

Southern Africa Regional Irrigation Association (SARIA) Workshop 31 January to 1 February 2006, South Africa

The SARIA Workshop is scheduled for 31 January to 1 February 2006 at Roodevallei Lodge, Pretoria, South Africa. The workshop is the outflow of the endeavours by the South African National Committee on Irrigation and Drainage (SANCID) to create an opportunity for closer collaboration and networking amongst South African countries.

1. Background

Insufficient water is progressively becoming the major constraint for Africa's vision of sustainable agriculture, rural development and livelihoods. Water scarcity is a particular threat to sub-Saharan Africa (SSA) where dryland agriculture constitutes more than 95% of farm output. SSA is characterized by erratic seasonal rainfall, a high evaporation rate from the soil surface and unproductive soil water loss by runoff, exacerbated by *in situ* evaporation and deep drainage. SSA, in addition, is characterized by a complex relation between land productivity, land degradation and population supporting capacity. FAO assessed the productive capacity of the land in different countries and established that 18 of the 82 countries at risk of not being able to feed their population are in the SSA. There are about 200 million hectares of land in use for crop production in the SSA, of which 12 million hectares are under irrigation, accounting for a substantial portion of the region's total agricultural output. A further 800 million hectares have crop production potential but most of these soils are problem soils with inherent constraints.

Bearing in mind water constraints and endemic low soil productivity in the SSA, the Bloemfontein Declaration on Water and Nutrient Conservation Technologies was compiled and endorsed by the 55 delegates who attended the Water Conservation Technologies for Sustainable Dryland Agriculture in Sub-Saharan Symposium (WCT) held in April 2003 in Bloemfontein, South Africa. To meet future food demand will be no easy task, given that higher yields have to be obtained primarily from soils that are already degraded and with diminishing water sources of declining quality. The WCNT challenges focus on:

- Water use efficiency
- Irrigation development, improvement and irrigation scheme rehabilitation
- The improvement and maintenance of soil fertility
- The adoption of ecologically sustainable best management practices to enhance water and land conservation, and food security.

These challenges endorse and are linked to the objectives of the International Commission on Irrigation and Drainage (ICID); International Conventions such as the UN Convention to Combat Climate Change; NEPAD, the Comprehensive Africa Agriculture Development Programme (CAADP); the World Association of Soil and Water Conservation (WASWC); the World Overview of Conservation Approaches and Technologies (WOCAT); and a host of other regional and international initiatives and programmes. These challenges, furthermore, coincide with the mission and objectives of SARIA, dedicated to:

- Enhancing SSA regional food security by improving water and land resource management;

- Enhancing the productivity of irrigated lands through appropriate management of the environment; and to
- Enhance Aids awareness programmes through workshops and facilitation.

In SADC's zest for food security, sustainable rural livelihoods and a healthy environment, sustainable land and water management plans need to be revisited, developed and implemented. These plans should include the adoption of best management practices for both rainfed and irrigated agricultural production to ensure long-term viability.

2. **Theme and Objectives of the 2006 SARIA Workshop**

The theme of the Workshop is **Sustainable Agricultural Production in SADC**.

The objectives of the 2006 SARIA Workshop, aimed at SADC countries are to:

- Inventorise the natural resources in SADC countries including water-related infrastructure
- Deliberate the most beneficial use of resources
- To enhance communication, research, training and development of appropriate science and technologies in water use efficiency and economic development to improve the livelihoods of the inhabitants of the SADC region
- To establish links to and networking with related regional and international initiatives and programmes.

3. **Programme**

The Programme will commence with a technical field excursion on Monday 31 January 2006, followed by the SARIA Workshop on 1 February 2006. The Workshop programme will host a country situational paper per SADC country, as well as three expert presentations on Soil productivity; Rainwater harvesting technologies; and Climate change.

4. **The SARIA Contact Persons**

Dr Andrew Sanewe (Andrews@wrc.org.za) – Committee Convener

Ms Mara de Villiers (Mara@arc.agric.za) - Secretariate

Mr Felix Reinders (ReindersF@arc.agric.za) – Vice President: ICID

SARIA WORKSHOP

Monday 30 January - Technical Excursion

09:00 Depart Roode Vallei Lodge for Brits Irrigation Scheme in the North West Province and the World Heritage Site of Cradle of Humankind

Tuesday 31 January - Workshop

Chairperson: Dr Sizwe Mkhize

08:00 Registration

08:15 Welcome and introduction **A. van Coller**

08:30 Keynote presentation: ICID Overview **F. Reinders**

09:00 Water harvesting **Prof B. Mati**

09:30 Zimbabwe country paper **Dr I. Mharapara**

09:50 Zambia country paper **P. Gondwe**

10:10 Discussion

10:25 *Tea*

10:40 Climate change **Prof R. Schulze**

11:10 Tanzania country paper **Prof Mwanuzi**

11:30 Swaziland country paper **S. Maseko**

11:50 Discussion

12:05 Namibia country paper **P. Liebenberg**

12:25 Mozambique country paper **Prof R. Brito**

12:45 Malawi country paper **P. Chipeta**

13:05 Discussion

13:20 *Lunch*

14:30 Soil productivity **Prof M. Laker**

15:00 Madagascar country paper **T. Rakotondrambo**

15:20 Lesotho country paper **Dr S. Molete**

15:40 Botswana country paper

Dr K. Mmolawa

16:00 *Tea*

16:15 Discussion

16:30 Synopsis and the way forward

Dr G. Backeberg

Wednesday 1 February – SARIA Steering Committee Meeting

08:00 SARIA Steering Committee Meeting Chaired by Dr Andrew Sanewe

10:00 *Tea*

12:00 *Lunch*

15:00 Closure of meeting

15:30 *Tea*