

In South Africa, I presented a number of short courses on this subject over the years. They were attended by some 500 practitioners from South Africa and neighbouring countries. I produced a 560-page handbook titled *Flood risk reduction measures*. It was soon out of print. I have also made a number of presentations at international meetings and symposia on this subject.

I can state with complete confidence that the IPCC and Stern Review reports claiming that natural disasters on the African continent, have in the past or will in the foreseeable future increase in frequency and magnitude are demonstrably false.

### **Failed promises**

I respectfully suggest that you forward this document to the two visiting scientists so that they are not caught by surprise during the discussions. I am sure that you are aware of the mounting resistance of the African countries to interference in their affairs by the UK and other developed countries. They will not take kindly to this example of pressures by UK officials to persuade them to adopt costly and economically damaging greenhouse gas control measures. If these pressures are accompanied by offers of technical and financial assistance they will be doubly suspect. Africa has experienced these failed promises in the past. The failure of the post-Gleneagles promises is an example.

There are other examples such as the unscientific banning of DDT resulting from the actions of northern hemisphere environmental pressure groups. This alone resulted in millions of avoidable deaths on the African continent. Another example is the decision of a UK chain store to stop importing fruit, vegetables and flowers from Kenya on the

grounds that air transport contributes to global warming. The consequent impoverishment of the Kenyan farmers was of no concern. (BBC News 21 February 2007).

I am sure that the civil engineers in the audience will be interested in the financing of a UK concern to construct an extensive water supply system in Dar es Salaam. The contractor subsequently declared a dispute with the Tanzanian government and submitted the issue to an arbitration tribunal under the auspices of the World Bank. (26 March 2007). As a result, African governments are being encouraged to say “no” to this type of assistance.

Africa has repeatedly insisted that it requires trade not aid. This has not been forthcoming. I trust that your speakers will devote some time explaining the above actions to their audience.

## **Conclusions**

I must inform you that I am unaware of any South African scientists who are “*seeking to deliberately confuse the public on the causes of climate change.*” This falsehood can only lead to the impossibility of healthy exchanges of scientific knowledge between our two countries, and between the UK and the countries of Africa, on this fundamentally important global problem.

In South Africa our inexperienced scientists have accepted this unethical practice as being the norm. Their divisive attitude has already caused serious damage to the advancement of science in this country. My frequent attempts to encourage a healthy exchange of views on this subject have failed.

I have attached the title and introductory page of my 93-page technical report that I submitted to the Stern Review nearly two years ago. Part 2 of the report deals specifically with the evaluation of climate change science.

In a spirit of cooperation and in order to facilitate the discussions, I will gladly prepare a master CD that includes the full report as well as my 120-slide PowerPoint presentation on the subject. You can then make copies and distribute them to the participants with my compliments.

In any event, I intend compiling this and other material on CDs and making them available free of charge before 5 September.

Yours faithfully

WJR Alexander



## TECHNICAL REPORT

# **An assessment of the likely consequences of global warming on the climate of South Africa**

## **Extended summary**

### **W.J.R. Alexander Pr Eng**

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Fellow, South African Institution of Civil Engineering  
Member, United Nations Scientific and Technical Committee  
on Natural Disasters, 1994 - 2000

November 2005

This report is my independent contribution to the current climate change debate. The purpose is to provide linkages between climatic processes and hydrometeorological responses. This is required for the reconciliation of climate change theory with observational deductions derived from extensive studies of a comprehensive South African database.

I have neither requested nor received any financial or material support from any source in connection with these studies.

This report is not copyright and may be copied and distributed in full and without alteration for non-profit purposes provided due acknowledgement is made to my authorship.

## **CLIMATE CHANGE: THERE IS NO NEED FOR CONCERN**

### **Results of global warming from whatever cause:**

- Clearly discernible increase in rainfall over South Africa
- Increase in the numbers of beneficial, widespread, heavy rainfall events
- Increase in evaporation. This has both beneficial and adverse effects
- Increase in river flow, e.g. Zambezi River at Victoria Falls
- Increase in groundwater levels, e.g. in dolomite compartment near Zeerust

These are altogether different processes at sites located hundreds of kilometres apart, and in different climatic regions. They are also mutually consistent with changes (where detectable) that are concurrent in time. The beneficial increases are in accordance with the global physical processes and international studies.

### **Continued global warming will NOT**

- Pose a threat to water supplies
- Adversely affect agricultural production
- Increase the risk of floods and droughts
- Increase the spread of malaria
- Increase the eutrophication of water in dams
- Increase soil erosion
- Result in the loss of natural plant and animal species
- Result in desertification

There is no believable evidence to support these claims.

### **It would be most unwise for South African authorities**

**To force the implementation of costly measures**

**Based on unverifiable global climate models**

**And abstract theory**

**For which there is no believable evidence.**