

South-South Cooperation Case Study

Sudan - South Africa collaboration for IWRM. "Some for all forever."

2010-2014

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I. Executive Summary

Enhancing water resource management is widely acknowledged to be an urgent priority in the Republic of Sudan and would strengthen the foundation for the increasingly significant agricultural sector. This is a key area of growth in the country, but one vulnerable to the impacts of variable rainfall associated with climate change. However, in some parts of the country the priority is promoting participation in water management to mitigate risks of conflict.

UNEP's Sudan Integrated Environment Programme supports sustainable and equitable environmental governance to enable recovery from the impacts of conflict and support adaptation to the impacts of climate change. UNEP's role is to provide information and to demonstrate forms of participatory and ecosystems based governance that provide effective management of resources elsewhere (particularly in African contexts) so that Sudanese stakeholders can use them as models for the reform and development of national systems of environmental governance. The work has had a particular focus on Darfur, as Darfur develops reforms to environmental governance that enable an end to chronic cycles of conflict over natural resources.

The collaboration began with a study tour to South Africa where Darfuri water professionals learnt about the post-apartheid reforms to water management. The ideas resonated well and a second tour was undertaken with political decision makers from across the three Darfur states. These tours, and the vision statements produced by the delegates, became the platform for the development of Integrated Water Resources Management (IWRM) in Darfur in particular and in Sudan in general and also supported the process that has now progressed to the development of the first major participatory catchment management project in the region.

The work has also spawned a national level dialogue on IWRM including a presentation to parliament, and support to an ongoing capacity building programme for the Groundwater and Wadis unit in the Ministry of Water Resources and Electricity. A new national IWRM unit has been established within the Ministry. Overall there have been four missions in each direction between Sudan and South Africa between 2010 and 2013.





Figure 1 Senior Sudanese delegates visiting the South African Parliament in Cape Town to discuss the role of government in Integrated Water Resources Management

II. Participants and their roles

Recipient entity	Basic information	Role		
Ministry of Irrigation and	Sector: Water	Asked UNEP for support on		
Water Resources / Ministry of	Centre of Operations: Dafur, Sudan	developing IWRM capacity		
Water Resources and	Ownership: Government/ Ministry and implementation.			
Electricity	of Water Resources and Electricity:			
	Groundwater and Wadis Unit			
Groundwater and Wadis Unit,	Sector: Water	Overall responsibility for		
Ministry of Water Resources	Centre of Operations: National	technical aspects of		
and Electricity	programme with Darfur focus	groundwater and wadis in		
(Republic of Sudan)	Ownership: Government	Sudan		
UNEP	Sector: Water	Coordination, training,		
	Centre of Operations: Dafur, Sudan	advocacy		
Water Research Commission	Sector: Water	Specialist knowledge		
(South Africa)	Centre of Operations: National	High level advocacy		
	programme with Darfur focus	Coordination of study tours		
	Ownership: Government	_		



III. About the initiative

Justification for the programme

Following the signing of the Comprehensive Peace Agreement in 2003 the Government of National Unity enjoyed a peace dividend that enabled it to take measures to enhance governance in many sectors. UNEP was requested to undertake a Post Conflict Environmental Assessment, which was published in 2007. This major study included an assessment relating to freshwater and made recommendations for the implementation of IWRM with a focus on management of numerous degraded watersheds.

Following up on this in Darfur, a major effort was undertaken to provide water for the 2 million displaced people. However, as the crisis was taking place in a semi-arid area, there was a major impact on groundwater resources. The NGO Tearfund conducted an assessment that identified that some 800,000 IDPs (internally displaced people) were at risk of water supplies failing. In 2008 UNEP published another report entitled "The case for drought preparedness" which was aimed at integrating water resource management into the massive humanitarian response to the Darfur crisis. The report drew attention to the particular vulnerability of communities facing the impact of climate change in addition to the impact of conflicts. UNEP worked with UNICEF and the Sudanese government to develop monitoring and contingency plans for the risk of drought in the camps. This raised awareness for the need for a more comprehensive approach to water resource management in Darfur.

Background of the initiative

Integrated Water Resource Management (IWRM):

In 2005 Sudan made a commitment to implement Integrated Water Resource Management in order to promote sustainable and equitable management of water resources. IWRM is distinctive in the following ways:

- Water resources are managed in their entirety, addressing the needs of all water users and the environment. This is usually done watershed by watershed.
- Water users are represented in a participatory approach.
- A balance of economic considerations, basic needs, and environment is achieved.
- The role of women in management of water resources is emphasized.

After the request of the government of Sudan in 2007, UNEP undertook a comprehensive review of the environment in Sudan. In line with the government's own undertakings, UNEP recommended IWRM to be supported in Sudan with a particular focus on a number of degraded wadi basins. Since that time UNEP has mobilised to Sudan and has implemented a successful programme to integrate water resource considerations in the UN humanitarian and early recovery



programme in Darfur and to raise awareness of IWRM. This work included two successful study tours to South Africa to review how South Africa has implemented IWRM in the post-apartheid era to promote inclusivity and sustainability of water resource management. These tours have resulted in the development of a shared vision on IWRM with stakeholders from Khartoum and Darfur.

Brief outline of the programme design and process

Integrated Water Resource Management is an approach to governance and management of water that establishes multi-sectoral water councils to address water resource planning. Technical specialists, government officials, traditional leadership, and civil society are all included in dialogue over water resource management. The purpose of this approach is that decision making addresses both technical and social issues in an informed and inclusive manner. Key features of IWRM therefore are that it is:

- Consultative: Planning of infrastructure is done in a way that includes periods of consultation and review by relevant stakeholders.
- Multi-sectoral: Water councils include different water interest groups e.g. agricultural, pastoral, domestic and private sector users.
- Representative and inclusive: The councils include state government and traditional leadership and non-state actors, such as civil society, including women's groups and academics.
- Technically informed: Specialists such as engineers, hydrologists and hydrogeologists discuss water related issues with non-specialist water stakeholders and are able to both inform and listen to the concerns of the different interest groups.

In accordance to the process described above, technical tours were conducted in May and November 2010. Delegates from Ministries of the Sudanese Government, regional planners, personnel of the technical departments and UN staff all participated. A small group from UNEP, UNICEF, PWC/WES also went to Cape Town in August 2010 for training in IWRM and climate change. This training event formed the basis of a series of ten workshops and training events across the states of Darfur and Khartoum. Additionally, visits from the WRC South Africa to Sudan took place between 2010 and 2012. These were mostly focussed on promoting IWRM with processes of policy dialogue, fund raising and high level advocacy in Khartoum, supported by workshops and awareness raising in North and South Darfur. In addition, in 2012 the Director of the Centre for Environmental Economics & Policy from Africa University Pretoria (ZA) came to Sudan to give briefings on the green economy to Sudanese delegates preparing for the Rio+20 Summit. This broadened the collaboration beyond IWRM supporting the integration of climate and water programming in Sudan.



Supporting entity	Basic information	Role	
Ministry of Environment,	Sector: Environment	Environmental Governance;	
Forest and Physical Planning	Centre of Operations: National	Project Partner	
(Sudan)	Ownership: Government		
Department of Water Affairs -	Sector: Water	Water Governance	
South Africa	Centre of Operations: Pretoria,		
	South Africa		
	Ownership: Government		
University of Pretoria:	Sector: Environmental Policy	Education / research	
Centre for Environmental	Centre of Operations: Pretoria,		
Economics & Policy	South Africa		
	Ownership: University		
Government of UK	Sector: Development	Funding	
UKAID / Department for	Centre of Operations: London,		
international Development	United Kingdom		
(DFID)	Ownership: Government		
Drinking Water and Sanitation	Sector: Water, Sanitation and	Water supply, sanitation and	
Unit Particularly the WES	Hygeine.	hygiene (WASH)	
Project (Water and	Centre of Operations: Dafur,		
Environmental Sanitation).	Sudan		
	Ownership: public		
Italian Government	Sector: Development	Co-funding	
	Centre of Operations: Rome,		
	Italy		
	Ownership: Government		
State Water Corporations	Sector: Water	Water Supply / WASH	
South Darfur; North Darfur;	Centre of Operations: according		
West Darfur	to state, Sudan		
	Ownership: Government		
University of Cape Town	Sector: Water, climate change,	Education	
	Environment		
	Centre of Operations: Cape		
	Town, South Africa		
	Ownership: University		
Legislation Council of West	Sector: All	Government, Legislative	
Darfur	Centre of Operations: West	oversight	
	Darfur, Sudan		
	Ownership: Government		
Ministry of Agriculture North	Sector: Agriculture	Government, Development and	
Darfur State and South Dafur	Centre of Operations: North and	propagation of Agricultural best	
State	South Darfur, Sudan	practice	
	Ownership: Government		
Ministry Urban Planning and	Sector: Utilities	Government oversight of the	



Public Utilities North Darfur	Centre of Operations: North	water sector	
State	Darfur, Sudan		
	Ownership: Government		
Ministry of Water Resources &	Sector: Water and Environment	Government oversight of the	
Environment, South Darfur.	Centre of Operations: South	water sector	
,	Darfur, Sudan		
	Ownership: Government		
Darfur Land Commission	Sector: Land Management Land management for the		
	Centre of Operations: Darfur,	Darfur region	
	Sudan		
	Ownership: Government		
Darfur Reconstruction &	Sector: Reconstruction and	Support the post conflict	
Development Fund	Development	recovery of Darfur	
r	Centre of Operations: Darfur		
	Ownership: Government		
Legislation Committee,	Sector: All	Develops legislation; including	
Legislation Council South	Centre of Operations: South	support of IWRM and	
Darfur	Darfur, Sudan	sustainable natural resource	
	Ownership: Government	management	
Darfur Regional Authority	Sector: All	Support the post conflict	
(formerly Transitional Darfur	Centre of Operations: Darfur,	recovery of Darfur	
Regional Authority)	Sudan		
3,	Ownership: Government		
UNICEF	Sector: WASH	Collaboration on groundwater	
	Centre of Operations: Darfur,	monitoring in emergency water	
	Sudan	supplies	
	Ownership: UN		
Council for Development of	Sector: Livestock	Supports development for	
Nomads	Centre of Operations: Darfur,	pastoralist groups.	
	Sudan		
	Ownership: Government		
Breede Overburg Catchment	Sector: Catchment Management Water resource management		
Management Agency	Centre of Operations: Breede	_	
	Overburg, South Africa		
	Ownership: Government		
Nelson Mandela Bay	Sector: Municipal Government	Municipal government: water	
Metropolitan Municipality	Centre of Operations: Port	management	
	Elizabeth, South Africa		
	Ownership: Government		
EThekwini Municpality	Sector: Municipal Government	Municipal government: water	
•	Centre of Operations: Durban,	management	
	South Africa		
	Ownership: Government		
City of Cape Town	Sector: Municipal Government	Municipal government: water	



	Centre of Operations: Cape	management
	Town, South Africa	
	Ownership: Government	
University of KwaZulu Natal	Sector: Education, Environment Research, Education	
	Centre of Operations:	
	Pietermaritzburg, South Africa	
	Ownership: University	

IV. Financial Arrangements

The study tours were funded by the Sudan Integrated Environment Project. The first tour cost approximately \$100.000 and used DFID funding. The second tour had a similar cost and was



funded by the Italian Government. The training undertaken at the University of Cape Town, the costs for the return visits, and the UNEP contribution to the Freshwater Governance conference came from the DFID funded portion of the Sudan Integrated Environment Project. Overall the DFID funded UNEP IWRM programme budget was approximately \$3.8 million for the Sudan Integrated Environment project which runs from 2009 to 2014.



Figure 2 The Undersecretary of the Ministry of Irrigation or Water Resources, Engineer Adam Bashir, and the Minister of Agriculture and Forestry for South Darfur, Dr Ibrahim Dukheri, inspect citrus irrigation in the Hex Valley. South Africa.

V. South-South Cooperation Components

There was little awareness of IWRM in Sudan, which is why the study tours to South Africa were organised to kick-start the process by building a shared vision for what IWRM would be like. The experiences of Port Elizabeth and the Hex Valley in the Breede Overburg in managing drought were particularly important in understanding how approaches to IWRM could be transformative to the water sector in Sudan. The study tours were followed up with return visits to Khartoum and Nyala (South Darfur) in Sudan in which Eiman Karar (Director of Water Resource Management and member of Sudanese diaspora in South Africa) led a process of dialogue on IWRM policy in Sudan. A presentation was made to the parliament in Sudan and also to the state legislatures in North Darfur and South Darfur. In North Darfur the process has moved forward with the development of the Wadi El Ku Catchment Management project. In South Darfur the situation has also progressed and now there are consultations and awareness raising for a new Natural Resources Framework law as part of ongoing efforts to break a cycle of conflict over natural resources.

The first study tour took place in Cape Town, South Africa from May 16 to 28 2012, where the technical future development was agreed upon. Fifteen Delegates from three Darfur states (North, South and West), including the State Water Corporation Director Generals and the Federal DG of Groundwater and Wadi Department, planned the ongoing process and recommendations. This was manifested in a vision statement with the following recommendations:

Water institutions, policy and finance

- Effective collaboration between organisations based on clearly defined mandates and responsibilities.
- Policies, strategies and law aligned for effective implementation of water supply and water resource management.
- Water resources managed along catchment boundaries.
- Water user associations inform water sector planning through representative and well
 managed water boards and consultation processes. WUAs formed progressively at state,
 catchment and sub-catchment level.
- A sustainable and equitable supply "Some, for all, forever" based on a stepped tariff policy that addresses:
 - o Affordable basic supply for low income users.
 - o Cost recovery for water services.
- The need to limit demand, particularly in periods of drought.
- Sustainably funded programme of research providing cost effective and innovative solutions in partnership with water sector.



Master plans and drought management

- Investment and implementation undertaken according to clear and strategic plans.
- Mutual alignment of water supply, sanitation and resource management strategy with wider urban planning strategy.
- Each organisation implements its activities according to a strategically prioritised and costed plan. This will bring organisational efficiency and improved collaboration with partners.
- Transparent prioritisation of investment according to need and cost effectiveness.
- Cost benefit analysis for triple bottom line (financial, economic, environment).
- Reliable and complete databases readily available to planners and implementing agencies and researchers.
- Status of water availability and implementation of drought response activities kept up to date and available for planning and management purposes.
- Locations potentially vulnerable to drought implement mitigation measures to reduce impact and develop contingency plans for drought response.

Communication and public relations

- Water users active in demand management motivated on the basis of a sound understanding.
- Government agencies, parliamentarians, ministers and governors have good understanding of integrated water resource management principles and practice.
- Children and their families increase their awareness, understanding and implementation of sustainable water management practices.

Engineering and technology

- Sustainable, equitable, cost effective management of groundwater within IWRM approach.
- Sustainable, equitable, cost effective management of surface water within IWRM approach.
- Widespread uptake of rainwater harvesting and ongoing innovation and uptake of new methods.
- Cost effective leakage control implemented in all reticulated supply networks.
- Ecosanitation implemented including effective management of sludge as part of strategic approach for total sanitation.

Other recommendations

- Effective collaboration between capacity building programme and internal training activities.
- Support to institutions is well planned and is integrated into sector planning for humanitarian early recovery programming.
- Urban planning capacity increased to facilitate integrated development management in towns and cities.
- Strategic use of study tours in all sectors to assist with visioning for post conflict programme objectives. Good management of tours maximises benefits for development of strategy in Sudan.



Another statement was made in the second study tour, which took place from November 1 to 7 2010, again in Cape Town, where decision makers were asked to work on the progress of IWRM. Thirteen delegates, including Undersecretaries of the Ministry of Environment Forests and Physical Development and the Ministry of Irrigation and Water Resources Sudan and ministers of the three Darfur States participated. At this meeting, the decision makers agreed on collaboration between the three states, Transitional Darfur Regional Authority (TDRA; and now Darfur Regional Authority DRA) Council for Development for Nomads, Federal ministries and other partners (wadis and water users across the state boundaries) for supportive collaboration with the Ministry of Irrigation Water Resources (Republic of Sudan) and the Department of Water Affairs (Republic of South Africa). The following was agreed on for action:

- 1. Endorse the IWRM and catchment management approach, and take this forward for endorsement in state capitals.
- 2. Establish collaboration between the three Darfur states, TDRA, Council for Development for Nomads, Federal ministries and other partners like the wadis and water users across state boundaries.
- 3. Establish working group to develop and implement action plan on IWRM for Darfur addressing hydrological management, stakeholder participation, urban water management, integrated development planning, legal and institutional issues, as well as finances and projects.
- 4. The working group shall comprise the following organisations:

Ministry of Water and Environment –South Darfur

Ministry of Urban Planning – West and North Darfur

Groundwater and Wadis Department

Darfur Reconstruction and Development Fund (TDRA)

Darfur Land Commission (TDRA)

Council for the Development for Nomads

Public Water Corporation

- 5. Review and strengthen national policy, strategy and institutions for IWRM for Non-Nilotic waters by building capacity of Groundwater and Wadis Department and state level institutions; reviewing and reforming institutional framework for Non-Nilotic waters and groundwater; reviewing the national strategy and policy for Non-Nilotic water resource management; building capacity of research institutions.
- 6. Request UNEP to undertake a facilitation, advocacy and research role to promote IWRM.

The University of Cape Town hosted a training course on IWRM and climate change from 11 to 13 August 2010, where five delegates from GWWD, the Public Water Corporation, UNICEF and UNEP participated.

Brendan Bromwich from UNEP Sudan attended the International Conference on Freshwater Governance for Sustainable Development conference in the Drakensburgs, South Africa in



November 2012 and made a presentation drawing on the work of the Sudan programme relating to promoting good governance in the water sector.

The Director of the Water Resource Management division of WRC, Eiman Karar, came to Sudan between July 2010 and 2012 in order to attend on the following occasions:

- July 2010
 - Advocacy and presentations on IWRM from the South African Experience in Khartoum, El Fasher and Nyala; making presentations in MIWR and at state legislatures.
- June 2011
 - Speaker at the Darfur International Water
- December 2011
 - Presentation on South African experience in water resources management at the National Council Assembly
 - o Conducted national workshop on water resources management shared vision; established six water users groups in addition to a senior technical committee
 - o Supported dialogue on Water Resources Policy for South Darfur State
- December 2012
 - o Followed up on technical working groups on water resources shared vision
 - Supported dialogue on new proposed natural resources framework law for South Darfur in Nyala
 - Dialogue and sensitisation for the proposed Wadi El Ku Project in North Darfur, meeting El Fasher based stakeholders and advising government and UNEP on project proposals

In June 2011, the Director of the Centre for Environmental Economics & Policy in Africa University of Pretoria (SA) visited Sudan and gave:

- Briefings to the Sudan Delegation to the Rio +20 Summit.
- Public lecture series in Khartoum on climate change, natural resource economics and the green economy (Venues: Forestry National Corporation, UNEP, Dal Group, Sudanese Environmental Conservation Society, MEFPD, Rashid Diab centre)

VI. Lessons Learned

Overall impact:

The South-South cooperation element has been transformative to UNEP's work on IWRM in Sudan. As a result of the collaboration with South Africa, IWRM moved on from being an abstract concept to being a tangible reality that works in Africa. A shared understanding across Darfur's water sector of what IWRM was and how it helps came out of this collaboration, and it provided the foundation for actually changing the way things are done. The success of this



exercise, which began in Darfur, became a national process during the lifetime of the project as a result of the awareness it raised and buy-in to the collaboration with South Africa.

It is noted that many of the specific recommendations made in the vision statements have not been implemented as proposed. The course of the progress of IWRM has been worked out gradually along the overall principles established in these vision statements rather than the detail. This is reasonable. When working in the context of conflict, it is inevitable that plans need modification and realignment. One of the major changes has been that the Darfur states have been realigned – to five states rather than three, and the role of the Transitional Darfur Regional Authority has been changed to the Darfur Regional Authority. The simultaneous move to being five states and one region is of course a significant institutional challenge for line ministries. This arrangement, however, emerged from the Doha Document for Peace in Darfur and reflects the social complexity of Darfur.



Figure 3 Different water user groups at a well in Wadah in the Wadi El Ku Catchment in North Darfur

Highlights of the content of the learning:

Reforming water governance makes a fairer society: South Africa reformed its water sector in the aftermath of apartheid. Sudanese delegates heard the stories first hand from black farmers how under apartheid they struggled to make a living without access to resources, but now they work alongside white grape growers in managing water resources collectively. It is a much fairer society: one in which everyone's livelihood and business can grow. This makes it highly relevant in post conflict or peacebuilding contexts such as Darfur.



The water sector needs to be balanced between demands and sustainable resource management: Prior to the collaboration with South Africa, work on water in Darfur was almost exclusively driven by user demand and humanitarian standards. The emergency WASH programme had achieved great results in saving lives of displaced people, but in the emergency stage sustainable resource management was neglected. It was a considerable challenge to move water related work on from this "emergency" mentality. It was in South Africa that the key stakeholders in Darfur's water sector developed a shared vision for the importance of resource management in addition to work on water supply.

Policies and mandates of institutions need to be clear and complimentary. Delegates were impressed by the way water is managed "by the book": the policy and legal framework is clear and this enables institutions to work to their mandate - and not beyond. The financing is clear and work gets done. Other parts of government can be relied on for their role, too. This context is clearly motivating for all involved.

Water resources should be managed along catchment boundaries. It is better for water resources to be managed by the hydrological boundaries rather than political boundaries. This promotes the most rational, profitable and equitable use of the water resource as a whole with less influence from external factors. It means that it is the water itself that gets managed for the benefit of all users rather than issues relating to water getting caught up in other political questions.

Drought response needs careful planning and management. In the Southern Cape delegates were impressed by how Nelson Mandela Bay Metropolitan Municipality was coping with water shortages. They were implementing contingency plans with careful coordination across government departments. There was a major emphasis on public awareness and participation. This has directly informed drought management planning in Darfur's humanitarian response, where drought contingency planning in camps for displaced people has active engagement of water users.

Lessons for South-South collaboration approaches:

Study tours and overseas training can have a major impact if they are part of an ongoing programme: The study tours were the major leaps forward in an ongoing process of reform in the water sector. They did not produce results in isolation of the seven year programme of technical assistance and coordination, but they were "game-changers" within that process because:

- Group-work reflections on the tours enabled the production of vision statements that were then used as a platform for implementation at home.
- A two stage process with technical delegates and a follow up for decision-makers worked well in developing real change in the water sector in Darfur.



• It was important that enough relevant people from across Darfur and national government to enable a critical mass of people to support the agenda and promote change back at home.

So the tours were not just about learning from abroad but developing a shared vision amongst all the delegates who will collaborate on a process of change in the country or region from which they come. The return visits of delegates from South Africa to Sudan were important too in the sense of extending the reach of the messaging so that it reinforced the advocacy of those who had attended the tours. This is also enhanced with being linked to a practical ongoing programme.

Similarly for training abroad, if a number of people attend then a partnership exists in implementing what has been learnt. A group of five participants attended a climate change and IWRM event in Cape Town, and three of them worked together to undertake a major awareness raising programme across Darfur based on the training they received. If just one had attended then he would have had to work to convince a second person to collaborate before being able to work together for wider scale up.

Genuine local ownership is essential: the key factor in South-South Collaboration is that more local ownership is achieved, as a result of the increased empathy between the partners in the collaboration – similar development challenges have been approached so there is communication of shared experience and understanding. Therefore when events take place they should be in the languages of the host country with translation for external participants only as needed – ideally this is not needed as in the case when work is undertaken in partnership with returning diaspora. Similarly ownership of the overall project and dissemination processes should be locally owned, with external agencies acting to facilitate where necessary, but not to backstop processes to the extent that local institutions do not ultimately carry the weight of the work.

Working with diaspora produces very positive results, bringing out benefits that combine the ownership of a home-grown initiative and exposure to international ideas. In Sudan working with diaspora enabled messaging on IWRM to reach parliaments at state and federal level that was highly appreciated by stakeholders involved.

VII. Conclusion

Improving sustainable and equitable environmental governance is necessary for both adaptation to the impacts of climate change and to mitigate against risks of conflict over natural resources. South Africa's experience of using IWRM as a means of rebuilding the water sector to be more equitable and sustainable resonated well with the diverse challenges Sudanese water managers are facing. As result of the South South Collaboration process the concepts of IWRM became tangible realities for Sudanese water managers rather than abstract concepts. This collaboration has is supporting the emergence of a shared vision for IWRM in Sudan in general and in Darfur in particular. This is bearing fruit with a major catchment management project now underway in



Wadi El Ku. This broader support for IWRM supports the rebuilding of equitable natural resource management in the face of the ongoing conflict risks in the region.

VIII. Contacts

Supporting entity	Contact	Detail
Groundwater and Wadis Unit	Mohy El Din El Kabir	IWRM Coordinator mkabir5@yahoo.com
South African Water Research Commission (WRC)	Eiman Karar	Director Water Resources Management eimank@wrc.org.za
UNEP Sudan	Brad Smith	Programme Coordinator <u>bradley.smith@unep.org</u>
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	Brendan Bromwich	Consultant (formerly Programme Coordinator) brendan.bromwich@unep.org

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The Ministry of Environment, Forests and Physical Development, Republic of Sudan

Department of Water Affairs, Republic of South Africa

United Nations Environment Programme, Division of Regional Cooperation, Interagency and Country Level Coordination Unit, Division of Regional Cooperation, UNEP

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