



*Letters to the Editor*  
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## CLIMATE CHANGE

**Dr G. Ziervogel from the University of Cape Town writes:**

As researchers working on impacts of and adaptation to climate change, we would like to register apprehension over Professor Alexander's article *Climate Change: there is no need for concern*. A number of key sectors in South Africa, including agriculture, water and energy, are projected to experience significant impacts, even with the most conservative estimates of climatic change. Considering that even small regional changes could result in dramatic impacts, our focus needs to be on building adaptive capacity so that future climate variability and change can be managed in a sustainable manner that does not result in any negative effects of climate change. We are excited at governments' commitment in this area, and look forward to improving the involvement of the science community in supporting appropriate decision-making and responses through rigorous research.

**Gina Ziervogel  
Emma Archer  
Peter Johnston**

*Disaster Mitigation for Sustainable Livelihoods Programme (DiMP), University of Cape Town.*

## CLIMATE CHANGE

**Dr Mark Tadross from Cape Town writes:**

*The following is a letter stating our objections to some of the views expressed in Prof. Alexander's article "Climate change — there is no need for concern", published in the Water Wheel. I have circulated it around the signato-*

*ries at the end of the letter and all have agreed to its contents. We would be very grateful if it were to be published in the Water Wheel, allowing our views on the subject to be aired. We hope this will contribute to an open and informed debate on the subject.*

Prof Alexander's article "*Climate change — there is no need for concern*", ironically, causes us great concern.

We take grave issue with the conclusions presented, and argue that they are premature and overstated. Such a point of view could lead to serious negative consequences if, as the vast majority of the scientific research for the past few decades indicates, it is true that climate change is a serious cause for concern. For a water stressed country like ours, there is no room for complacency or self-delusion, and the threat of global warming and climate change must be seriously considered.

We note that the assertions made are, perhaps, not surprising given the approach used to analyse the data. For example, to analyse mean annual rainfall (MAP) over South Africa is to ignore the fact that the region is subject to strong climate gradients, responding to widely differing atmospheric processes on different sub-annual time scales and compounded by a highly variable landscape. Consequently, any changes are likely to be first seen on these gradients in time (seasonal) and space (climate boundaries). These aspects are obscured in the analysis presented. Also, given that the observed trend in global temperature has been increasing in recent decades, detecting trends over the past 100 years or more may be inappropriate. Prof Alexander's article although interesting, makes broad conclusions regarding rainfall, flooding frequencies, and evaporation rates

without looking at regional or local impacts of these changes.

More seriously, a number of the conclusions do not concur with other published results for the South African region and there is an urgent need to reconcile this discrepancy. The material presented by Prof Alexander has yet to appear in the scientific literature, which is the only appropriate place for assessing its true merit. Peer review and discussion would certainly assist in understanding and explaining the contradictions. Prof Alexander has little to say about temperature trends, now already well researched over South Africa, which are not only consistent with findings elsewhere, but are also known to have direct impacts on water resources by altering evapotranspiration. This has major implications for intensive and extensive agriculture and natural ecosystems.

We urge scientists to contribute to this debate in an informative, meaningful and also rigorously scientific way.

**Dr. G. Midgely**

*Chairman, SA Committee for Global Change, and Head: Climate Change Research Group, National Botanical Institute*

**Dr. M. Tadross, C. Jack, C. Lennard, R. Walawege, A. Steynor, N. MacKeller**

*Environmental and Geographical Science, UCT*

**Dr. W. Landman, Dr. W. Tennant**  
*South African Weather Service*

**Prof R.E. Schulze**

*School of Bioresources Engineering and Environmental Hydrology, University of KwaZulu/Natal, Pietermaritzburg*

## GOATS AND WATER

**M**s Sally Hall from Muldersdrift writes:

I feel the next major input in "Working for Water" must be the tying up of goats and cattle in rural areas.

These animals, from India to the Comores, are tied up so that they do not destroy the crops of the other inhabitants of the area.

In South Africa they cause three major disadvantages to the upliftment of the rural communities:

- ◆ They eat all the new crops, unless the owner of the crops can afford a fence or concrete blocks to protect their fruit trees.
- ◆ They feed on trees when they re-sprout. Both free-roaming cattle and goats eat the new sprouts until the tree dies.
- ◆ Their hooves break up the soil in the denuded catchment areas and with the next thunderstorm all the soil washes away. This means all our dams are full of sand and nothing can grow and no run-off is retained

on the land due to the lack of vegetation.

If these people are rich enough to afford a goat, they can buy some rope or make it out of old plastic bags and tie the goat up to a stay. The cattle can also be tied up and the person who is rich enough to own cattle can pay for grazing or cut it himself. If other third world countries can do this it should not be beyond our government to help the poor to re-establish trees for firewood and erosion protection.

## New DWAF Minister Plans to Focus on Sanitation Backlog



**T**he new Minister of Water Affairs and Forestry, **Ms Buyelwa Sonjica (left)**, said in her budget vote speech in the National Assembly on 17 June 2004 that she was going to place special emphasis on the provision of sanitation.

She said that, "While we have made excellent progress with water supply, and will be celebrat-

ing the 10 millionth person to receive safe water through the Department's programmes later this year, the same cannot be said for sanitation. Improving sanitation is a major challenge and one on which I am going to concentrate during my term of office."

The Minister said that DWAF's current policy "focuses on firstly achieving the very basic levels of service – usually VIP toilets.

"While these are perfectly adequate in the rural areas, I am not convinced that they are appropriate in urban areas.

"In areas next to existing suburbs and townships where there is already water borne sanitation, it is both socially and politically difficult to give people what they see as a second-best solution. Moreover, in areas close to existing infrastructure, the additional cost may well be less than for an entirely new system."

She said she and Minister Mufamadi (the Minister for Provincial and Local Government) were working on a study to determine alternative strategies for reaching the sanitation targets and providing water borne sanitation in urban and peri-urban areas.

"As a people-centred government, a government with a 70% mandate from the electorate, we are morally and politically bound to give people the level of service that restores their dignity.

"I know that the funding currently available for sanitation is not adequate for us to achieve our targets if we want to provide water borne sanitation in these areas. We will need more investment funds and also to ensure that municipalities can pay for the operating costs, for water to flush toilets, for the staff, chemicals and electricity needed to run the wastewater treatment plants so that we do not pollute our rivers. Free basic water without free basic sanitation will not enable those targeted to enjoy the healthy environment promised by our Constitution."

### HIGHLIGHTS

Other highlights from the Minister's speech were the following:

#### ◆ Water supply and sanitation investment

Funds for water supply and sanitation investment, previously managed by DWAF will now be allocated to local government.

The funds will be transferred through the Municipal Infrastructure Grant (MIG) administered by the Department of Provincial and Local Government. The water services budget of the Department is thus reduced from R2 608 million to R1 334 million.

#### ◆ Water resources

A National Water Resource Strategy will be published

before the end of this year. The Strategy includes investment in water infrastructure – dams, pipelines and canals – to ensure that South Africa and its neighbours' water needs are met in a sustainable manner. Projects are underway from the Berg River in the Western Cape to the Olifants River in Limpopo province, and DWAF is currently cooperating with South Africa's neighbours through joint projects on the Orange-Senqu and Komati rivers.

◆ **Resource poor farmers**

DWAF plans to create opportunities for poor farmers on irrigation schemes, "giving them access to water for high value crops and food production.

"Water is available to irrigate 12 000 ha in the Eastern Cape, Free State and Northern Cape and the Department will be working with Provincial and National Departments of Agriculture to implement schemes to use these allocations.

"Financial assistance is given to emerging farmers for water infrastructure as well as operation and maintenance with 458 farmers receiving financial support from the Department for the first time last year. R28,4 million has been budgeted in 2004/2005 to assist another 4 500 historically disadvantaged households. This will include support for household rainwater harvesting storage tanks,

acquisition of water entitlements to promote equity, training in water management and help for viability studies to enhance the sustainability of future schemes.

◆ **Catchment Management Agencies**

Four Catchment Management Agencies will be established during this financial year, in the Inkomati, Umvoti/Mzimkhulu, Breede and Crocodile West/Marico water management areas. The Department will devolve administration to the local water users and communities, accompanied by vigorous capacity building so that historically excluded communities can participate in water management. R28 million has been budgeted for this in 2004/2005.

◆ **Human resources**

The Department is growing its human resources for the future, developing the next generation of professionals and managers. This year DWAF has placed 35 interns and will shortly appoint another 15 across the country. 20 of their 79 external bursars joined the Department after completing their degrees, while the Water Research Commission helped 428 young professionals, 66% from historically disadvantaged communities, to gain post-graduate qualifications and high level technical experience.

**CALL FOR PAPERS:  
DEADLINE FOR SUBMISSION EXTENDED TO 31 DECEMBER 2004**

Special Issue of *Water SA* on: Irrigated and Rain-fed Agriculture for Poverty Reduction in Sub-Saharan and North Africa:

**Past Performance and Future Challenges**

*Water SA* is a multidisciplinary journal funded and published by the Water Research Commission (WRC) of South Africa. The journal publishes refereed, original work in all branches of water science, technology and engineering. *Water SA* is introducing a series of special editions on various interdisciplinary themes on water resource management in Africa. The first of these editions is planned in collaboration with the Centre for Environmental Economics and Policy Analysis in Africa (CEEPA), to publish original research work on the contribution of irrigated and rain-fed agriculture to poverty reduction in sub-Saharan and North Africa. Contributions are invited for this special issue from all branches of scientific water research and policy on approaches to measurement and evaluation of experiences in technological, institutional and policy innovations for *managing water resources* in support of irrigation and rain-fed agricultural production systems for poverty reduction. Please note that the particular emphasis of this special issue is on the *role of various aspects of water resource management*, and not the contributions of *other forces of agricultural change* to poverty reduction such as breeding and improved crop management innovations in isolation of associated water management problems and challenges. The special issue will be peer-reviewed by a panel of renowned international experts in the relevant disciplines from Africa and the rest of the world. The final date for submission of manuscripts for this special issue, which will be printed in 2005, is December 31, 2004.

Submission of work solely authored by or co-authored with Africans is especially encouraged.

**Please send manuscripts to:**

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