



Netherlands Commission for  
Environmental Assessment

# Appraisal of 3 Programme formulation documents for the Water Sector between South Sudan and the Netherlands

## South Sudan



NCEA – Memorandum of the Dutch Sustainability Unit  
20 July 2012



Photos cover:  
Floris Deodatus



Netherlands Commission for Environmental Assessment

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## MEMORANDUM of the Dutch Sustainability Unit

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**From** : DSU at Netherlands Commission for Environmental Assessment (Ineke Steinhauer)  
**To** : Durk Adema, Netherlands Embassy, Juba, South Sudan and Omer van Renterghem, DGIS/DME, The Hague  
**Date** : July 2012  
**Subject** : Desk study: Appraisal of 3 Programme formulation documents for the Water Sector between South Sudan and the Netherlands (ProWaS/SSN); PSGK, EES and Lakes, by Niek Bech and Floris Deodatus  
**Our reference** : SU-07

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### 1. INTRODUCTION

Under an agreement made in 1993 with the Directorate General for Development Co-operation (DGIS) of the Netherlands Ministry of Foreign Affairs, the Netherlands Commission for Environmental Assessment (the Commission) provides advice on development co-operation projects and programmes when requested by the DGIS, by or through one of the Netherlands Embassies or by Governments of DGIS partner countries. These activities were until 2012 exclusively related to Environmental Impact Assessment (EIA) and/or Strategic Environmental Assessment (SEA).

Since 2012, as part of a new agreement with the DGIS, the Commission has been assigned an additional task, namely the realization of the Dutch Sustainability Unit (DSU). The aim of the DSU is to contribute to mainstreaming of environment, climate issues and sustainable development considerations in the water and food security spearheads as part of the implementation of the Multi-annual Strategic Plans (MASP's) of the Netherlands Embassies in partner countries. This is the translation into implementation of the initiative Nr. 45 of 28th June 2011 ('Motie Ferrier').

A Multi-Annual Strategic Plan 2012 – 2015 (MASP) has been prepared for South Sudan and was approved in 2011. This MASP has its focus on three (3) sectors: 1. Peace & the rule of law, 2. Food security and 3. Water management, and within this sector the priorities are on three (3) themes: Water supply, River systems and Rural water supply and sanitation.

In this framework, the Commission received a request from DGIS and the Netherlands Embassy in South Sudan. The Netherlands Embassy is currently elaborating its Water programme for two States in South Sudan. This has resulted in three programme formulation documents for Lakes State, Eastern Equatoria State and national IWRM policy development. The DSU has been asked to perform an assessment of these documents, as well as an assessment of the tender documents that will be elaborated on basis of these documents. Later on, also proposals by consultants will be assessed by the DSU.



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### 2. OBJECTIVE AND SCOPE

DGIS has requested the DSU of Netherlands Commission for Environmental Assessment:

1. to conduct an assessment of the appraisal documents for Lakes State and Eastern Equatoria State and the national IWRM component on mainstreaming of environment, climate issues and sustainability, including recommendations for improvement;
2. to assess the tender documents that will be drawn up based on the appraisal documents on DSU issues, including recommendations for improvement;
3. to assess proposals of consultants based on the tender documentation on sufficient attention for DSU issues.

To this effect, the DSU of Commission has engaged two consultants, Mr. N.J. Bech and Mr. F. Deodatus, to perform the assessment. This report concerns the first DGIS request (nr. 1). Both consultants received additional information with respect to the assignment. The appraisal documents have been prepared following an extensive process of workshops, desk-studies, identification missions, and discussions with various stakeholders. As a result the documents have been subject to many changes and improvements, and the final draft versions are considered to be rather thorough and complete. It is not the intention that these documents are changed yet again with track changes. The objective of this review is to conduct an overall sustainability assessment and to contribute issues of sustainability to the documents (in the form of observations), rather than to screen the documents. The 'Assessment Framework for Sustainability Analysis of MASP's' – that has been prepared as one of the activities that preceded the establishment of the DSU –, was used to assess the appraisal documents.

Two appraisal documents were provided for the assessment:

1. Eastern Equatorial State (Draft version, 3rd July 2012 – 57 pp. + annexes)
2. Lakes State (Draft version 20th May 2012 – 41 pp. + annexes), followed by a draft programme formulation document of 11 July 2011 – 60 pp. + annexes)

A third appraisal document was added later on, a national component to support the Ministry of Water Resources and Irrigation (MWRI) in Juba with IWRM at policy level, which is linked to the above two Programmes:

3. From Policy & Strategy to Governance & Knowledge (Draft version, 5th July 2012, 41 pp.).

Documents nr. 1 and 3 have been assessed by both consultants, document nr. 2 has been assessed by one consultant only.



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### 3. EASTERN EQUATORIA STATE

#### 3.1 Programme description

The area of the State is twice the size of Netherlands, and has a population 0.9 million pp distributed over eight (8) counties. The Programme will focus on two (2) areas covering five (5) counties with about 2.000 villages:

- Kenneti watershed in Torit and Lopa/Lafon Counties. This is a semi-humid area with water conflicts between urban and rural, and between sedentary and pastoral communities.
- Greater Kapoeta area consisting of three Counties. This is a semi-arid area with food insecurity and water shortages in the prolonged dry season.

The Programme has three (3) components:

- IWRM – Integrated Water Resources Management in Kenneti Watershed; this component is linked with the national component of the Water Sector Programme.
- WPU – Water for Productive Use (both in Kenneti and Greater Kapoeta) with a focus on agriculture and livestock.
- SWIS – Safe Water and Improved Sanitation (both in Kenneti and Greater Kapoeta).

The Programme will focus on the implementation of four (4) types of activities (for which typical management options and some early implementation / entry point activities are given):

- Investments in water management infrastructure, such as setting up a hydrological network, hafirs, small dams, storage ponds, irrigation systems, boreholes, water pumps, pit latrines, waste disposal.
- Strengthening of livelihood interventions in agriculture, livestock and agro-forestry, mainly through water-related interventions and linkages with other programmes that focus on charcoal, Arabic gum, horticulture, cereals, livestock, etc.
- Improvement of management and operation systems of water infrastructure, such as watershed planning & management, operation & maintenance, pricing, ownership, establishment of water users committees.
- Facilitating scaling up of private sector investments.

In addition to the above, attention will be given to four (4) cross-cutting themes:

- Knowledge and capacity development
- Sustainability: people, planet, profit
- Gender balanced development
- Local governance strengthening

For the implementation arrangements, it is envisaged to engage a Technical Assistance Team (TAT) that will have overall responsibility for the implementation of the Programme. The TAT will build capacity of the County governments with respect to planning, implementing and monitoring activities in a participatory manner with involvement of CBO's. For the detailed design of the Programme, the TAT will prepare Annual Plans of Operation (APO) and Six-Month Activity Plans (SMAP) that will be presented to a joint Programme Steering Committee (PSC). The Programme has an implementation period of 5 years and a budget of € 28.3 million, of which about 50% for investments, 25% for Programme organization and 25% for capacity building, planning and linkages with other initiatives.



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### 3.2 Sustainability analysis

#	Item	expected impacts		
		pos.	n.a.	neg.
<b>1. Political economy</b>				
1.1	Sustainability as an item on the political agenda	✓		
1.2	Natural resources management (NRM) & land use planning (LUP) policies	✓		
1.3	Costs & benefits of (un)sustainable development taken into account		-	
<b>2. Policy, culture &amp; representation</b>				
2.1	Sustainable development considerations included in core processes	✓		
2.2	Stakeholder representation in planning & decision making	✓		
2.3	Accountability & transparency by leading institutions and policy makers		?	
2.4	Business interests for the private sector are respected and promoted	✓		
<b>3. Rule of Law</b>				
3.1	Law enforcement enhancement (incl. fight against corruption)		-	
3.2	Contract security for the business environment		-	
<b>4. Economic</b>				
4.1	Economic rationale of national budgets		?	
4.2	Raw materials use (long term continuity, efficiency, energy consumption)	✓		
4.3	Business development services (incl. appropriate technology and R&D)	✓		
4.4	Sustainable trade		-	
<b>5. Social</b>				
5.1	Demographic issues		-	
5.2	Employment & labor conditions (child labor)		-	
5.3	Land rights & secure tenure	✓		
5.4	Household vulnerability (income, food, health)	✓		
5.5	Equitable benefit sharing mechanisms (fiscal system, taxes)		-	
5.6	Gender issues (mainstreaming in policies and in practice)	✓		
5.7	Public awareness & capacity development	✓		
<b>6. Environment</b>				
6.1	Land & soil conservation (and rehabilitation)	✓		
6.2	Water management (safety, security and access)	✓		
6.3	Ecosystem services & spatial planning	✓		
6.4	Forest management & fight against deforestation	✓		
6.5	Renewable energy promotion		-	



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### 3.3 Risks

The document contains a separate chapter on Risks (8), which obviously are a main factor in considering the sustainability of Programme Interventions. The main risks identified are:

- Political context: the fragile political environment and lack of national cohesion and state building, pose a threat to Programme implementation.
- Governance and accountability: there is a lack of transparency and a risk of corruption that need to be mitigated by thorough screening of partner institutions.
- Security: internal violent conflicts continue to exist over land, water and cattle. As a result, the possession of arms for protection is widespread among communities.
- Resource bottlenecks: the shutting down of the oil pipelines has resulted in austerity measures and reduced the implementation capacity of MWRI and a 50% budget cut.
- Programme assumptions: several of the above issues, as identified in the Logical Framework, require further negotiation between the EKN and MWRI, notably the relevance of national programmes for IWRM and SWIS, and the allocation of funds for linkage programmes in other sectors. Other assumptions concern the availability of groundwater and the water users committees (motivation, ownership, cost recovery).

### 3.4 Findings and recommendations

#### 3.4.1 General

The appraisal document states that the “sustainability of the interventions” is the key challenge in the Programme as a result of various risks and constraints, e.g. low implementation capacities, political fragility, insecurity, lack of infrastructure, influx of returnees, droughts, ongoing environmental degradation, etc. This is consistent with the findings of other donors working in Sudan. The MWRI has responded to these challenges with the WASH Strategic Framework that has a strong reference to sustainability. There remain, however, gaps between strategies/targets and actual implementation. Adopting a focused and pragmatic approach is proposed to make a sustainable impact, emphasizing practical interventions and implementation at County level. The early implementation activities (entry points) that have been formulated in the appraisal document contribute to narrowing the gap.

South Sudan is slowly moving away from relief and recovery to development, leaving thirty years of destruction and war behind. The conditions are gradually improving allowing the communities to actually make use of the potential of the natural resource base. The pressure on the natural resources is expected to increase, and after so many years of strife, insecurity and internal conflicts over land and water are expected to remain a major concern. Conflict resolution in combination with community based resource management is therefore given high attention in the Programme document.

It needs to be emphasised that EES shares an area of outstanding biodiversity value which is among the most valuable in the world: the Boma-Jonglei landscape, covering among others the Boma and Badin-gallo National parks. This area represents one of the few last remaining areas in the world with large scale herbivore migration. Apart from that, EES has a number of smaller biodiversity hotspots such as the Kidepo complex shared with Uganda, Imatong Mountain and other mountain ridges harboring endemic species. Interventions in water management may influence wildlife habitat in these areas and changes in land use patterns, particularly when related to water holes and cattle.



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EES is one of the areas in South Sudan with a significant potential for tourism based on culture and nature. IWRM should consider possible interactions between water management and tourism.

Large scale land acquisition and investments (land grabbing) forms a risk with respect to local land users and accessibility to water. Tuning of IWRM and land use planning with different ministries involved and the Lands Commission is therefore eminent.

### 3.4.2 Sustainability is addressed in a constructive manner:

- Sustainability is given special attention in a separate chapter (par. 3.2):
  - Impacts on sustainability must be a separate item in the Inception Report
  - SEA and EIA will be included in decision making
  - A set of criteria and indicators must be made to measure progress towards sustainability
- The word “sustainable” or “sustained” is included in the vision, the aim and specific objectives of the Programme.
- A hybrid planning & implementation approach is adopted, combining results-based management and process facilitation, which enhances the sustainability of the Programme activities.
- Possible positive and negative impacts of the Programme have not been researched in detail, but preliminary analysis during Programme identification and formulation indicate that the proposed activities respond well to the issues of sustainability (par. 3.2.2). In the Inception Phase, the Technical Assistance Team will be asked to better explore the possible impacts with the intention to introduce EIA and SEA and include these in decision-making.
- Capacity development and participation of LCA and CBO's is given much attention throughout the appraisal document, which contributes to achieve long term sustainability of the Programme interventions.
- Experience shows that the sustainability of drinking water infrastructure is very difficult (spare parts, community organization, training of maintenance staff, lack of finance, lack of ownership, poor design, reliability of India Mark II pumps and boreholes). In spite of good intentions, numerous donors have subsidized the establishment of drinking water installations, without sufficient maintenance training and often no financial participation at all by the water users. Subsidies may be considered as reasonable, but a contribution should be mandatory.

### 3.4.3 Suggestions for improvement:

- SEA and EIA are planned to be undertaken, but should be carefully linked with the appropriate level of decision making. For example, SEA could better be included in the PSGK component, related to IWRM, whereas the larger scale interventions concerning water management infrastructure require EIA
- In the selection & evaluation criteria for the tendering of the TAT, the theme “sustainability” is not considered in the qualification nor in the evaluation criteria. It is recommended to include this in the tender documents and use sustainability criteria for qualification (minimum requirements) and/or for the evaluation of proposals (awarding).
- The envisaged increase of (small) hafirs may result in attracting increased livestock densities, in turn resulting in land degradation in the surroundings. It is recommended to emphasize the participation, contribution in labour or costs, and awareness raising of the livestock owners in this component. Particularly, because many conflicts are related to cattle.
- For the monitoring of the impacts of the Programme (in general and with respect to sustainability in particular) it is recommended to establish a baseline in the inception phase, which may serve as a point of reference to measure progress and environmental impacts.





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- Gender balanced development is given attention in a separate paragraph (3.3), but the theme is not mainstreamed in the Programme. In the section on SWIS, it is recommended to give the gender issue specific attention, considering the important role of women in water supply and sanitation.
- The implementation cycle follows a process-oriented approach of Annual Operating Plans (APO), Six-Months Activity Plans (SMAP), underpinned with a monitoring framework. This offers an excellent mechanism to include sustainability as a permanent issue on the agenda.
- A project implementation period of 5 years is rather short considering the scope and ambitions of the Programme in relation to the difficult field conditions (poverty, institutional weakness, lack of infrastructure, conflicts). It is recommended to consider a long term involvement to ensure sustainability of the Programme investments.
- The five Counties together receive an annual budget from the State of about USD 1.650,000.- for overall development activities. The EES Programme has an annual budget of about € 3,000,000.- for development activities in the Water Sector. Such a budget increase means a tremendous impact at the start of the Programme, as well as at the end when the Programme is stopped. A resilient and flexible Programme Design with safe storage measures of project results and with a provision for a smooth/gradual phasing out at Programme ending will contribute to sustainability. Considering that this is the responsibility of the TAT, this could be included in the selection and evaluation criteria for the tendering.
- Match IWRM and land use policy development : the programme needs to link up with interventions such as the "South Sudan Rural Land Governance Project" (SRLG) implemented by the Lands Commission, Tetretech and ARD consult, and with the World Conservation Society's land use planning activities in order to align with current initiatives to structure rational land use.
- Elaborate a strategy to deal with the factors causing erosion and siltation in catchment areas dealing with risks related to climate change and deforestation.



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### 4. FROM POLICY & STRATEGY TO GOVERNANCE AND KNOWLEDGE

#### 4.1 Programme description

The overall objective of the Programme is to establish an operational institutional and legal framework for Integrated Water Resources Management (IWRM), facilitating well-informed decision making on water interventions, designed by competent institutions. It has three components:

- Policy and strategy, with a focus on the establishment of a robust institutional & legal framework and the development of framework plans for water resources development.
- Water resources assessment and monitoring, which aims at enhancing the Water Information Management System (WIMS) to improve and intensify water resources data collection and monitoring, with Lakes and Eastern Equatoria States as initial focal areas.
- Knowledge and capacity development that will support the functioning of the Water Sector in general, and the WASH Training and Research Centre in particular.

Apart from the policy and institutional development of the Water Sector at national level, the Programme will initially establish a strong match with the two Programmes in Eastern Equatoria and Lakes States that implement ground activities. This will be in the form of pilot activities to test IWRM in two typical different physiographic areas, with the aim to extend this (if proven successful) to other areas:

- Flood plains in Lakes State: Na'am River Basin
- Semi-arid catchments in Eastern Equatoria State in Greater Kapoeta: Kenneti River Basin

Considering the nature of this Programme i.e. institutional strengthening, several activities have been defined that provide linkages with other existing or new donor initiatives in the Water Sector, such as:

- South Sudan Water Partnership
- Capacity building by NUFFIC
- Water resources management by the World Bank
- Small irrigation development Programme by JICA
- Urban water supply for which investment proposals have been prepared
- Capacity building by VNG

The implementation arrangements are designed in such a way that the Programme will be carried out by a Support Unit under the Ministry of Water Resources and Irrigation (MWRI). A Technical Assistance Team (TAT) of the Support Unit will manage and implement the Programme. The Programme has an implementation period of 5 years and a budget of € 5.1 million, of which about 50% for investments in institutional strengthening & capacity building (including linkage Programmes) and 50% for Programme organization (TAT). The TAT will prepare Annual Plans of Operation (APO) and Six-Month Activity Plans (SWAP) that will be presented to a joint Programme Steering Committee (PSC).



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### 4.2 Sustainability analysis

#	Item	expected impacts		
		pos.	n.a.	neg.
<b>1. Political economy</b>				
1.1	Sustainability as an item on the political agenda	✓		
1.2	Natural resources management (NRM) & land use planning (LUP) policies	✓		
1.3	Costs & benefits of (un)sustainable development taken into account		-	
<b>2. Policy, culture &amp; representation</b>				
2.1	Sustainable development considerations included in core processes	✓		
2.2	Stakeholder representation in planning & decision making	✓		
2.3	Accountability & transparency by leading institutions and policy makers		?	
2.4	Business interests for the private sector are respected and promoted	✓		
<b>3. Rule of Law</b>				
3.1	Law enforcement enhancement (incl. fight against corruption)	✓		
3.2	Contract security for the business environment		-	
<b>4. Economic</b>				
4.1	Economic rationale of national budgets		?	
4.2	Raw materials use (long term continuity, efficiency, energy consumption)		-	
4.3	Business development services (incl. appropriate technology and R&D)	✓		
4.4	Sustainable trade		-	
<b>5. Social</b>				
5.1	Demographic issues		-	
5.2	Employment & labor conditions (child labor)		-	
5.3	Land rights & secure tenure	✓		
5.4	Household vulnerability (income, food, health)	✓		
5.5	Equitable benefit sharing mechanisms (fiscal system, taxes)		-	
5.6	Gender issues (mainstreaming in policies and in practice)	✓		
5.7	Public awareness & capacity development	✓		
<b>6. Environment</b>				
6.1	Land & soil conservation (and rehabilitation)	✓		
6.2	Water management (safety, security and access)	✓		
6.3	Ecosystem services & spatial planning	✓		
6.4	Forest management & fight against deforestation	✓		
6.5	Renewable energy promotion		-	



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### 4.3 Risks

The document contains a separate chapter on Risks, which obviously are a main factor in considering the sustainability of Programme Interventions. The main risks identified are:

- International political conflict: this may jeopardize normal functioning or result in (temporary) suspension of the Programme.
- Internal instability and conflict: unsafe situations may lead to travel restrictions for certain parts of the country.
- Institutional weakness: suspension of oil production may lead to budget constraints and suspension of salary payments of national staff.
- Coordination problems: overcrowding of the water sector with donor initiatives may lead to competition instead of coordination.

### 4.4 Findings & recommendations

#### 4.4.1 General

The shift from emergency and recovery to development oriented policies and strategies, has raised the need to develop and manage the Water Sector. This component responds to this change, and deals with institutional strengthening, with a clear focus on long term sustainability, adopting an integrated and participatory approach. It is not expected that well-elaborated policies & strategies, improved monitoring, and enhancing capacity building, will have negative impacts on sustainability “on the ground”. On the contrary, the interventions are all aimed at improving sustainability. The major concern in this Programme, however, is about “institutional sustainability”. Are the policies and strategies feasible? Will the monitoring system be resilient enough to allow continuation after Programme ending? Will the relevant institutes be able to continue capacity building after Programme ending? These questions need to be answered in the detailed Programme design.

Large scale land acquisition and investments (land grabbing) forms a risk with respect to local land users and accessibility to water in several South Sudan states, particularly West, Central and Eastern Equatoria. Tuning of IWRM and land use planning with different ministries involved and the Lands Commission is therefore eminent. (see also 1.2 and 2.4 in table above)

Financial sustainability (related to 4.1 in table above) depends very much on sharing of (tax) revenues between stakeholders and different administrative levels. Presently, procedures concerning collection and allocation of funds related to resource use are not transparent and depend very much on personal relations and variable relations between different structures (also varying among states. The lack of operational funding of state agencies responsible for environmental monitoring hampers adequate enforcement of legislation related to water quality and river basin protection. As a result, tools often provided by donor funded initiatives are not being used to improve sustainable resource management.

#### 4.4.2 Sustainability is addressed in a constructive manner:

- Sustainability is given special attention in a separate chapter (2.3). The Programme is well placed to assist South Sudan in addressing the issues of sustainability in the Water Sector. Integrated Water Resources Management is indeed a concept to integrate ecological (Planet), economic (Profit) and social (People) dimensions of development in a catchment area.



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- The introduction and development of IWRM also offers the opportunity to incorporate EIA and SEA type of analysis in Framework Plans.
- The emphasis on institutional strengthening and capacity building has a long term and enduring impact that remains valuable for South Sudan after Programme ending.
- The hybrid approach combining institutional development at national level and ground implementation in the Eastern Equatoria and Lakes States Programme offers opportunities to test policies in the field and plough back lessons learned into policies, which enhances sustainability.

### 4.4.3 Suggestions for improvement:

- The overcrowding of donor initiatives in the Water Sector calls for a strong effort in donor coordination, which may be considered as an integral part of institutional strengthening. It may be recommended that this is included as a separate activity / budget line.
- In this context it is important to connect to current platforms for sectoral coordination between Government and donors, such as the Natural Resources Working group, the Environment Cluster Group and WASH working group, etc.
- IWRM requires collaboration between various sectoral Ministries (e.g. Water, Public Utilities, Power, Agriculture, Environment, Mining, etc.). It is not clear whether the MWRI is able to obtain such cooperation, if not, coordination at above-ministerial level is recommended.
- Although IWRM requires the participation of all stakeholders, it is primarily driven by the Government overseeing the entire institutional setting and many stakeholder interests. The involvement of government staff is therefore essential, which is considered a risk because of uncertain salary payments. It is recommended that guarantees be obtained for inclusion of national staff in the Programme.
- The IWRM policy and strategy requires to promote adequate and transparent financial mechanisms to cover management costs of water resources, sharing revenues and costs between users and different administrative levels.
- Activity 1.3.1 – Action Plan for rolling out IWRM Strategic Framework in river basins – offers excellent opportunities to introduce the concept of SEA. It is recommended to include this in the detailed description of the activity and in the Logical Framework.
- In the selection & evaluation criteria for the tendering of the TAT, the theme “sustainability” is not considered in the qualification nor in the evaluation criteria. It is recommended to include this in the tender documents and use it as criteria for qualification (minimum requirements) and/or for the evaluation of proposals (awarding).



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### 5. LAKES STATE

#### 5.1 Programme description

Lakes State covers an area of 40,000 km<sup>2</sup> with a population of 0.8 – 1 million. The programme will mainly address land and water resource management in the extensive floodplain system of Northern Lakes. Initially it will focus on the North-Western part, being the counties of Cueibet, Rumbek Central, Rumbek North, Rumbek East and Yirol West. The main issues are access to safe drinking water, conflicts due to concentration of people around water in the dry season and changing patterns of river systems. The programme is described in 5 components:

- (i) Water for Livestock – improving availability and access to drinking water for livestock, as well as improved marketing of livestock products;
- (ii) Water for Agriculture – flood protection, dry season water storage, water supply to horticulture, marketing and alternative crops;
- (iii) Water for Fish and Habitats – fish habitat improvement through connectivity, micro credit, marketing.
- (iv) Safe Water and Improved Sanitation – improved access, new water points, awareness, toilets;
- (v) Integrated Water Management: Knowledge and Capacity Development – river basin plans, knowledge development, water resources monitoring.

For the implementation arrangements, it is envisaged to engage a Technical Assistance Team (TAT) that will have overall responsibility for the implementation of the Programme. The TAT will build capacity of the County governments with respect to planning, implementing and monitoring activities in a participatory manner with involvement of CBO's. For the detailed design of the Programme, the TAT will prepare Annual Plans of Operation (APO) and Six-Month Activity Plans (SMAP) that will be presented to a joint Programme Steering Committee (PSC). The Programme has an implementation period of 5 years and a budget of € 33.1 million, of which about 67% for investments, 16% for technical assistance and 11% for linkages with other initiatives.



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### 5.2 Sustainability analysis

#	Item	expected impacts		
		pos.	n.a.	neg.
<b>1. Political economy</b>				
1.1	Sustainability as an item on the political agenda	✓		
1.2	Natural resources management (NRM) & land use planning (LUP) policies	✓		
1.3	Costs & benefits of (un)sustainable development taken into account		-	
<b>2. Policy, culture &amp; representation</b>				
2.1	Sustainable development considerations included in core processes	✓		
2.2	Stakeholder representation in planning & decision making	✓		
2.3	Accountability & transparency by leading institutions and policy makers		?	
2.4	Business interests for the private sector are respected and promoted	✓		
<b>3. Rule of Law</b>				
3.1	Law enforcement enhancement (incl. fight against corruption)		-	
3.2	Contract security for the business environment		-	
<b>4. Economic</b>				
4.1	Economic rationale of national budgets		?	
4.2	Raw materials use (long term continuity, efficiency, energy consumption)	✓		
4.3	Business development services (incl. appropriate technology and R&D)	✓		
4.4	Sustainable trade		-	
<b>5. Social</b>				
5.1	Demographic issues		-	
5.2	Employment & labor conditions (child labor)		-	
5.3	Land rights & secure tenure	✓		
5.4	Household vulnerability (income, food, health)	✓		
5.5	Equitable benefit sharing mechanisms (fiscal system, taxes)		-	
5.6	Gender issues (mainstreaming in policies and in practice)	✓		
5.7	Public awareness & capacity development	✓		
<b>6. Environment</b>				
6.1	Land & soil conservation (and rehabilitation)	✓		
6.2	Water management (safety, security and access)	✓		
6.3	Ecosystem services & spatial planning	✓		
6.4	Forest management & fight against deforestation	✓		
6.5	Renewable energy promotion		-	



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### 5.3 Risks

The document contains a separate chapter on Risks (8), which obviously are a main factor in considering the sustainability of Programme Interventions. The main risks identified are:

- Political context: the fragile political environment and lack of national cohesion and state building, pose a threat to Programme implementation.
- Governance and accountability: there is a lack of transparency and a risk of corruption that need to be mitigated by thorough screening of partner institutions.
- Security: internal violent conflicts continue to exist over land, water and cattle. As a result, the possession of arms for protection is widespread among communities. Lakes is bordering Unity State where oil exploitation is an additional conflict risk factor.
- Resource bottlenecks: the shutting down of the oil pipelines has resulted in austerity measures and reduced the implementation capacity of MWRI and a 50% budget cut.
- Programme assumptions: several of the above issues, as identified in the Logical Framework, require further negotiation between the EKN and MWRI, notably the relevance of national programmes for IWRM and SWIS, and the allocation of funds for linkage programmes in other sectors. Other assumptions concern the availability of groundwater and the water users committees (motivation, ownership, cost recovery).

### 5.4 Findings and recommendations

#### 5.4.1 General

The appraisal document states that the “sustainability of the interventions” is the key challenge in the Programme as a result of various risks and constraints, e.g. low implementation capacities, political fragility, insecurity, lack of infrastructure, influx of returnees, droughts, ongoing environmental degradation, etc. This is consistent with the findings of other donors working in Sudan. The MWRI has responded to these challenges with the WASH Strategic Framework that has a strong reference to sustainability. There remain, however, gaps between strategies/targets and actual implementation. Adopting a focused and pragmatic approach is proposed to make a sustainable impact, emphasizing practical interventions and implementation at County level. The early implementation activities (entry points) that have been formulated in the appraisal document contribute to narrowing the gap.

South Sudan is slowly moving away from relief and recovery to development, leaving thirty years of destruction and war behind. The conditions are gradually improving allowing the communities to actually make use of the potential of the natural resource base. The pressure on the natural resources is expected to increase, and after so many years of strife, insecurity and internal conflicts over land and water are expected to remain a major concern. Conflict resolution in combination with community based resource management is therefore given high attention in the Programme document.

The northern eastern parts of Lakes State are covered with extensive floodplains and marshes of the Bahr el Gazhal and Sud. These wetlands are an important habitat for many wetland species and migratory species. As an indicative example of this, the Lakes State flag shows the seriously threatened shoe bill stork, of which the area presents the most important habitat all over the world. Interventions in water management may influence wildlife habitat in these areas and changes in land use patterns, particularly when related to water holes and cattle.





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Large scale land acquisition and investments (land grabbing) forms a risk with respect to local land users and accessibility to water. Tuning of IWRM and land use planning with different ministries involved and the Lands Commission is therefore eminent.

### 5.4.2 Sustainability is addressed in a constructive manner:

- Sustainability is given special attention in a separate chapter (par. 3.2):
  - Impacts on sustainability must be a separate item in the Inception Report
  - SEA and EIA will be included in decision making
  - A set of criteria and indicators must be made to measure progress towards sustainability
- A hybrid planning & implementation approach is adopted, combining results-based management and process facilitation, which enhances the sustainability of the Programme activities.
- Possible positive and negative impacts of the Programme have not been researched in detail, but preliminary analysis during Programme identification and formulation indicate that the proposed activities respond well to the issues of sustainability (par. 3.2.2). In the Inception Phase, the Technical Assistance Team will be asked to better explore the possible impacts with the intention to introduce EIA and SEA and include these in decision-making.
- Capacity development and participation of LCA and CBO's is given much attention throughout the appraisal document, which contributes to achieve long term sustainability of the Programme interventions.
- Experience shows that the sustainability of drinking water infrastructure is very difficult (spare parts, community organization, training of maintenance staff, lack of finance, lack of ownership, poor design, reliability of India Mark II pumps and boreholes). In spite of good intentions, numerous donors have subsidized the establishment of drinking water installations, without sufficient maintenance training and often no financial participation at all by the water users. Subsidies may be considered as reasonable, but a contribution should be mandatory.

### 5.4.3 Suggestions for improvement:

- SEA and EIA are planned to be undertaken, but should be carefully linked with the appropriate level of decision making. For example, SEA could better be included in the PSGK component, related to IWRM, whereas the larger scale interventions concerning water management infrastructure require EIA.
- In the selection & evaluation criteria for the tendering of the TAT, the theme "sustainability" is not considered in the qualification nor in the evaluation criteria. It is recommended to include this in the tender documents and use sustainability criteria for qualification (minimum requirements) and/or for the evaluation of proposals (awarding).
- The envisaged increase of (small) hafirs may result in attracting more livestock resulting in higher livestock densities, in turn resulting in land degradation in the surroundings. It is recommended to emphasize participation, contribution in labour or costs, and awareness raising of the livestock owners in this component, particularly because many conflicts are related to livestock.
- For the monitoring of the impacts of the Programme (in general and with respect to sustainability in particular) it is recommended to establish a baseline in the inception phase, which may serve as a point of reference to measure progress and environmental impacts.
- Gender balanced development is given attention in a separate paragraph (3.3), but the theme is not mainstreamed in the Programme. In the section on SWIS, it is recommended to give the



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gender issue specific attention, considering the important role of women in water supply and sanitation.

- The implementation cycle follows a process-oriented approach of Annual Operating Plans (APO), Six-Months Activity Plans (SMAP), underpinned with a monitoring framework. This offers an excellent mechanism to include sustainability as a permanent issue on the agenda.
- A project implementation period of 5 years is rather short considering the scope and ambitions of the Programme in relation to the difficult field conditions (poverty, institutional weakness, lack of infrastructure, conflicts). It is recommended to consider a long term involvement to ensure sustainability of the Programme investments.
- The Lakes State Programme has an annual budget of about € 4,400,000.- for development activities in the Water Sector. The budget increase for Lakes State will have a serious impact on operations of the State and County governments at the start of the Programme, as well as at the end when the Programme is stopped. A resilient and flexible Programme Design with safe storage measures of project results and with a provision for a smooth/gradual phasing out at Programme ending will contribute to sustainability. Considering that this is the responsibility of the TAT, this should be included in the selection and evaluation criteria for the tendering.
- Match IWRM and land use policy development : the programme needs to link up with interventions such as the "South Sudan Rural Land Governance Project" (SRLG) implemented by the Lands Commission, Tetretech and ARD consult, and with the World Conservation Society's land use planning activities in order to align with current initiatives to structure rational land use.
- Elaborate a strategy to deal with the factors causing erosion and siltation in catchment areas dealing with risks related to climate change and deforestation.
- To improve sustainability and to cope with the growing donor-dependency of beneficiaries, an approach should be developed and applied where beneficiaries need to invest in order to obtain their benefits instead of waiting for donations.