

**SPEECH BY MR RONNIE KASRILS, MP, MINISTER OF WATER AFFAIRS
AND FORESTRY OF THE REPUBLIC OF SOUTH AFRICA AT THE
INTERNATIONAL CONFERENCE ON FLOODS HELD ON 27-28 OCTOBER
2000, MAPUTO, MOZAMBIQUE**

Your Excellency, Mr White, Chairperson of the Committee of the 3rd World Water Forum, Ministers from SADC.

South African farmers have a saying that goes like this: “If the droughts do not get you, the floods will” The floods that ravaged the whole Southern African region in February this year have left painful memories. In South Africa we are still busy with repair work.

We remember how cruel the elements were Mozambique. They brought tremendous suffering and were a severe setback for all the great economic and social strides this country has made. We are still saddened by the devastation and that is why we view this conference as very important to our collective efforts. We approach it with the seriousness it deserves in the spirit of solidarity and co-operation. We are grateful to the Mozambican people and the government for hosting us, especially, the President and my esteemed colleague, Minister Roberto White.

International and regional co-operation is a tried and tested way to mobilise joint support and to jointly tackle our common problems.

By this time last year, SADC countries were being informed that weather prospects during the imminent summer rainy season would be influenced by relatively cooler conditions over the Equatorial Pacific Ocean, popularly referred to as a La Niña event.

This information was forthcoming from the Southern African Regional Climate Outlook Forum which consists of the Weather Services of most of the SADC countries.

The consensus in October of 1999, of seasonal prediction was that higher than normal rainfall could be expected during the coming rainy season.

Such predictions, however, cannot adequately prepare us for such extreme, in fact extraordinary events that wreaked the havoc of the February floods. We owe it to one another to revisit these tragic events to identify major problems, learn the lessons and to jointly seek solutions. As such, we regard the Conference highly and trust that it will provide the foundation to better mutual understanding, cooperation and support with regard to flood management issues in a SADC context.

Chairperson, while flood management is inseparably linked to disaster management, it also forms an integral part of water management. While flood peaks constitute a threat for disaster managers, against which the public has to be protected, water managers regard flood waters as an integral - and thus expected - part of the hydrological cycle.

Chairperson, honourable friends, the floods in South Africa were caused by exceptionally large quantities of rain, for relatively long periods, over large areas. Monthly rainfall totals of more than 1 000 mm, during February of this year, were common and in places in excess of 900% of the average February rainfall was recorded.

As we are all well aware, Mozambique bore the brunt of the resultant floods. The tragic scenes of devastation, inspiring images of co-operation and heroism, live in our minds. In South Africa, Mpumalanga and Northern Provinces were devastated by the resulting floods, while at least another five provinces experienced various degrees of flood damage. According to the latest summarised statistics, 139 lives were lost. Flood damage runs into billions of Rands.

Some of the largest floods on record were experienced. Record flows were observed in the Komati River where it enters Mozambique, the Crocodile River (in Mpumalanga), the upper reaches of the Letaba and Sabie Rivers, and the Limpopo where it enters Mozambique at Pafuri.

Flood peaks over wide areas were at levels expected only once every 20 to 50 years. At the Mozambique border, the Komati River flood was probably a one in 200 year event and in the Limpopo, a one in a 100 year flood.

In the Komati River, the preliminary estimate of the flood peak - 11 200 cubic metres per second (cumecs) - is the highest that could be traced from hydrological records and historical references that date back to the late 1800s. The flood levels were more than five metres higher than during the 1984 Domoina floods, which were previously regarded as the worst in living memory.

Particularly acute floods were experienced where floods from several rivers came together as in the Limpopo where major inflows downstream of Beit Bridge from the Sand, Luvuvhu and Mutale Rivers contributed to one of the worst flood events ever observed at Pafuri, where the Limpopo enters Mozambique.

Chairperson, I will limit my input to the shared situation between South Africa and Mozambique and structure my comments according to the four working group topics of the conference.

With regard to the first topic, watershed management, the new democratically elected South African Government has fundamentally revised its water legislation since it came into power in 1994. Very importantly, with regard to the watercourses shared with Mozambique, is the strong focus in the new legislation on the equitable and reasonable utilisation of water in shared watercourses. Somewhat off the topic of flood management, this means that the South African Government will strive to ensure that Mozambique receives its fair share of the water from the river basins originating in South Africa and shared with Mozambique.

The second workshop topic is the use of structural versus non-structural flood management measures. Structural flood management measures are primarily linked to managing floodwaters, whereas non-structural measures are primarily focused on managing land use on flood plains, together with influencing the actions of people by, for instance, awareness raising and improvement of early warning systems.

The issue of structural versus non-structural measures is an extensive debate. In terms of the new South African Disaster Management Policy, there is a major shift in focus from reactive to preventive disaster management. This shift in accent will inevitably shift the South African flood management focus more from structural to non-structural. With regard to non-structural flood management measures, we attach special value to floodplain zoning and flood warnings.

Chairperson, flood warnings are only possible if reliable information is available. My Department operates a number of real time, or near to real time, flow gauging stations in the rivers that we share with Mozambique. During the rising stage of the floods, flood flows were regularly provided to Mozambique. Due to the extraordinary size of the floods, most of these flow gauging stations were inundated and damaged, thus terminating the river flow information at the time when it was actually needed most. During the rebuilding of these stations, care will be taken to ensure that they can withstand larger floods.

Our recent experience has shown that flood warnings are not effective if there are no institutions to channel warnings to a specific audience. Those affected must furthermore know what the warnings mean and what is expected of them under certain circumstances.

Probably the most topical issue resulting from the floods, was about the value of dams with regard to flood management. This issue is categorised under structural flood management measures. Following on vague, negative reports regarding the impact of South African dams of the flood regime in Mozambique, I instructed inquiries in this regard shortly after the floods.

Contrary to media reports, all the relevant dams on the South African river systems flowing to Mozambique helped reduce flood impacts rather than aggravate the floods. The size of the floods was however such that dams with a storage capacity of about three times that of the huge Vaal Dam (which has a volume of 2 600 million cubic metres) would have been required on the Limpopo River to be able to impact substantially on the flood flows in the Limpopo System.

The prohibitive cost of such dams makes their establishment very unlikely, if they are to be constructed primarily for flood attenuation purposes. They would have to be kept empty for up to fifty years at a time if they were to be effective when a major flood was experienced. Such large storage dams would have to be linked to socio-economic development.

I have already mentioned certain aspects of the third workshop topic, namely hydrometeorological data collection and dissemination, when referring to flood warnings. Apart from our ongoing co-operation in the region with regard to hydrological information, there are excellent opportunities to co-operate in a SADC context in the field of meteorological monitoring and information dissemination.

With regard to the fourth workshop topic, viz. International and Regional Co-operation, I would like to just mention that we are very excited about the current initiatives to establish a Regional Disaster Management Focal Point for SADC. This should not however detract from the need to promote greater collaboration in the management of shared rivers in line with SADC Protocol on shared water courses. It is critical that the good relations between our water managers is maintained and strengthened.

In line with international trends, I would like to see that flood management in the SADC context be based increasingly on well-planned zoning of our floodplains, supported by early warning systems, and campaigns to inform the public of the exact meaning of warnings, and on the actions required from them in reaction to the warnings. Throughout the region, a balanced approach to flood management is required, entailing a healthy balance of structural and non-structural measures to enable a socially and economically optimal use of floodplains.

In this we can benefit greatly from the experience of others and in this respect, I would like to thank the organisers and all the international collaborators who have made this even possible.

Chairperson, friends and colleagues “If the droughts don’t get you, the floods will” Let us be better prepared next time – for the vagaries of nature are ever present – and require we be vigilant and prepared.
Obregado.