



Nile Basin Initiative

Shared Vision Program

Water Resources Planning and Management Project

Baseline and Needs Assessment of National Water Policies
of the Nile Basin Countries:
A Regional Synthesis

Water Policy Component

December 2006



Nile Basin Initiative–Water Resources Planning &
Management Project

Baseline and Needs Assessment of National Water Policies
of the Nile Basin Countries:
A Regional Synthesis

Water Policy Component

December 2006

Table of Contents

1	Executive summary	1
2	Introduction	7
	Methodology	8
	Policy Context	9
	Complexity issues	10
	How to use this report	12
3	Policy analysis	13
	Institutions and processes: Summary issues	13
	3.1.1 Institutional process matrix	14
	3.1.2 Policy formation matrix	21
	Content and status: Summary issues	25
	3.1.3 Policy documentation matrix	26
	3.1.4 Policy content matrix and gap analysis	28
	Implementation: Summary issues	36
	3.1.5 Implementation process matrix	37
4	Emerging policy landscape and support needs	44
	Regional Assessment	45
	4.1.1 Needs and support summary matrix	54
5	Bibliography	55
6	Annexes	56
	Review form	56
	Outcome of working groups at Regional Workshop	57
	Regional Lead Consultant Terms of Reference	59
	National Consultant Terms of Reference	61
	Indicative table of key issues and policy status across the nine riparian countries	63
	Acronyms	63

1 Executive summary

This report assesses the current status of water policy in Nile basin countries. It is intended to help in planning future development and implementation of the water policy process, one of four components of the Water Resource Management Project (WRMP). The report has been sponsored by the German Government with funds provided through the Federal Ministry for Economic Cooperation and Development (BMZ) and facilitation through the German Development Cooperation (GTZ).

Although prepared in English, it is recommended that the final version of the report is translated into both French and Arabic to assist in widening access to the information across all Nile countries.

The long-term goal of the WRMP is to ensure that Nile Basin water resources are developed and managed such that they support socioeconomic development in the region. Better understanding of good practice in water policy development can facilitate this goal.

The water policy component has five sub-components:

- 1) Enhancing regional coordination and cooperation;
- 2) Baseline and needs assessment for water policies of the Nile Basin Countries;
- 3) Preparing guidelines and good practice for policy formulation and implementation;
- 4) Capacity building and skills development in the domain of water policy formulation and implementation;
- 5) Establishing a Policy Support Facility (PSF) to facilitate learning by doing, and to promote greater balance of technical capacity across sectors and countries within the basin.

Under the Shared Vision Project (SVP), the PSF will provide advisory support to assist riparian governments in addressing national policy formulation and implementation issues within a regional context.

This report has synthesised the findings of baseline studies and needs assessments prepared by National Consultants for each Nile basin country in mid-2005 according to the following timetable:

- i) Receipt of initial national report drafts in mid-2005;
- ii) Following review and feedback by the Water Policy Lead Specialist and other advisors, resubmission of national drafts, where necessary, in late 2005;
- iii) Synthesis of draft national reports into a zero draft regional report in December 2005;
- iv) Circulation of the zero draft ahead of a regional meeting in January 2006;
- v) Receipt of comments and feedback on the Zero Draft at the workshop and production of first full draft (Draft 1.1) in February 2006;
- vi) Receipt of feedback on draft by 17th February and incorporation into Final Draft;
- vii) Circulation of Final Draft in May 2006;
- viii) Discussion at meeting in June 2006;
- ix) Receipt of feedback and completion of report by October 2006

Policy and complexity:

Policy development and implementation is an arrangement of issues, processes and institutions that are seldom linear in their relationship(s). The policy process in the water sector is, at heart, highly complex and frequently the direction taken by a policy process is subject to the influences of many different constituencies of interest reflecting a range of ideas on resource availability, access and management issues. Often interests are embedded in particular institutions and suggest narratives—or stories on why particular approaches

are necessary in a given policy—that may be part of long-standing positions held by different institutions. Irrigation institutions may, for instance, in a particular context hold a narrative that reinforces the need to expand the command area or improve water use efficiency. Environmental institutions, by contrast, may have narratives that reinforce the need for greater environmental flows and water quality monitoring.

Balancing competing narratives and achieving an acceptable compromise within the processes of policy formation—and in the final policy document output—is a key challenge for national ‘policy makers’. Moreover, helping to ensure that final national policy outputs complement rather than contradict the positions of other countries sharing a transboundary resource is a particularly challenging goal. In the Nile context this has been referred to as the need for a ‘convergence’ of national agendas into a regional ‘cooperative agenda’ (Sadoff, et al, 2002).

The actual process of policy development is subject to a variety of interpretations in theory and practice. Some interpretations assess change in terms of policy steps or rapid progress, perhaps surrounding particular ‘emblematic events’ including floods and droughts, or following major political upheaval (Haajer, 1996). In these cases change is achieved in a short space of time. Other interpretations regard policy development as slower and more incremental. No one interpretation can characterise a complete process of change, particularly across a number of countries: in the Nile basin, for instance, many different types of process may be reflected in different national processes at different times, for instance in terms of the level to which stakeholder from different sections of society are included in a policy process.

Effective policy processes in the water sector are central to overcoming developmental challenges facing Nile countries and communities. The river basin poses complex physical and social challenges. These are driven by great inter-annual and spatial variability in flow characteristics and the complexity of the river regimes in the two major sub-basins—the White Nile and Blue Nile and the huge diversity in resource users at the state, sub-state and community levels. Nearly 350 million people—or approximately half of Africa’s population—inhabit the 10 riparian states of whom some 190 million are within the basin confines itself. The population is expected to double in the next 25 years adding major pressure to states that include some of the world’s poorest.

The NBI is addressing the sectoral development challenge including establishing a series of investment projects in the basin that allow for the optimisation and sharing of benefits between riparians. These include enhancing energy availability, increasing overall food production, developing substantial transport links and facilitating industrial development, in addition to broader contributions in the fields of environmental conservation and conflict reduction.

Creating an environment in which better policy processes can assist in the generation and sharing of such benefits will help both to strengthen the NBI and widen regional cooperation leading to enhanced capacity for all countries to continue to generate—and share equitably—future benefits.

Key institutional challenges

Effective institutional environments in each country are critical to the development and implementation of sound policy. Given the benefits that can emerge if national policy enhances capacity for regional cooperation, national institutional performance has an important regional dimension to it as well. However, there is both literature and experience from the case studies that underlines the difficulty in achieving effective implementation even after the successful design and adoption of policy. On paper, policy can simply ‘evaporate’ at lower levels if institutional environments and buy-in by key stakeholders are lacking

or fail adequately to address implementation needs. Analysis of the national reports on institutional challenges faced by countries highlighted the following:

Roles and responsibilities: A high frequency of overlapping and conflicting roles and responsibilities between institutions existed, linked to which was poor inter-sectoral collaboration and control. Some countries noted a lack of overall cooperation within the sector between different institutional (frequently ministerial or departmental) jurisdictions. Both protective institutional responses and lack of effective coordinating mechanisms featured as reasons.

Decentralisation and central vs. local capacity: Processes of decentralisation were noted across most countries often as part of wider political or administrative change. In the case of federal structures, in particular, concern existed that roles and responsibilities between levels remained ill-defined and resulted in implementation inertia and even failure. Clearer definition of institutional roles and responsibilities within policy was an important issue flagged and was linked to a recognised need for greater capacity in achieving accountability, monitoring performance and enforcing sanction against institutional underperformers.

Linked to issues of local capacity was the requirement for greater stakeholder involvement and awareness raising at lower levels. This often reflected a lack of public information accompanying policy reform processes, although in only a few instances did the reports make explicit mention of sharing responsibilities with civil society as part of policy development and implementation. Evident tensions between the recognised need for greater local involvement yet continued centralised institutional roles posed the question what were the responsibilities of central institutions if not implementation? This prompted discussion of a role for central institutions in areas such as national data development on resource availability and demand at an aggregate level, and by sector. It was widely acknowledged that better availability of such information could enable more effective country engagement in transboundary processes. Some countries recognised trade-offs between the benefits of decentralised management on the one hand and capacity to implement policy at lower levels with, on the other, the key role of national/federal institutions in driving forwards transboundary cooperation. Overall, however, there was little discussion of local transboundary issues or approaches. Nor did a particularly clear picture emerge of what ‘worked best’ in decentralisation, in part because most processes had only been current for a few years. Nevertheless, careful tracking, recording and dissemination of this experience is critical and suggests a need for further research and analysis.

Process facilitation: Some countries highlighted the need for help in inter-institutional facilitation during policy formation, including help in guiding stronger and more inclusive processes at a national level. Occasionally, however, it was acknowledged that there exist political ‘distractions’ which hinder management of the policy environment. Quite frequently, reports discussed institutional and legislative fragmentation including countries where successive older laws remained on the statutes leading to unresolved clashes and contradictions with evolving water legislation. Navigating and repairing this fragmented landscape was noted as a key task in effective policy reform, including the need for careful review and consolidation of existing legislation.

Major institutional support required:

- Strengthening or building strong institutions in the countries was a key need identified, in both human resource capacity and knowledge, and in systems and approaches to policy development;
- Improving legislative environments to avoid policy confusion was a focus of some support requests, including assistance in drafting effective national regulations and codes;
- Developing technical capacity was a key request, in both specific technical and broader development

- areas including rural development, community participation and effective dialogue with partners;
- Development of process capacity was a second major area of support, and needs assessment focused on developing the ‘tools of the trade’ for policy formulation, including capacity in decision-making, management of processes, knowledge and communications management both in-country and across the region, organisation of experience-sharing events, development of effective databases and institutional development for effective coordination and consensus-building processes; one key suggestion was the development of roadmap for such capacity development in each country.

Major policy content challenges

In all countries, bar one, there are existing policies either drafted, completed and/or awaiting implementation. Much of this activity stems from the post-1992 era, reflecting global policy change and the widespread adoption of IWRM principles. Whilst some countries are adopting decentralised catchment management approaches, others are lagging behind or adopting different approaches. The content of existing national policy varied widely between countries, reflecting both the different stages of policy development in different countries and widely different social, economic and geographic contexts. In spite of the variety, a number of critical issues emerged.

Reflecting broader global shifts in policy reform processes: Some countries noted that major changes to global development policy during the 1990s required reflection in national policy, including the need to augment the range and type of institutions involved in developing and implementing policy. Of particular note was the frequent mention of anticipated private sector engagement and the need to support this.

Reflecting changing regional realities in policy: Also noted was the need for policy content to reflect changing relations between the resource and surrounding social environments, particularly in terms of such issues as rapid population growth and declining per capita water availability. Few policies adequately reflected transboundary issues, barring reference to international (bi- and multilateral) agreements to which countries were already party. This is not surprising, given that many policy processes were established prior to the development of the NBI. Nevertheless, a challenge noted was the need to find ways of reflecting the changing regional water management environment in national policy, which suggests a need for a more dynamic and responsive approach to policy reform.

Informing policy environments: Issues requiring greater reflection in policy included analysis of equitable and reasonable water utilization (national and international), rainwater harvesting, pastoralism, the private sector, cost sharing and water pricing. Some of these reflected a need to address ‘new principles’ of management as enshrined in post-Dublin Statement global water policy; others refer to specific national priorities. One comment on the process of forming policy was the need to ‘replace prescription with demand-driven participation’. This reflected a strong belief that in order for effective implementation to take place policy had to be owned publicly. Related to this was the need to create environments that enabled more effective dissemination, not least because policies included sometimes sensitive issues including water tariffs and rights.

Major policy content support required:

- Particular content issues raised and for which support was requested included achieving greater attention in policy to food security and energy issues, legal rights, national norms on water quality, IWRM principles and training in IWRM preparation planning and design, as well as gender mainstreaming;
- A second major content issue was the request for greater integration of regional issues in policy and

assistance in doing so, including better regional sharing of information.

Key implementation challenges

Much of the analysis of national findings focused on the challenges facing implementation. This received particular note because nearly all countries had been or were now involved in implementing a completed policy, sector plan or legislation or were re-evaluating an earlier process of policy formation. Many challenges related to implementation within weak institutional environments were evident, with particular awareness of the need to build substantial capacity at more decentralised levels.

Public awareness and key stakeholders: Some countries noted the lack of an effective approach to private sector and civil society involvement in policy implementation. Included in this was a recognition that greater involvement might require greater incentives, including possibly offering assistance, guidance and training to private sector organisations that are significant in local-level implementation. Linked to this was the problem of general low public awareness of policy and policy processes leaving potential beneficiaries in a position of ignorance; hence the need to build greater stakeholder involvement as part of awareness-raising, without which policy implementation could fail to achieve traction at lower levels and in the long term its intended benefits.

Monitoring and evaluation: This was often raised as an important issue. Without indicators linked to a proper monitoring and evaluation framework implementation would fail to become a learning-based process, and capacity to enforce new regulations and identify and track areas of weak local capacity would be impaired.

Leadership and legislation: The need for a strong lead institution or set of institutions that were well-coordinated should be complemented by an effective legislative environment in which there was consistency with other sectors. In particular it would be difficult to address transboundary issues without a significant level of leadership, coordination and complementarity. Significantly, some countries mentioned the high costs of implementation and the need for specific financing of the policy process to help ensure that policy was translated into practice. Other countries raised concerns that the wider economic environment could seriously impair implementation if revenues generated under new systems were inadequate to fund new institutional arrangements such as decentralised catchment boards.

Stability and instability: Broader social and economic stability was also a prerequisite for effective implementation. In some countries political instability and high political ‘turnover’ of key individuals affected both capacity to ensure political will was applied to the process and the existence of an executive arm of government with sufficient experience to push a policy process along. There was also concern in some cases that future political actors might not wish to continue to support an existing process.

Major implementation support required:

- *Equalising technical capacity:* This was required to ‘level the playing field’ for implementation and ranged from joint training programmes, help in assessing training and capacity building needs, to study tours of different countries and contexts;
- *Capacity to monitor and evaluate processes and impacts:* Monitoring was a major area of weakness including assessing bottlenecks in implementation, evaluation of process and impact, and, more generally, establishing systems that could track achievements against objectives at all levels and help to develop staff capacity;
- *Clearer definition of institutional arrangements for implementation:* This covered a range of issues,

including help in reassessing mechanisms of coordination and enforcing legislation, developing collaborative frameworks at a national level, and training in assessing institutional constraints and supporting the development of frameworks for assessing different user needs;

- *Support to stakeholder involvement*: Finally, building capacity in stakeholder involvement and public awareness-raising was highlighted, including the need to combine training with specific policy sub-themes such as IWRM sensitization and strategies for promoting private sector involvement.

Condensed summary of support needs

Under the different sub-themes under policy this table summarises the needs identified across the countries and the type of support required.

	Needs identified	Support requested
Process	<ul style="list-style-type: none"> • Information management • Technical capacity • Financial assistance • Legislative consistency 	<ul style="list-style-type: none"> • Annual support workshops • Technical assistance • Creation of shared databases • Training in specific areas • Capacity development 'road-mapping' • Support for policy revision and updating
Content	<ul style="list-style-type: none"> • Specific assistance on key thematic issues • Collective work on a regional cooperation framework • Collation of national water use data by sector • IWRM preparation, planning and design 	<ul style="list-style-type: none"> • Support for integration of regional issues in national policy and planning • Technical support on transboundary principles and issues • Facilitation of expertise-sharing within the basin • Help in establishing basin-wide national norms on water quality • Training in specific topics such as gender mainstreaming and conflict resolution
Implementation	<ul style="list-style-type: none"> • Training of trainers for implementation issues and new roles • Mechanisms for process monitoring, feedback and review • Public awareness-raising approaches • Legal reform and alignment • Better institutional management 	<ul style="list-style-type: none"> • Establishment of joint training programmes, including needs identification • Supervise and evaluate implementation processes • Support study tours • Establish joint training sessions on issues including public awareness raising • Provide technical assistance on stakeholder sensitization, effective performance monitoring

Indicative table of key issues and policy status across the nine riparian countries

Key issues	Burundi	DRC	Egypt	Ethiopia	Kenya	Rwanda	Sudan	Tanzania	Uganda
Institutions									
Overlapping & conflicting responsibilities	✓	✓	✓	✓			✓	✓	
Poor inter-sectoral collaboration and control	✓	✓				✓	✓		
Lack of overall responsible body	✓	✓				✓			
Complicated centre-local relations			✓	✓			✓		✓
Need for greater decentralisation of WRM		✓	✓			✓			
Active policy of decentralisation			✓		✓		✓	✓	
Discussion over role of the centre			✓	✓			✓		
Content and status									
Mention of transboundary issues (weaker lighter; stronger darker)	✓		✓	✓	✓	✓	✓	✓	✓
Policy implemented			✓	✓	✓	✓	✓	✓	✓
Finalised but pending	✓								
Redrafting in progress		✓					✓		
No policy document		✓							
Implementation									
Need for lower-level capacity development		✓		✓			✓		
Low integration of private sector / civil society	✓	✓	✓	✓	✓		✓		✓
Low public awareness / stakeholder involvement	✓	✓	✓	✓		✓	✓		✓
Monitoring and evaluation lacking	✓	✓		✓					✓
Weak management / enforcement capacity	✓	✓		✓			✓	✓	✓
Need for effective and consistent legislation	✓	✓	✓		✓	✓	✓	✓	✓
High costs / need for process financing	✓	✓	✓		✓			✓	

2 Introduction

This study is the outcome of a process of documenting current water policy development and implementation in Nile Basin Countries¹. It assesses the status of current policy processes, highlights gaps in existing policies and suggests ways in which to assist countries in enhancing policy formulation and implementation as part of a wider regional cooperation framework under the NBI. In particular, the analysis will help in planning the structure and functioning of the Policy Support Facility under the water policy component, which is part of the Shared Vision Programme's Water Resource Planning and Management Project (WRPMP).

The long-term goal of the WRPMP is to ensure that Nile Basin water resources are developed and managed in an equitable, optimal, integrated, and sustainable manner to support socioeconomic development in the region. An important element of this goal is a common technical foundation to facilitate integrated water resources planning and management from a basin-wide perspective. Common understanding of good practice in policy development, combined with enhanced skills in project planning and management and supported by basin-wide decision support tools, can facilitate cooperative development and joint investment planning in the Nile Basin.

The Water Policy Good Practice Guides and Support component seeks to strengthen capacity to formulate and implement effective national policies and strategies in Nile Basin countries following IWRM principles and practices on shared river basins. This country- and needs-driven component aims at enabling all basin countries to operate on an equal footing. From a regional dialogue on the good-practice elements of formulating and implementing water policy, this will assist Nile Basin countries in reaching a common understanding of the interaction between national policies, regional needs, and cooperative development providing a platform for enhancing the transboundary reach of national policies and strategies in the Nile Basin.

Development of this report has been both iterative and interactive at all stages. Although this report has been prepared in English from both English and French documents, there are three main languages spoken in the basin—English, French and Arabic. It is therefore recommended that the final version of the report be translated into both French and Arabic to ensure full access to the information contained within and to maximise the opportunity for further feedback and development of its content.

The water policy component has five sub-components:

- 1) Enhancing regional coordination and cooperation: This subcomponent includes activities required for the establishment and ongoing operation of the project, including regional coordination, the support of a basin wide policy task force, and assessment of policy formulation and implementation needs;
- 2) Baseline and needs assessment for water policies of the Nile Basin Countries;
- 3) Guidelines and good practice for policy formulation and implementation: A key activity is the compilation of good-practice policy guidelines and a compendium of case studies covering the processes of policy formulation and implementation through regional dialogue, exchange of experience, and consultant support. Information will be disseminated through workshops, seminars and training courses, an electronic knowledge database and other networking activities;

¹ With the exception of Eritrea which, at present, has observer status only under the NBI and is not part of this current project.

4) Capacity building and skills development in the domain of water policy formulation and implementation;

5) Policy support facility: To facilitate learning by doing advisory support will be provided through the PSF to assist riparian governments in addressing policy formulation and implementation issues. Support from the PSF will be demand-driven and be based on agreed criteria and an approved application process.

Methodology

The **process** employed in developing this report had three-stages:

1) National report development: Working with the Water Policy Lead Specialist (WPLS)², National Consultants (NC) prepared a baseline and needs assessment report for each country, including holding workshops for review and feed back under the guidance of the WPLS. These reports were submitted to the WPLS in the latter half of 2005.

2) Regional Report development: The Regional Consultant (RC)³ received reports from the WPLS and commented on their content and analysis in review sheets (see annex), which were then used to revise the national reports. National reports were subsequently consolidated into a regional report (zero draft). The consolidation process included the development of a series of matrices, under guidance from the task force, which highlighted the gaps in policy areas identified by national consultants.

3) Presentation of draft regional report: A zero draft regional report was presented at a regional workshop in January 2006 for feedback and to guide preparation of the first full draft. Workshop groups commented on three key questions set by the Regional Consultant (see Annex) to help guide feedback.

On the basis of feedback received from the groups, from the WPLS and from plenary discussions at the workshop, a first draft (1.1) report was produced in early February 2006. Following circulation of this draft further feedback was incorporated into a final draft version completed in May. This final report is the outcome of discussions over that draft and subsequent written feedback from two out of the nine countries.

The process of assessing data provided in the national reports involved: a) Simplifying the policy process into three broad areas—institutions and processes, content, and status and implementation; and b) compiling national report data into a series of comparative matrices. The content of these matrices was then compared and contrasted on the basis of: i) Commonalities in structures, processes and expressed need between countries; and ii) using comparative qualitative analysis of the data presented by the national consultants and gap analysis to identify issues not explicitly mentioned in the national reports. In parallel with this, broader comparative analysis allowed the tracing of the basin policy landscape on the basis of the most (and least) prominent policy issues. This was synthesised into a short narrative section.

Policy process matrix

To establish a common understanding of nomenclature used, the following matrix defines the major elements of an ideal type policy process. This does not mirror the processes undertaken within Nile countries, but sets a template against which comparisons can be made.

2 Dr Osman El-Tom Hamad.

3 Dr Alan Nicol.

Policy stage	Major definition
Agenda setting	Different government, non-government and private institutions raise policy issues for public and private discussion through the media, other fora and/or interest-group networks. At this stage articulation of key policy narratives take place and institutional actors seek to influence what remains in or is dropped from any emerging policy agenda.
Formation	Agenda items start to be included in draft texts before presentation to the Legislature in a particular country or in a policy statement (often the precursor to an Act). Key policy narratives may appear in different forms at this stage and generate intense intra- and inter-institutional dialogue and lobbying as drafts are circulated and finalised. At stage policy drafts may be circulated more widely to other stakeholders (e.g. beyond government) for expert-specific or more general public feedback.
Adoption	At this decision-making stage the final policy structure and content is agreed (though not necessarily consensually). It is adopted by various processes including voting in national legislatures and/or being signed into existence by decree (Presidential). This should be followed by human resource development, institutional reforms, mechanisms for enforcement of legislation and public awareness to pave the way for successful implementation of the policy.
Implementation	Once adopted the policy becomes legally binding and enters a stage of implementation, though there may be some considerable time lag between adoption and implementation. One key issue at this stage is the prior degree of consensus and/or stakeholder engagement achieved in formulation and adoption. If lacking, then implementation of an unpopular (or largely misunderstood) policy may result in failure at lower levels. Another danger is that in the process of forming the policy it becomes too vague in content and in defining roles and responsibilities thereby hindering implementation. This lack of clarity may have resulted from the need to achieve a high degree of consensus between disparate parties during formation, which is a danger of highly stakeholder-driven processes that lack effective facilitation.
Monitoring and evaluation	Monitoring and evaluation of the policy against objectives and targets set during the formation and decision-making process in theory allows feedback loops that can enable adjustments and fine-tuning during the implementation process. These loops may be established through ministries and departments conducting independent evaluations or, more generally, through processes of local voter action (but only where the political process allows for such issue-based voter behaviour). Alternatively, monitoring and evaluation may be contracted out to consultant companies.
Review	When major internal and/or external changes occur and cannot be accommodated through adjustment and fine-tuning, a full review of the water policy becomes inevitable. This starts a new round of the policy cycle.

Source: various

Policy Context

From source at the headwaters of the Kagera River in Rwanda and Burundi to outlet into the Mediterranean, the Nile and its tributaries stretch more than 6,700 km across Burundi, the Democratic Republic of Congo (DRC), Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda. With the exception of Eritrea, which is currently an observer only, all riparians are full members of the Nile Basin Initiative.

The basin covers a tenth of Africa's total land mass (some 3 million km²), and includes globally important habitats such as Lake Victoria (the second largest freshwater body by area in the world) and the vast wetlands of the Sudd in Sudan. Notwithstanding their natural endowments and rich cultural history, the basin countries face considerable development challenges. Presently the riparians include some 350 million people—or approximately half Africa's total population—of whom some 190 million live within the basin itself. Many of these communities suffer extreme poverty and are vulnerable to environmental degradation, political upheaval and climate change. With the basin population expected to double in 25

years, these multiple challenges will deepen exacerbating the problems facing the basin's socio-economic development.

Opportunities to enhance the basket of benefits that the Nile as a resource can provide is the key goal of strengthened cooperation under the NBI (see box below). More effective policy development and implementation can contribute significantly to this goal by enhancing the prospect for transboundary development projects. Opportunities include enhancing energy availability for all countries, increasing overall food production for expanding populations, developing substantial transportation opportunities, facilitating industrial development, ensuring better environmental conservation and helping to reduce propensity for conflict at all levels. Cooperation over water resource management can also catalyse greater regional integration in social, economic and even political spheres. In the longer term, so-called benefits 'beyond the river' could far exceed those deriving from the river itself (Sadoff, et al, 2002).

NBI establishment and structure

Nine of the 10 Nile riparians established a forum to facilitate a process of legal and institutional dialogue in 1997. In early 2000, a panel of experts concluded 3 years' work by producing a draft "Cooperative Framework" text. By early 2006 this Framework was nearing completion with most outstanding issues having been resolved. In the mean time, Nile riparians also agreed to take concrete steps towards greater cooperative development through the formal launch of the Nile Basin Initiative (NBI) in February 1999.

The NBI is a transitional institutional mechanism guided by: i) a shared vision "to achieve the sustainable socio-economic development through the equitable utilisation of, and benefit from, the common Nile Basin water resources" ; and ii) a set of policy guidelines which provide a basin-wide framework for cooperative action.

The NBI structure is comprised of a Council of Ministers of Water Affairs of the Nile Basin (NileCOM), a Technical Advisory Committee (NileTAC), and a Secretariat (NileSEC) located in Entebbe, Uganda. The NileCOM is the main policy and guidance forum for Nile Basin cooperation (there are subsidiary ENCOM and NELCOM organs), whilst NileTAC coordinates joint activities and establishes working groups as required to accomplish specific tasks.

To translate the NBI's shared vision into action, a Strategic Action Programme was launched to identify and prepare cooperative projects in the Basin. The Programme comprised two complementary sub-programmes: i) a Shared Vision Programme (SVP) of technical assistance and capacity building-type projects implemented basin-wide to create an enabling environment for cooperative development; and ii) Subsidiary Action Programmes (SAP) carried out by smaller groups of Nile riparians, comprising physical investments at the sub-basin level.

The basin-wide Shared Vision Programme currently includes eight projects. Four of these are thematic in nature, addressing issues related to environmental management, power trade, efficient use of water for agriculture, and water resources planning and management (under which the Water Policy component falls); the other four are to facilitate efforts to strengthen confidence-building and stakeholder involvement (communications), the development of applied training in the basin, promoting and developing benefit sharing approaches and to ensure effective integration, execution and co-ordination.

Two Subsidiary Action Programmes: The Eastern Nile Subsidiary Action Programme (ENSAP) which includes Egypt, Sudan and Ethiopia; and the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP) which includes the six countries in the southern portion of the Basin, as well as Sudan and Egypt, are the means by which countries can identify and execute joint investment projects.

Source: World Bank

Complexity issues

'The whole life of policy is a chaos of purposes and accidents. It is not at all a matter of the rational implementation of the so-called decisions through selected strategies.' (Clay and Schaffer, 1984).

Water, by its nature, intersects sectors and national borders, hence any water policy should take into consideration policies of other related sectors. Moreover, if countries share a river basin like the Nile their national water policies should reflect awareness of impact and opportunity beyond national borders, as well as the impact of the neighbouring countries' water policies on their own access to, and use of, the resource.

The desired outcome of the Water Policy is that national water policies and strategies are improved or

initiated in Nile Basin countries according to sound IWRM and good-practice guidelines, especially those related to international river basins. In order to achieve this outcome a necessary level of shared awareness of the regional policy environment is required, and of the policy goals and needs of different riparian countries.

Policy processes are embedded in complex institutional and political-economic environments that are subject to key influences beyond water management issues—including external trade environments, energy prices, population movements and, quite probably, global climate change issues. The literature reflecting the complexity of such policy environments is considerable. An overview prepared by Sutton (1999) highlighted some important issues, including five key cross-cutting themes in the literature: a) the division between policy making and implementation; b) the management of change issue; c) the important role of interest groups in the policy process; d) the question of ownership of the policy process; and e) the narrowing of policy alternatives.

Often policy is depicted as a linear process involving rational choices between distinct ‘options’. Under such a conception policy makers are problem-solvers providing balanced, objective and analytical decision making skills based on high quality (and agreed) information sets: they epitomize ‘rational economic being’ and careful order and structure. In such a conception the process is not contested either inwardly or outwardly and decisions are taken sequentially, beginning with identification of issues and challenges (the agenda-setting) and ending with identified actions to address these issues (the implementation process and subsequent monitoring and evaluation). Commonly there are three phases: an agenda-setting phase (asking the question what is the problem?); a decision making phase (what should we do?); and an implementation phase (undertaking actions on the ground) (see Grindle and Thomas, 1990). If there are problems, these may be ascribed to a lack of political will in implementation (as is so often the case in the water sector), or because of poor resource management.

Other disciplines, notably sociology and political science, contribute ideas on policy ‘narratives’ and policy ‘discourses’, whereby narratives tell a story about a situation and help to simplify often complex and overlapping causes and effects: ‘we are water scarce, therefore we should improve our supply infrastructure’ or ‘our wetland areas are important for long-term tourism development so we should ensure base environmental flows at all times’. Such narratives may become ‘conventional wisdom’ or what Allan (1999) has described as ‘sanctioned discourse’ if they become part of the dominant political landscape and have powerful interests backing them.

Weaker narratives, with less access to decision makers and based on narrower sub-national or interest group concerns may contest the more dominant narratives sometimes in the national policy space through the media, but often in more private realms and through informal contact. They may, however, prove relatively incapable of influencing what is actually included in policy because: a) such narratives may lack the power resources to influence decisions taking in policy formation; and/or b) they may themselves be politically infeasible (perhaps representing overtly narrow group or geographical interests).

How quickly policy formation takes place is an area of debate in the literature. Sutton identifies different models of policy change over time: the incrementalist model where policy makers examine limited alternatives and choose options that differ only marginally, with an emphasis on consensus-building rooted in what can be done (the politically feasible) (Lindblom, 1980); a mixed-scanning model which involves looking at a broad range of options and examining in-depth a limited number; the policy as argument model which regards reforms as outcomes of ‘reasoned arguments’ developed through debate

and exchange between state, society and competing knowledge systems (e.g. the science community, the environmental lobby, practitioners, engineers, and others); policy as social experiment, where different options are tried—essentially testing hypotheses of change—and a final outcome is achieved through trial and error; and policy as interactive learning, where ‘stakeholder perspectives’ take centre stage in order to promote interaction and sharing of ideas between policy-makers, and ‘recipients’ of policy.

Problems of policy implementation are numerous and go beyond the frequently cited problems of lack of commitment. Institutional capacity gaps, lack of legal sanction to enforce the necessary obligations on institutional parties as well as possible policy ‘evaporation’ at lower levels due to lack of effective communication can be associated with implementation failure. The reasons are likely to be multiple and complex, rather than single-issue. Lindblom argues that implementation always makes or changes policy to some degree: ‘Policy implementers interact with policy makers, adapting, co-opting, or simply ignoring new policies, making implementers crucial actors whose actions determine the success or failure of policy initiatives’ (Lindblom, 1980). The implication of frequent implementation failure is that implementers and recipients must be brought into policy development processes from their inception. This reflects a need for strong process-based approaches that recognise consensus-building, participation of key stakeholders, conflict resolution, compromise, contingency planning, resource mobilisation and adaptation as features of successful policy development. Encouragingly, many of these features are highlighted in the national needs assessments.

How to use this report

This report is a starting point for analysis of policy on water resources in the Nile basin and for assessing how best to support countries at different stages of policy development and implementation. It provides an assessment of the kinds of activities that the PSF could engage in, ranging from training and capacity building, to study tours and the facilitation of better information management within and between countries. It is not a vehicle for rigorous comparative analysis of different countries because of the clearly variable architecture of policy environments in respective countries and the varying levels of detail provided by national consultants in their respective reports.

Primarily this should be used as a working document, and should receive additional inputs on policy content, status and implementation as part of a process of maintaining and enhancing the sharing of information on basin policy processes. It is suggested that the report is substantially revised and updated as part of a PSF review process in 2008, enabling the report to become a part of live feedback on project progress.

3 Policy analysis

This section provides a consolidated summary of the key institutional, policy content and implementation landscape in the basin and is based on the material provided in the national reports. At the end of each section there is a synthesis of key issues arising.

Institutions and processes: Summary issues

The following tables on institutional processes and policy formation provide for comparison of country situations based on data included in the national consultant reports. From this analysis a clear set of issues emerges.

Firstly, overlapping and conflicting responsibilities are significant in many countries to which are linked issues of poor inter-sectoral collaboration and control. Some countries note a lack of overall cooperation within the sector or of an overall body responsible for cooperation. In addition there are complicating factors provided by different state structures—i.e. between states that are more centralised or more decentralised (and some that are federal in structure). In the latter case, in particular, roles and responsibilities between institutions at different levels are ill-defined and definition and clarity are often mentioned as challenges. This is of particular importance when considering stakeholder involvement and the need for awareness raising to help strengthen implementation; weak local structures may hinder their success. In only a few countries is mention of shared responsibilities with civil society in developing and implementing policy made explicit. At the same time as the need for more decentralised management structures is recognised there is also discussion of the role of the ‘centre’ as a primary institutional knowledge manager. In some countries this is tied to the need for overall capacity development and the generation of national data on resource availability and demand by sector which can assist countries in engaging with regional and transboundary processes.

Some countries note the major global policy changes that took place during the 1980s and 1990s and the need to reflect these in national policy. Of particular note is the need to increase the type and range of institutions involved in policy development, content and implementation with frequent mention made of the need to support private sector involvement. In some countries where the institutional environment is more developed and comprehensive, this is matched by the more frequent need to revise and address new policy issues, particularly where population growth is rapid and water availability declining per capita.

The need for external assistance in facilitating between institutions in policy formation is raised, including help in guiding stronger and more inclusive processes. In some cases, however, it is acknowledged that there are political ‘distractions’ that make the policy environment difficult to manage.

3.1.1 Institutional process matrix

	Key Institutions involved in the water sector	Institutional issues identified
Burundi	<ul style="list-style-type: none"> • Ministère de l'Aménagement du Territoire et de l'Environnement et du Tourisme • Ministère de l'Energie et des Mines • Ministère du Développement Communal et de l'Artisanat • Ministère du Commerce, de l'Industrie • Ministère de l'Agriculture et de l'Elevage • Ministère de la Santé Publique • Ministère de l'Intérieur et de la Sécurité Publique • Ministère des Transports, Postes et Télécommunications • Ministère des Relations Extérieures et de la Coopération • Geographical Institute of Burundi; publicly-owned, this covers a number of areas including hydrology and meteorology; it is the national focal point for Nile basin cooperation 	<ul style="list-style-type: none"> • Overlapping responsibilities and capacities • Lack of qualified personnel, basic financing and equipment • Lack of technical knowledge at higher levels • Scattered information and data on the sector • Competition between departments and overlapping control and regulatory responsibility • Little inter-sectoral collaboration • Ineffective policy implementation • Better coordination required vertically and horizontally • Decree to put into place the structure to coordinate National Water Policy implementation has yet to be updated, thus hindering implementation; there is no-one to take the initiative on implementation of the NWPIf an institutional structure were in place, the anticipated budget for implementation of US\$ 9.1 million over 10 years still beyond current capacity • Insufficient consultation among partners in the sector • Election periods distract decision makers' attention • Confusion between management and resource exploitation roles generates 'competence conflict' • In formulating the NWP, some partners have not been involved (NGOs, private sector, donors) • Recognition that the policy is not "once-and-for all" and must be dynamic and inclusive • NWP has never been presented to Parliament to be accorded legal status.

	Key Institutions involved in the water sector	Institutional issues identified
DRC	<ul style="list-style-type: none"> • Comité national d'action de l'Eau et de l'Assainissement (CNAEA) (Ministère du plan) • REGIDESO (Ministère de l'énergie) • Service National de l'hydrologie Rurale (SNHR) (Ministère du Développement Rural) • Commission Nationale de l'Energie (CNE) (Ministère l'Energie) • Zones de santé Rurales (ZSR) Ministère de la Santé • Régie des voies Fluviales (RVF) (Ministère de Transport) • Régie des voies Maritimes (RVM) (Ministère de transport) • METTELSAT (Ministère de transport) • Institut National d'études et de Recherches Agronomiques (INERA) (Ministère de l'Agriculture) • Office de Voirie et Drainage (OVD) Ministère des Travaux publics et Urbanisme • Direction de Ressources en Eau (DRE) Ministère de l'Environnement • Programme National d'Assainissement (PNA) Ministère de l'Environnement 	<ul style="list-style-type: none"> • Lack of overall body responsible for the sector • Lack of coordination and competition between institutions
Egypt	<ul style="list-style-type: none"> • Ministry of Water Resources and Irrigation (MWRI) • Ministry of Agriculture and Land Reclamation (MALR) • Ministry of Housing, Utilities and New Communities (MHUNC) • Ministry of State for Environmental Affairs (MSEA) • Ministry of Health and Population (MoHP) • Ministry of Industry (MoI) • Ministry of Transportation (MoT) • Ministry of Local Development (MoLD) • Ministry of Electricity (MoE) • Ministry of Planning (MoP) 	<ul style="list-style-type: none"> • Poor coordination between concerned institutions • Lack of proper maintenance of previously established projects funded by foreign technical assistance due to limited budgets • Sector activities shared between many authorities (ministries and governorates), as well as local councils, investors' associations, water users' associations (WUA), and water boards (WB) Legal framework needs to be reinforced and certain laws updated
Ethiopia	<ul style="list-style-type: none"> • Ministry of Water Resources (MoWR) is composed of nine technical departments and eight supportive units/ services established in 1996 • Regional Water bureaux in each region • Regional Irrigation Development Authorities 	<ul style="list-style-type: none"> • Prior to 1995 sector institutions fragmented • Still some overlapping responsibilities (e.g. water quality management) • Role of regional Water Bureaux still not well-defined • Some regions not ready or able to undertake responsibilities (e.g. collection and analysis of hydrological data) • Organization lacking in some departments (e.g. Planning and Projects, Transboundary Rivers, Water Resources Management & Water Utilization) • MoWR lacks strong centralized information system

	Key Institutions involved in the water sector	Institutional issues identified
Kenya	<ul style="list-style-type: none"> • Current institutional emerged from 1974 National Water Master Plan under which the Government upgraded the Department of Water Development (DWD) of the Ministry of Agriculture into a full Ministry of Water • Ministry of Water and Irrigation established in January 2003 • Regulatory functions are the mandate of Water Resources Management Authority (WRMA) • WRMA appoints Catchment Area Advisory Committees (CAACs) of up to fifteen persons in each catchment to advise on water resources management, including granting and revoking of permits • Water Services Regulatory Board regulates provision of Water and Sanitation Services and licenses Water Services Boards (WSBs), approving their appointed Water Services Providers (WSPs) through Service Provision Agreements • Water Resources Users Associations act as fora for conflict resolution and co-operative management of water resources in catchment areas • Water Services Trust Fund: (WSTF) assists in the financing of provision of water supplies in areas otherwise inadequately served • Water Appeals Board: (WAB) adjudicates disputes within the sector • Kenya Water Training Institute trains water technocrats and undertakes joint research activities 	<ul style="list-style-type: none"> • 1980s budgetary constraints prevented delivery of goals • Government started “handing over” and developed the National Water Policy, which was adopted by Parliament as Sessional Paper No 1 of 1999; the Policy also stated that the Water Act be reviewed and updated, attention being paid to the transfer of water facilities • The National Water Policy and the Water Act 2002, have reformed the sector resulting in new autonomous institutions with clear roles and powers • National policy provides for public consultations in decision making, separation of roles, and stakeholders participation • Major obstacle is the lack of adequate resources to fully operationalise the new institutions though the newly-established institutions are only in their second year of operations

	Key Institutions involved in the water sector	Institutional issues identified
Rwanda	<ul style="list-style-type: none"> • Ministry of Lands, Environment, Forests, Water and Mines (MINITERE) • Ministry of Agriculture (MINAGRI) • Ministry of Infrastructure (MININFRA) • Ministry of Health (MINISANTE) • MINICOM • MINALOC • RURA (L'Agence Rwandaise de Régulation des Services d'Utilité Publiques) 	<ul style="list-style-type: none"> • Weak management capacity and need for staff training • Need to balance concurrent demands (for domestic, agricultural, industrial, energy and environmental); sustainable management requires integrated decision-making taking account of the interdependence of these sectors • Should manage water resources inter-sectorally and with better coordination of donor interventions • Should avoid negative effects of projects on other resources or usage and take into account upstream and downstream users • Develop integrated water resources management (IWRM) directives and manuals for better sector coordination and policy implementation • Establish National Water Management Authority tasked with integrated management • Accelerate current national water law formulation to facilitate policy implementation • Undertake major dissemination of policy document, water master plan elaboration and capacity building

	Key Institutions involved in the water sector	Institutional issues identified
Sudan	<ul style="list-style-type: none"> • Ministry of Irrigation and Water Resources (MIWR) • National Council for Water Resources (NCWR) formulating common water resources policies and coordinating activities of which Technical Water Resources Organ (TWRO) is executing arm • The National Water Corporation (NWC) • States Drinking Water Corporations under the authority of the respective state ministers responsible for water affairs including operation, maintenance and management of drinking water utilities • The Executive Unit of Merowe Dam Project • The Executive Unit for Heightening Roseires Dam • Kenana and Rahad Executive Corporation • Jonglei Canal Executive Authority • Nile Waters Directorate (NWD) • Ground Water & Wadis Directorate (GWWD) • Irrigation Operation General Directorate (IOGD) • Hydraulic Research Station (HRS) • Ministry of Health • Ministry of Agriculture • Ministry of Power • Ministry of Industry • Ministry of Finance and National Economics • Ministry of Foreign Affairs • Ministry of Environment and Tourism • Ministry of Regional Governments • Ministry of Justice 	<ul style="list-style-type: none"> • Enforcement of legislation and policy depends on the relevance of the regulations and on the administrative machinery for implementation or compliance • More effective machinery for enforcement of regulations is required; e.g. pollution control regulations are not applied; siting restrictions on pumps are poorly or no longer enforced, and aquifer monitoring is lacking • Active participation of private sector in irrigation services will require a greater role for MIWR in resource stewardship; its capability as a regulatory and controlling agency should be enhanced, as the private sector is becoming more active in providing services • MIWR should also be empowered to establish polices, regulations and guidelines to monitor and control the private and public sectors performance in water resources development and management • Stronger inter-sectoral coordination mechanism required, and is recognized as an essential requirement in developing the integrated, holistic approach needed for sustainable water resources management
Tanzania	<ul style="list-style-type: none"> • Ministry of Water and Livestock Development (MoWLD) • Ministry of Health • The Energy and Water Utilities Regulatory Authority (EWURA) • Urban Water Supply and Sewerage Authorities • Water Supply and Sanitation Authorities • President's Office; Regional Administration and Local Government; Municipal and District Councils; Village Councils 	<ul style="list-style-type: none"> • Policy proposes multi-sector coordination to be vested with the Ministry responsible for Water Affairs • To be more effective, an appropriate mechanism to coordinate all relevant sectoral issues, including the alignment of various policies to avoid conflicts at operational level is a matter of urgency • An apex body might perform this role

	Key Institutions involved in the water sector	Institutional issues identified
Uganda	<ul style="list-style-type: none"> • Ministry of Water, Lands, and Environment (MWLE) • Water Policy Committee (WPC); multi-disciplinary team representing stakeholders and constituting advising the Minister and mandated to initiate revisions to legislations and regulations; coordinates sector ministries' plans and projects affecting water resources; key function is the formulation of an international water resources policy • Directorate of Water Development (DWD); lead technical agency responsible for managing water resources, coordinating and regulating all sector activities and provides support services to the local governments and other service providers through its technical department - the Water Resources Management Department (WRMD); comprises Water Resources Monitoring and Assessment, Water Quality Analysis and Water Resources Regulation Divisions, which manages the Water Permits Unit. • National environmental Management Authority (NEMA); regulates all environmental management in Uganda including wastewater discharge regulation • National Water and Sewerage Corporation (NWSC); autonomous parastatal entity responsible for the delivery of water supply and sewerage services in 15 large urban centres • Local Authorities; comprising Districts, towns and lower local governments together with the communities, are responsible for implementing, operating, and maintaining water supply and sanitation facilities (except in the large urban centres under NWSC) • Municipal and urban councils mandated to operate, maintain and manage urban water supplies for domestic and industrial use in partnership with water user groups, associations and water authorities; also handle the licensing of industries, solid, sewerage waste disposal and drainage systems in their localities; important role in the management and protection of water resources • Sub-county council is responsible for the provision of water and sanitation services and protection of natural resources including water • Water user groups and associations are mandated to manage, operate and maintain water point resources at community level; lower local government thus plays key role in setting local priorities and mediating in water management issues. • Ministry of Health (MoH) responsible for hygiene promotion and household sanitation, spearheaded by the Environmental Health Division (EHD) • Ministry of Education and Sports (MoES) is responsible for hygiene promotion and sanitation in schools. It works to ensure that schools have the required sanitation facilities and provide hygiene education to 	<ul style="list-style-type: none"> • Other partners/institutions actively involved in the management of water resources in the country include NGOs (local & international), the private sector and other institutions • Some aspects of water management integrated within community initiatives and under village level administrative arrangements; where the case, communities are organized into user groups. • Water policy recognizes that all interest groups in Uganda including private sector organizations and NGOs will be engaged in partnership with the government at an operational level • Uganda Water and Sanitation NGO Network (UWASNET) formed as the umbrella organisation for all NGOs (over 120 registered today under UWASNET) involved in the water and sanitation sector; role is well recognized by both government and development partners • Currently, the private sector has only been used in contracted implementation roles; government intends to promote the role of the private sector in mobilizing and financing development and provision of water and sanitation services through Build Own and Operate (BOO) or Build, Operate and Transfer (BOT) arrangements, especially in urban centres • The existing institutional framework in Uganda lacks strong river/lake basin management authorities, catchment boards or similar bodies to manage and regulate Uganda's trans-boundary water resources including the Nile

	Key Institutions involved in the water sector	Institutional issues identified
Uganda	<p>the pupils including the need for hand washing after latrine use</p> <ul style="list-style-type: none"> • Ministry of Gender, Labour and Social Development (MGLSD) is responsible for gender responsiveness and community mobilization • Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) interfaces with MWLE in the implementation of water for production programmes, in particular the use and management of water for irrigation, animal production and fisheries • Ministry of Energy responsible for Hydropower development • Ministry of Finance, Planning and Economic Development responsible for macroeconomic management leading budgeting and planning, including allocation of funds for the operations of other Ministries. It is the contact ministry in mobilization of development partners supporting the various sectors in the economy • Ministry of Foreign Affairs; responsible for foreign affairs and regional cooperation; plays key role in maintaining the diplomatic fabric between Uganda and other riparian states • Ministry of Justice and Constitutional Affairs is responsible for analysis and advice on legal matters pertaining to the country's cooperation with other riparian states 	

3.1.2 Policy formation matrix

	Policy process
Burundi	<ul style="list-style-type: none"> • National Water Master Plan (PDNE) initiated in 1993 • In 1999 FAO supports government to set up multisectoral working group on water resources management policy (NWP) • National Policy and Strategic Action Plan for the Water Sector completed in 2001; Action Plan indicates objectives, actions, performance indicators, institutional responsibilities, budgets and implementation calendar • Implementation to extend from 2001 to 2010; Ministry of Land Management and Environment overall coordinator; Geographical Institute of Burundi technical coordinator • Relatively low implementation to date due to confusion over articles in the text • Key need for better vertical coordination within the sector and greater horizontal coordination with other sectors • Council of Ministers reinforcing coordination role of the Geographical Institute • The Environment Code in 2000 provides the basis for environmental management • The NWP, adopted in September 2000, describes main directions and strategies for water resource development • Formation process described as ‘considerably inclusive’ because 11 national institutions involved at a senior level • Action Plan anticipates participation by public sector and local communities through communal administration, but involvement described as ‘very weak’ by private sector, NGOs and donors • Decree to put into place the structure to coordinate NWP implementation yet to be updated thus hindering implementation; as a result, no-one to take the initiative on NWP implementation • Anticipated budget for implementation of US\$ 9.1 million over 10 years beyond current government capacity • Insufficient consultation among different partners in the sector • Election periods distract decision makers’ attention • There is confusion between the role of management and resource exploitation, which generates a ‘competence conflict’ Recognised that the policy is not “once-and-for all” and must be dynamic and inclusive • The NWP (National water policy) has never been presented to Parliament to be accorded a legal status
DRC	<ul style="list-style-type: none"> • No unified water policy in existence • Many existing documents affecting management and allocation date from pre- and post-Independence eras • Seminar held in 1988 on National Standards and Water Quality aired many of the challenges facing the sector • Development of a Water Bill including within it a Water Code supported by UNDP, including a workshop for different sector actors • Water Code has been awaiting promulgation since 2000

	Policy process
Egypt	<ul style="list-style-type: none"> • Water policy development in Egypt an ongoing process • Succession of water policies over the years starting from the completion of the High Aswan Dam (HAD) • Until 1999 policies concentrated on supply-side management • In 1975 initial policy looked at available water resources and determined excess water available for use in agricultural land expansion, yet neglected future increases in water requirements except in the agriculture sector, paid little attention to groundwater availability and neglected altogether industrial water demand • 1980 Ministry of Irrigation evaluated available water resources and distribution; projected water resources status every five years starting from 1980 until 2000; 1980 policy considered development of agricultural drainage water reuse as a major source; Irrigation Improvement Project seen as having a major effect in the long term • 1982 Egyptian Water Master Plan's long term objectives to optimize the development and use of the available water resources and to reinforce the government capacity in water planning in order to be able to support socio-economic development • 1986 revision to 1980 policy updated basic assumptions of that policy based on changes to upstream supplies and expected impact of Irrigation Improvement Project on quantity and quality of agricultural drainage water reuse; main policy objective to sustain the use of water resources in order to close the country's food gap • In 1990, the 1986 water policy was reviewed and updated to account for some eight years of drought, a halt to conservation projects (Jonglei canal, 1983), and the formulation of the new agricultural expansion policy • 1993 Water Security Project sought to promote most efficient use and allocation of Egypt's scarce water, developing projections of water availability and demand over ensuing 20-year period • Better enabling environment needed; formed by the national and regional policies and legislation that enable all stakeholders to participate. Role of government crucial; replace traditional prescriptive, centralised approaches by the creation of a framework within which participatory and demand-driven sustainable development can take place; includes decentralization and privatization while the national government would act more as regulator and controller; water legislation should enable this changing role • Institutional roles and functions of organizations at different levels should be clearly described, including creation of effective co-ordination mechanisms between the different agencies and the development of financial structures that enable these agencies to perform their tasks efficiently • Institutional Reform Unit established within MWRI will play a major role in this respect
Ethiopia	<ul style="list-style-type: none"> • Policy formulation undertaken by multidisciplinary team • National Water Policy based on macro economic and social policies and strategies • In-depth discussion of principles and drafts at grassroots level with participants from regional bureaus down to the woreda levels in order to consider water resource development objectives and to include felt needs of people

	Policy process
Kenya	<ul style="list-style-type: none"> • With external assistance the government conducted a national master plan study between 1976 and 1981, later updated to a second National Water Master Plan study between 1990 and 1992 with Japanese assistance • Studies proposed a future framework for water development and highlighted major problems and constraints in the sector including lack of a comprehensive policy-institutional-legal framework to guide development; and financial constraints on realising the goals and objectives of supplying potable water to all • In developing the National Water Policy, the Government established a National Task Force to review and replace the Water Act with a draft Bill • The Water Act (2002) introduced key reforms to the legal framework for the management of the water sector in Kenya which revolve around: a) separation of the management of water resources from the provision of water services; b) separation of policy making from day to day administration and regulation; c) decentralization of functions to lower-level state organs; d) the involvement of non-government entities and communities in the form of Water Users Associations to manage water resources and provide water supply and sanitation services.
Rwanda	<ul style="list-style-type: none"> • In 1994 the government undertook development of a single national policy on water management • The World Bank co-convened a seminar in 1997 to discuss and outline the major features of a new policy • The Ministry of Agriculture produced in 1998 an outline of major areas of policy and the overall organisation of the sector • Completion of two documents was made possible in 2001 when the Hydrological and Water Resources Management Division was established within MINTRAP, allowing the integration of concepts of decentralisation, community participation and private sector involvement in water management • In February 2004 the government held a workshop to examine policy options on different water management issues, bringing together donors, ministries, NGOs, private and public sectors, and representatives from the regions • The Policy was finally agreed by the Council of Ministers in October 2004
Sudan	<ul style="list-style-type: none"> • The establishment of the Technical Water Resources Organ in 1992 and the National Water Council in 1995 facilitated the integration of all water resources sub-sectors; the Ministry became responsible for all matters related to water resources comprising policies, strategies, plans, and development of national and international water resources • Sudan's existing Water Policy (1992) was formulated by a team of Sudanese specialists under the auspices of the Ministry of Irrigation and Water Resources • Given the lessons of implementing the 1992 Water Policy, a multi-disciplinary, multi-sectoral committee was formed in 1999 to review, integrate and update the 1992 Policy • The committee drew representatives from all water-related institutions, including the private sector and NGOs • Supported by the FAO and the UNDP, the committee evaluated existing material, discussed with state governments, farmers, communities, NGOs and donors • The Committee reviewed other international experiences in the formulation of the guidelines, emphasising key bottlenecks, limitations and constraints embedded in sector in Sudan which needed to be adequately addressed • A preliminary draft of the national water policy was circulated to stakeholders within Sudan; it was then evaluated and improved on at a national workshop before finally being referred to all related federal ministries and state governments for comments • The remaining steps are to submit the revised policy draft (2000) to the National Water Resources Council for final improvement and then to the appropriate executive and legislative institutions for endorsement

	Policy process
Tanzania	<ul style="list-style-type: none"> • Policy formulation was prompted by the recognised need for review and up-date; policy support frameworks are still being developed • The new National Water Policy (NAWAPO) (July 2002) is the outcome of a review of the previous national water policy of 1991 carried out under the River Basin Management and Smallholder Irrigation Improvement Project (RBMSIIP) and reflects major global policy change in the sector post-1992 Dublin Conference Drafts of the policy and supporting frameworks were discussed and passed by cabinet of ministers; the policy was inaugurated in March 2003 • The entire process is described as involved and requiring considerable consensus building • The National Water Sector Development Strategy (NWSDS) has been developed and a Final Draft was prepared in February 2005 • A review of existing laws has also been conducted and is at an advanced draft stage (2005)
Uganda	<ul style="list-style-type: none"> • The formulation of Uganda's water policy emphasized consultation and participation by stakeholders; external technical and financial support was given and a process-oriented approach adopted; this ensured ownership of the process and policy issues as well as capacity building at centre and local governments levels • In conformity with the Water Act Cap 152, the first WPC members were appointed in March 1999 by the Minister, MWLE and inaugurated on 30th March 1999 • Their term of office expired in March 2002, without major activities, and only one formal meeting was held, in addition to training on international Water Laws and Negotiation skills on three occasions

Content and status: Summary issues

In all countries apart from DRC (2005) policies are either in place, drafted, completed and/or awaiting implementation. Much of this activity stems from the post-1992 era reflecting global policy change and the need for new thinking to be incorporated within revised policy approaches. Not surprisingly, many of the policies therefore include reference to IWRM principles and in two countries in particular there are concerted efforts at operationalising decentralised catchment management. Other countries are further behind in implementation but still make strong reference to IWRM principles in policy documents.

Policy content varies considerably according to specific national agendas (and the influence of institutions therein), for instance reflecting the need for long-term scenario building where per capita availability is rapidly declining. On the whole most policies do not refer to transboundary issues in great detail, barring reference to international (bilateral and multilateral) agreements to which countries are already party. None make explicit mention of benefit-sharing issues. This is perhaps not surprising given that key policy processes were in many cases established prior to NBI development. The challenge is how is to reflect the new regional cooperation agenda more effectively in future processes of policy development, revision and implementation. The need for a dynamic approach to policy that can allow the reflection of new and emerging realities is called for by some countries.

Recognising the need to refine policy content further, different countries suggest the need for further inclusion of issues such as water allocation (national and international), new concepts of benefit sharing, rainwater harvesting, pastoralist issues, the role of the private sector, cost sharing in implementation of projects and water pricing. Some suggestions reflect recognition of the need to address 'new principles' of management as enshrined in post-Dublin Statement global water policy processes.

One key comment on the process of forming policy content was the need to 'replace prescription with demand-driven participation'. This reflected a strong belief that effective implementation required that policy content be owned by constituencies likely to be affected—in effect completing the circle from design, through formation, to implementation impact, monitoring and evaluation. This reflected a perceived need to create proper enabling environments for the whole policy process from conception through to implementation, an important part of which was the more effective provision of information during policy formation processes to enable and elicit broader input into policy development processes. One of the key reasons cited was that some issues included within policy were in their own right highly sensitive and controversial and therefore likely to provoke dispute unless their rationale was adequately explained at the outset.

3.1.3 Policy documentation matrix

	Key current policy documents	Status
Burundi	<ul style="list-style-type: none"> • November 26, 1992 Decree • National Water Resource Management Policy • National Water Master Plan (Le Plan Directeur National de l'Eau (PDNE)) • Bilateral and multilateral accords (including between Belgium and the UK, dated 1934) on water allocations and the frontier on Lake Tanganyika) • Convention on the sustainable management of Lake Tanganyika • Legal Order of 26th November 1992 basic legislation for Burundi's water sector • Environmental Code of Burundi (2000) • Kagera River Basin organisation • Ramsar Convention ratified by Burundi in 1997 	<ul style="list-style-type: none"> • The National Water Policy (1992) has not been put into operation because of lack of an executing decree • The National Water Master Plan remains inoperative
DRC	<ul style="list-style-type: none"> • Since 2000 and with the assistance of UNDP the government has executed a project to establish a Water Law and Code 	<ul style="list-style-type: none"> • No water policy in place; policy development in early stages
Egypt	<ul style="list-style-type: none"> • Ministry of Irrigation, 1975, the Water Policy of Egypt, Cairo • Ministry of Irrigation, 1982, Summary of the General Policies of Ministry of Irrigation, Cairo Ministry of Irrigation • 1986, the Water Policy and our Relations with the Nile Basin, Cairo • Ministry of Public Works and Water Resources, 1993, Water Security Project. Main Report, Cairo • NWRP, January 2005. Water for the future, National water resources plan 2017, Ministry of water resources and irrigation, Cairo, Egypt. 	<ul style="list-style-type: none"> • Water Policy (2005) • Water Policy in place (1999)
Ethiopia	<ul style="list-style-type: none"> • Ethiopian Water Resources Policy, MoWR, 1999 • Ethiopian Water Sector Strategy, MoWR, 2001 • Water Sector development Programme, WSDP, MoWR, 2000 	<ul style="list-style-type: none"> • Water Policy in Place (1999)
Kenya	<ul style="list-style-type: none"> • The National Water Master Plan (1992); updated in 1998 as the 'After Care of National Water Master Plan' • Sessional Paper No.1 of 1999, on the National Policy on Water Resources Management and Development • Water Act 2002 as principal water legislation in the country • The Draft National Water Resources Management Strategy (2005 – 2007) • The Draft National Water Services Strategy (2005 – 2007) 	<ul style="list-style-type: none"> • The Water Bill 2002 was published on 15th March 2002 and passed by Parliament on 18th July 2002 • It was gazetted in October 2002 as the Water Act, 2002, and went into effect in 2003 when implementation of its provisions commenced • Water Policy in place (1999)
Rwanda	<ul style="list-style-type: none"> • Water Sector Policy, Ministry of Lands, Environment, Forests, Water and Mines, October 2004 	<ul style="list-style-type: none"> • Water policy in place
Sudan	<ul style="list-style-type: none"> • Sudan National Water Policy (1992) • Sudan National Water Policy (Draft) of 2000 (SNWP) 	<ul style="list-style-type: none"> • Water policy in place (1992); 2000 draft only

	Key current policy documents	Status
Tanzania	<ul style="list-style-type: none"> • National Water Policy – The United Republic of Tanzania. Ministry of Water and Livestock Development, July 2002 • Ministry of Water and Livestock Development, February 2005: National Water Sector Development Strategy 2005 to 2015, Final Draft - The United Republic of Tanzania • Ministry of Water and Livestock Development, February 2005: Water Resources Bill, Final Draft- The United Republic of Tanzania • Ministry of Water and Livestock Development, February 2005: Water supply and Sanitation Bill, Final Draft - The United Republic of Tanzania 	<ul style="list-style-type: none"> • Water policy in place
Uganda	<ul style="list-style-type: none"> • The National Water Policy (1995) • The National Environment Management Policy (1994) • The National Sanitation Policy (Draft) 	<ul style="list-style-type: none"> • Water policy in place

3.1.4 Policy content matrix and gap analysis

	Key policy content	Observed gaps by national consultants
Burundi	<ul style="list-style-type: none"> The NWP adopted in September 2001 describes main directions and strategies for water resource development in different socio-economic sectors of the country; it covers the following broad areas: <ul style="list-style-type: none"> i) access to drinking water; ii) rural access to hydro-electric energy; iii) increased rational use of water resources to satisfy population needs including agricultural and pastoral production; iii) sustainable protection of the resource; iv) improvement in mechanisms of coordination and ways to support management capacity in the sector of water 	<ul style="list-style-type: none"> Policy described as 'well presented' by international norms Policy on trans-boundary management highly summarized; there is a need to expand on the following: diversion and utilization of water resources; revision of existing accords and treaties related to international waters; protection of the environment surrounding the upstream basin; preservation of water quality for use downstream; questions on water sale; plans for data management and information communication including available decision support systems; an adequate framework of cooperation acceptable to all; cooperation principles in case of national disasters, inter-state conflicts, etc The NWP does not handle issues concerned with water rights in water resources management; water rights are covered under the 26 November 1992 Decree related to institutions and organizations in the public domain; this document covers issues of regulation, protection, transfer and access to water, but the Decree is inoperative due to the lack of a text of application Neither the Law nor NWP are widely publicly known Mechanisms to evaluate and revise the policy on water have not been considered Human resource needs have not been sufficiently examined under the sector evaluation Cost of implementation estimates have not been assessed
DRC	<ul style="list-style-type: none"> DRC has no national policy or strategy document (2005) 	<ul style="list-style-type: none"> No national Code on water No coordination structure in-country Little coordination between different sectors and partners concerned with managing the resource Weak financial support to the sector Lack of information exchange between riparian countries An absence of programmes concerned with regional cooperation, including pollution abatement, etc

	Key policy content	Observed gaps by national consultants
Egypt	<ul style="list-style-type: none"> • In 1999, the Planning Sector in MWRI prepared a conceptual framework for water resources planning based on the provision of quantitative and qualitative information using mathematical modelling and computer techniques to resolve conflicts between different water uses • The National Policy has three major pillars: 1) increasing water use efficiency; 2) water quality protection; and 3) pollution control and water supply augmentation • The National Water Resources Plan (NWRP) is based on a strategy called 'Facing the Challenge' (FtC) • FtC includes measures to develop additional resources, make better use of existing resources, and measures to ensure water quality and environmental protection • The NWRP includes a number of general institutional measures; it initiated a process of decentralization (to Water Boards) and privatization, including a restructuring of the role of MWRI, e.g. by establishing integrated Inspectorates at a local level • Cost-sharing and cost-recovery mechanisms will be implemented to make the changes sustainable, in particular with respect to operation and maintenance • The role of the key stakeholders in water resources management (including farmers) should be enhanced by involving them more fully in water management tasks but also by strengthening their sense of 'ownership' • The NWRP addressed the regional cooperation in the Nile basin by assuming that basin countries will continue to implement positively the NBI programmes and actions 	<ul style="list-style-type: none"> • Egypt's water policies have targeted different water resource development objectives over the years. Policy development now faces a number of challenges, principal amongst which is the mismatch of supply and demand resulting from increasing demands across all sectors • Rates of demand growth are linked directly to growth in population and rising living standards; there is a serious gap between available resources and water requirements which will increase over time; Egypt will soon face water scarcity • Previous policies emphasized allocation of excess waters to land reclamation projects. Projected agricultural expansion varied from one policy to another based on available excess water • On the supply side, all policies have taken the Upper Nile conservation projects into consideration as long term scenarios. The 1975 water policy was particularly optimistic about the completion of these projects. It suggested that all projects would be implemented in the future (non-specific time horizon, probably by 2000) • Implementing FtC will improve the performance of the water resources system. More water will be available for the various uses and the water quality will improve significantly • However, by implementing all envisaged measures, in particular all the planned horizontal expansion projects, the water resources system will reach its support limit; water availability per feddan and average cropping intensity are already decreasing. Farmers should expect that year-on-year water availability will be more variable in future; management of the system should be adapted to cope with this variability • The strategy FtC contains a wide range of measures and policy challenges up to the year 2017; after 2017 drastic policy decisions may be required at a national level, e.g. accepting some limitations in growth of the agricultural sector and increasing the developments and corresponding employment in the industrial and services sectors; an increase in the Nile water supply will ease the situation somewhat and should be pursued. A limited increase is not unrealistic, either as a result of water conservation projects in Sudan, changes in reservoir operation of Lake Nasser or (in the very long run) as a result of climate change

	Key policy content	Observed gaps by national consultants
Ethiopia	<ul style="list-style-type: none"> • The Water Policy goal is “to enhance and promote the efficient, equitable and optimum utilization of the available Water Resources of Ethiopia for significant socio-economic development on a sustainable basis” • Policy objectives, inter-alia, include: Equitable and sustainable development of the Water Resources of the country for socio-economic benefit of the people; Allocation and apportionment of water for efficient, equitable and sustainable use, according to integrated plans; prevention and management of drought and related disasters through allocation, distribution, storage and other means; flood control and mitigation through various means; and conservation, protection and enhancement of water resources and aquatic environment on a sustainable basis • The basic principles are the followings: water, as a natural resource, is the common good of the Ethiopian Peoples; every Ethiopian has a right of access to water of sufficient quantity and quality to satisfy basic human needs; water should be recognized as an economic and social good; water resources development shall be rural-centred, decentralized, participatory and integrated in approach; water resources shall be managed according to the norms of social equity, systems reliability, economic efficiency and sustainability; participation of stakeholders, especially women, shall be promoted in water resources development • The National Water Strategy aims at providing a road map to contribute towards: improving the living standard and general socio-economic well-being of the Ethiopian people; realizing food self-sufficiency and food-security in the country; extending water supply and sanitation coverage to large segments of the society; generating more hydropower energy; enhancing the contribution of water resources in attaining national development priorities; promoting the principles of integrated water resources management • More specifically the objectives of water strategy is to develop viable and implementable guidelines and directives that promote the sustainable, efficient, effective, reliable, affordable and user-acceptable development of water supply and sanitation services, including livestock watering in the country 	<ul style="list-style-type: none"> • The policy mainly deals with surface and ground water resources; it leaves out rain water management which has a great bearing in the sustenance of both surface and ground water • It does not address the implications of water rights such as right of access to water, transfer of water rights, etc • It stresses the need to enhance the capacity of regional states without addressing capacity building of stakeholders and beneficiaries at the lowest institutional level • The strategy provides a route map for actions, but rarely specifies the responsible bodies for these actions at different levels; and in all cases it does not set a time frame for implementation • The strategy lacks institutional mandates, responsibilities and linkages between various actors including the Ministry of Health, Environmental Protection Agency, and the Ministry of Agriculture, etc • Shortage of trained and experienced manpower in technical, legal, managerial and administrative fields is critical, yet the policy fails to indicate how it will ensure efficient and effective utilization of existing manpower and provides no provision against high turnover of skilled, trained and experienced manpower out of the water sector • The water policy has not clearly and adequately covered the issue of pastoralists • Some feel the policy and the laws are not owned by stakeholders at lower levels and that the roles of regions, zones, woredas, communities, private sector organs and NGOs, etc, are not clearly defined • Although a number of rivers originate from Ethiopia and are shared by neighboring countries, the water policy did not cover well the transboundary issues of these rivers.

	Key policy content	Observed gaps by national consultants
Kenya	<ul style="list-style-type: none"> • The Water Act 2002 separates water resources management from the delivery of water services. Part III of the Act is devoted to water resources management while Part IV is devoted to the provision of water and sanitation services. It establishes two autonomous public agencies: one to regulate the management of water resources and another to regulate the provision of water and sanitation services • The Act divests the Minister in charge of water affairs of regulatory functions over the management of water resources; this becomes the mandate of a new institution, the Water Resources Management Authority • The Act provides that the Authority may designate catchment areas, defined as areas from which rainwater flows into a watercourse • The Act provides for community groups, organized as Water Resources Users Associations, to manage water resources; these associations will act as forum for conflict resolution and cooperative management of water resources • Part II of the Act deals with ownership and control of water; Section 3 vests “every water resource” in the State; the right to use water from any water resource is also vested in the Minister • The right to use water is acquired through a permit, provision for which is made in the Act; it is an offence to use water from a water resource without a permit • Section 4 of the Act deals with control of water resources. It states that the Minister shall have, and may exercise, control over every water resource. In that respect, the Minister has the duty to promote the investigation, conservation and proper use of water resources throughout Kenya. Charging a premium for the use of water resources represents the use of charging as a mechanism for regulating the use of water • Sustainable water resources management requires the adoption of an ecological approach. This can be achieved by the establishment of a minimum flow which must be maintained at all times • Three mechanisms exist for managing the use of water resources: basin wide or catchment management, the concept of “the reserve” and “water quality objectives.” In providing for a reserve the Water Act, 2002, has broken new ground in the management of water resources in Kenya. The challenge lies in implementing this provision in such a manner that both aspects of the reserve – the need to maintain the river ecology as well as the need to provide for the livelihoods of the river dependent communities – are taken into account 	<ul style="list-style-type: none"> • The National Water Policy contains almost no issues on transboundary waters and therefore, does not give any policy direction on the issue of shared water resources • This prompted the Government in 2002 to form a National Task Force to formulate a Kenya Policy on the utilization of Lake Victoria water • The full implementation of the National Water Policy and the Water Act 2002 would require another two to three years • The formation of the Water Users Associations is anticipated to take time • Clear policies on Public Private Partnership with regards to private sector participation in the provision of water supply and sanitation services are still lacking • The subsidiary legislations, such as water resources management and water services rules, guidelines, standards and strategies are yet to be finalized. These require consultants to fine tune and facilitate stakeholder workshops to enable inputs and process ownership • The Water Act separates policy formulation, regulation and services provision; it defines clear roles for sector actors and a decentralized institutional framework. The establishment of these institutions, which broadly are categorized into water services and water resources institutions, allows for participation of the private sector and other stakeholders (NGOs, organized communities) and for sustainability in the management of water resources and provision of water services • Once fully operational, this framework will catalyze the restoration of degraded catchments and speed up water resources developments in the country and MDG achievement • Decentralization of service provision to regional and lower levels could have an impact on unit costs, decreasing overheads at the national level. Since the new institutions are at their formative stages, regulatory tools such as guidelines, rules, standards, realistic tariffs for cost recovery in water service provision and water use fees have yet to be developed

	Key policy content	Observed gaps by national consultants
Rwanda	<ul style="list-style-type: none"> • National Water Resources Management Policy (MINAGRI, July 1998) • The Water and Sanitation Sector Policy (MINITERE, October 2004) • Agricultural Transformation Strategic Plan (MINAGRI, 2004) • The National Environment Policy (MINITERE, 2002) • Politique Nationale de Gestion des Ressources en Eau (MINAGRI, 1998) 	<ul style="list-style-type: none"> • Does not mention new principles of water and transboundary water management • Regionally, policy only talks about 'international co-operation' (in larger river basins) • Water as an economic asset is sensitive; it is necessary to balance water for basic needs of the poor and water priced reasonably for agricultural and industrial use

	Key policy content	Observed gaps by national consultants
Sudan	<ul style="list-style-type: none"> • The Sudan National Water Policy Draft of 2000 (SNWP) has the following objectives, to: • Bring together and clarify existing policy • Review and adapt water policy to meet changing circumstances • Ensure Sudan’s water resources are properly managed, protected and efficiently utilized for the benefit of all • Provide the basis for ongoing development of water-related regulations and legislations • Strengthen and rationalize water related institutions in both public and private sectors. Main policy principles and statements of the SNWP are that: • Water is a scarce and valuable commodity which has to be equitably, economically and efficiently used • Access to water for basic human needs is the highest priority in the development of water resources • Development of water resources must be demand-driven and management should be undertaken at the lowest possible level • Development and management of water resources, and the operation and maintenance of water services must be economically sustainable through the recovery of costs from those who benefit • All water, including surface and groundwater, form part of the hydrological cycle and should be managed in an integrated manner • Water resources management affects everybody and should be undertaken with the participation of relevant stakeholders • People are stakeholders for water use and the national government is custodian of all water in Sudan for the equitable benefit of all in the public interest • The gathering and management of accurate information for recording and ongoing monitoring of water resources is essential for the proper development, management and protection of water resources • The environment needs to be protected in order to ensure sustainable utilization for present and future generations • The development of water resources will be undertaken in order to maximize its benefits in the public interest whilst ensuring minimum adverse impact on the environment • Public institutional arrangements at federal and state levels will be integrated, accessible, efficient and transparent whilst avoiding duplication of functions and responsibilities 	<ul style="list-style-type: none"> • Regulations on water resources management, pollution control, land use rights related to water, watershed development, environmental quality and pollution control standards, are not effective or enacted because of a lack of enforcement capacity • The policy is not based on a comprehensive approach to planning and management that takes physical, economic, social, and environmental factors into account • Policies and strategies to realign the roles of the private and public sectors to provide services for irrigation and water resources projects should evolve if sustainable improvements in irrigation benefits are to be realized • The water policy should promote cost sharing and encourage a more active role for water users in operation and maintenance of irrigation infrastructure and collection of water charges, the regulations for which have recently been enacted • Water pricing remains a problem although it is the key instrument for recovering costs and for encouraging changes in demand patterns. The Government should strengthen irrigation schemes to organize and manage the collection of the water charges through mobilization, encouragement and training of WUAs • Policy on water pricing and collection of charges in agricultural corporations is not clearly defined. The MIWR policy warrants cost recovery for water and operation of the system but farmers are obliged to pay flat rates for irrigation use during the season depending on the type of crop, but regardless of quantity of water used; this does not offer any incentive for conservation of water and has resulted in inefficient water use and complaints from farmers • The role of women in user organizations was not defined in the 1992 Water Policy

	Key policy content	Observed gaps by national consultants
Sudan	<ul style="list-style-type: none"> Water and water related issues are an integral part of the wider economy and have direct effects on many other sectors which require inter-departmental and inter-sectoral communication and cooperation 	
Tanzania	<ul style="list-style-type: none"> Policy completed in July 2002 and, inaugurated in March 2003 It aims to create an enabling environment for provision of efficient water services and changes the role of the Ministry of Water to ensure effective implementation of the policy, through participatory strategies, education and awareness raising campaigns targeting all stakeholders (both national and international) It aims at creating an enabling environment for provision of efficient water services Harmonization and linkage with other sectors is provided for in the policy All water allocation (abstractions) become subject to user fee charges It prescribes an IWRM approach: through comprehensiveness (holistic basin approach), subsidiarity (decentralized decision making) and economic approaches (value and costs) The policy provides for stakeholder participation in the planning, design and implementation of management actions and decision making processes The policy provides and encourages complementary actions or joint efforts in water supply & sewerage, as well as in sanitation services There is a commitment to develop a framework for management and utilization of trans-boundary water resources and collaboration with other riparian states The policy takes on board gender as well as socio-economic issues, with a greater focus on poverty alleviation 	<ul style="list-style-type: none"> Policy effectiveness rests on proper assessment, a holistic picture, appropriate regulations, adequate enforcement and incentives for behavioural change The EWURA act, 2001 creating a regulator for energy and water utilities is superseded by sector laws; this threatens harmony; (e.g. the energy policy (2003) and the national land policy do not address properly water management, conservation and related disaster abatement issues) The NAWAPO does not accord sufficient recognition to the role of lead agencies; for instance, climate change and variability and disaster abatement—whose related laws appear in other sectors and supersede that of the water sector—should be the Ministry responsible for meteorology and the Prime Minister’s office NAWAPO is silent on how to deal with water resources related protocols, treaties and conventions entered into or likely to become involved in; coping with regional demands on trans-boundary water resources is not specifically addressed Training of experts, technicians and other professionals, as well as rehabilitation of data acquisition networks and provision of tools and equipment have been undertaken by RBMSIIP project; the focus has been at the Ministry and on two Basins, the Rufiji and Pangani; the other seven water basins have similar capacity building needs and substantial amount of resources are required to address them (2005) NAWAPO does not provide a firm commitment to regional concerns, but does provide for cooperation and dialogue; Tanzania is a riparian to many international water bodies; the challenges of managing these resources may far exceed the local capacity, hence creating a gap; preparedness to cope with such demands is not clearly highlighted

	Key policy content	Observed gaps by national consultants
Uganda	<ul style="list-style-type: none"> • The overall objective under the Water Policy is to manage and develop the water resources of Uganda in an integrated and sustainable manner • The Policy covers Water Resources Management dealing with policy objectives, principles and strategies for monitoring, assessment, allocation and protection of water resources as well as the institutional framework; and Water Development and Use, dealing with objectives, principles and strategies for the development and use of water for domestic supply, water for agricultural production and other uses including industry, hydropower, recreation and ecosystem needs <p>The Water Policy is guided by an agreed set of national policy objectives as follows:</p> <ul style="list-style-type: none"> • Separation of regulatory powers from user interests; integrated and sustainable development, management and use of the national water resources, with the full participation of all stakeholders • Regulated use of all water, whether public, private or ground water, other than for “domestic” use • Sustainable provision of clean and safe water within easy reach, and good hygienic sanitation practices and facilities, based on management responsibility and ownership by users • Development and efficient use of water in Agriculture in order to increase productivity and mitigate effects of adverse climatic variations on rain-fed agriculture, with full participation, ownership and management by users • Improvement of co-ordination and collaboration among sector stakeholders to achieve efficient and effective use of financial and human resources; following consistent planning and implementation approaches within the context of decentralization, and policies on private sector participation, the role of NGOs, civil society and beneficiary communities • Equitable access and use of the Nile waters through effective involvement of the Government in the Nile waters issues, to secure adequate water for Uganda’s current and future needs • Promoting awareness of water management and development issues, and the creation of capacity at different levels • Promoting rational, optimal and wise use of the resources for all Ugandans and sectors • Promoting measures to control pollution of water resources • Promoting the gathering and maintenance of reliable water resources information and databases • Promoting viable management options for resource management and provision of water supply and sanitation services at all levels 	<ul style="list-style-type: none"> • The Policy recognizes the importance of trans-boundary issues including NBI issues, and accepts that the existing institutional and management framework in Uganda is not yet comprehensive enough to address the management of water resources in Uganda given the trans-boundary nature of Uganda’s water resources and other factors • The Water Policy did envisage the creation of such bodies to manage and regulate trans-boundary water resources issues posed by river/lake basins as follows: • “In the present Uganda context, it has not been found necessary - and therefore it has not been elaborated on further in this policy document - to create authorities, catchments boards or similar bodies. The Government will take the necessary steps if in future the requirement will arise for the creation of a river or lake basin management agency within Uganda where there are specific problems that can only be solved through such management structures” • The Water Policy is thus flexible with respect to water resource management issues and does not preclude the establishment of agencies to handle management issues relating to river/lake basins in Uganda. As a result of this, management of the Lakes Edward and George basins in western Uganda have recently been inaugurated by the Government of Uganda • “Uganda needs a coordinated strategy regarding international water resources issues in particular related to the utilization of the Nile waters and safeguarding of the water quality of the lakes; Victoria, Kyoga, Albert, George and Edward. This is a national level function” • The policy is weak in addressing lengthy and complex constitutional procedures for integrating international and regional principles, conventions, protocols and agreements into domestic law (to conform to principles of sovereignty of state) • The policy is weak in compelling compliance from staff from different sectors whose operations have an impact on management of water resources • The policy is weak in prioritizing water issues vis-à-vis other sectors; although the challenges of balancing economic and social benefits and balancing national and regional interests are well recognized, there is no pragmatic strategies to address this • With respect to water supply management the policy is inflexible and does not easily accommodate new management approaches (e.g. the shift from the old supply- driven approaches in some aspects of water supply management to a demand-responsive approach that has promoted meaningful participation of stakeholders and hence promoted sustainability of facilities and services)

Implementation: Summary issues

Implementation received particular comment among countries. Partly this was because most countries are currently involved in implementation, whether a completed policy, sector plan or legislation—or a process of early policy formation. The challenges of implementation within weak institutional environments were felt throughout the basin and, even where institutional environments were stronger at a central level, building substantial capacity at more decentralised levels was a notable concern.

Some countries raised the lack of an effective approach to integration of private sector and civil society involvement in policy implementation. Included in issues surrounding private sector participation was the concern that participation required greater market-based incentives to succeed, including possibly offering assistance, guidance and training for private sector organisations that were key to local-level implementation. Linked to this was the problem of general low public awareness and the need to generate greater stakeholder involvement as part of awareness-raising, without which policy implementation could fail at lower levels.

Monitoring and evaluation of implementation was also a key issue. Without indicators linked to a proper monitoring and evaluation framework it would be difficult to address transboundary issues adequately. Such frameworks would allow for important feedback loops, which could be critical to making implementation a learning-based process with longer-term chances of success. Related problems were the lack of enforcement of regulations and generally weak management capacity at lower levels. Some countries also noted the need to find a strong central institution—or well-coordinated set of institutions—to lead the process and to regulate implementation. In some countries in the absence of a strong lead, implementation remained hampered by a ‘confusion of roles’ between institutions. Strong institutional leads also required effective legislation to back them up. In some cases there was legislative inconsistency, which provided a strong argument for well thought-out processes of implementation that addressed legislation in other sectors and the need for consistency (e.g. between environment, energy and agriculture sectors).

Some countries mentioned the high costs of implementation and the need for process financing. In other countries there were concerns that the wider economic environment could seriously impair implementation if revenues raised under new systems were insufficient to fund the new institutional arrangements. Related to these issues of sustainability were the broader problems of political instability and high ‘political turnover’ affecting both the capacity to ensure political will was applied to the process, but also that the next set of political actors would support the existing process.

Implementation process matrix

	Implementation process	Issues arising
Burundi	<ul style="list-style-type: none"> • With FAO assistance in 1999 the Government set up a multisectoral working group for the elaboration of a water resources management policy in Burundi (NWP) • For water policy implementation a strategic Action Plan has been adopted which indicates specific objectives to achieve, actions to undertake, performance indicators to use, levels of responsibility of concerned national institutions, estimated budgets, as well as an activity implementation calendar • Implementation is between 2001 and 2010 • The Ministry of Land Management and Environment has been appointed to coordinate the water policy with the Geographical Institute of Burundi as technical coordinator 	<ul style="list-style-type: none"> • The Action Plan anticipates participation of the public sector (ministries) and local communities represented by the communal administration, but is silent on private sector and civil society roles • The Decree necessary to set up the coordinating institutional structure for implementation has never been updated, which is a principal hindrance to implementation • The costs of implementation are considerable, some US\$ 9.1 million over a period of 10 years • There is a lack of public awareness of the policy • There is no mechanism for the evaluation and revision of policy • A lack of political stability characterized by sudden change in governments has affected implementation • Confusion between the roles of management and exploitation of water resources generates competence conflict over resource management
DRC	<ul style="list-style-type: none"> • Policy such as exists in the form of pre-Independence ordinances is that of the Colonial state, concentrating on safeguarding quality and protecting water sources • Transboundary issues have not been a concern of legislation • There is no institutional coordination in financing devoted to the sector is weak 	<ul style="list-style-type: none"> • The government needs to strengthen administration and management of water institutions, in particular the Department of the Environment and specifically its Directorate of Water Resources • DRC should integrate transboundary issues in any future national policy • The government should request the twinning of the basins of the Nile and Congo in order reinforce exchange of expertise and learning
Egypt	<ul style="list-style-type: none"> • The FtC strategy seeks full implementation of all concepts of IWRM • MWRI plans to issue and distribute standard IWRM kits for different institutional levels which distil experience from ongoing training efforts within the MWRI and its projects • MWRI also plans to launch a National (Regional) IWRM Certification Program which is a pioneering attempt aiming at providing a recognized pool of experts in integrated water resources management 	<ul style="list-style-type: none"> • The current laws regulating the government's control of water resources and related installations are incapable of meeting the government needs in a manner consistent with its policy reform and economic plan; it is necessary to formulate new rules and amend current laws • Efficient water resources planning, development and management in Egypt is seriously constrained by a lack of investments to finance the different components of the water system • Fragmented institutional structures, the lack of regulatory mechanisms and of market-based incentives such as those included in public-private partnerships and technical and socio-economic constraints as well as inefficient public awareness and demand management practices all contribute to the unsustainable exploitation and use of water resources • MWRI launched a public awareness programme to inform citizens about the importance of water resources in development plans and to invite water users to participate in the decision making process

	Implementation process	Issues arising
Ethiopia	<ul style="list-style-type: none"> • The water sector development programme (WSDP) consists of various water resources projects of different magnitudes from 2002 to 2016 in three categories: Short-term (2002-2006); Medium-term (2007-2011); and Long-term (2012-2016) • Implementation of WSDP activities and projects involves many partners including government institutions, the private sector, local communities and individuals, NGOs and external support agencies • MoWR at the Federal level and Water Bureaus at the Regional level will assume lead responsibility for program implementation; the private sector is seen as an important partner; the government will examine the introduction of different kinds of incentives for private sector participation in the implementation of the WSDP • Communities will be responsible for managing common resources, improving their own organizational set up, undertaking and maintaining projects and increasing the involvement of women • NGO contributions to the WSDP will be improved by coordinating and linking their activities to the development programs of the regions; NGOs will perform four important functions: (a) bringing additional financial resources; (b) strengthening technical capacities of regional bureaus; (c) organizing local communities; and (d) undertaking rehabilitation works • Given the financial size of WSDP, the role of international lending and donor institutions in providing financial resources and technical assistance to implement the program activities is critical; the WSDP provides a comprehensive framework for donor agencies to help select projects and programmes, but also to coordinate water sector activities more efficiently • Programme management arrangements include four major functions: planning; implementation, co-ordination and monitoring formed at three levels: national, regional and local and planned to bring all stakeholders together for improved upstream support and downstream co-ordination • The management framework for implementing WSDP includes: National Steering Committee (NSC); Federal Programme Management Unit (FPMU); Regional Programme Management Unit (RPMU), and Sub-Programme Level Teams. • NSC is at the apex and comprises relevant federal ministries and institutions, regional states, donors and private sector; selected 	<ul style="list-style-type: none"> • Human resources development should emphasize training at all levels using national, regional and international institutions; currently there is little capacity to carry out implementation of the water policy at almost all levels • Capacity-building is required at national, regional, zonal, woreda and grass roots levels and in the private sector in a wide variety of fields including water resources management, international law and monitoring, evaluation systems, macro economic planning and policy analysis • Responsibilities, roles, relationships and accountabilities of policy implementation have not been clearly defined • Unclear institutional arrangements exist for policy implementation at regional, zonal, woreda and community levels • There is a lack of systematic monitoring and evaluating mechanisms for policy implementation • There is little policy popularization and awareness of the policy among the public and those concerned with water use issues • There is an absence of coordination at national, regional, zonal, woreda and community levels; and little collaboration among users of the water policy • The WSDP management arrangements are not in place; there is a need to accelerate the management framework to follow up and monitor the WSDP implementation which is already behind by more than three years • For WSDP implementation, programme management and monitoring arrangements have been devised as seen above; but for water policy arrangements for policy implementation, monitoring, follow-up and feed back do not exist, unless considered to be inclusive to the implementation framework of WSDP

	Implementation process	Issues arising
Ethiopia	<p>community representatives from different regions will also be present; the NSC will monitor programme progress and provide policy advice and guidance to the implementing organs</p> <ul style="list-style-type: none"> • FPMU, within the MoWR, provides technical, logistical and administrative support on management including planning, implementation, and coordination and monitoring; this unit will initially start functioning as part of the planning Department of the MoWR, then be transformed into a full programme management and coordination department • RPMU is established in each region within the Executive Council Office and focuses on the regional level activities; functions largely mirror the FPMU, but at regional level • Under the FPMU and RPMU, Sub-Programme Level Teams (3-4 persons) are to be established in accordance with major sub-sectors dealing with irrigation, hydropower, WSS and general water resources 	
Kenya	<ul style="list-style-type: none"> • The new water institutions established under the Water Act 2002 have been set up and are at their formative stages 	<ul style="list-style-type: none"> • In general there is political goodwill for the water sector reforms • Under the present arrangement it takes some time to lobby and adopt a new water policy especially on transboundary waters
Rwanda	<ul style="list-style-type: none"> • To develop integrated water resources management (IWRM) directives and manuals for better sector coordination and policy implementation • Established the National Water Management Authority whose ultimate mission is the holistic management of water resources • Accelerate the current national water law formulation process to help in policy implementation • To undertake dissemination of the policy document, water master plan elaboration and capacity building 	<ul style="list-style-type: none"> • The assessment stressed the weak management capacities in the water sector and underscored the need for national staff training at the Water and Sanitation Unit, Civil Engineering and Soil Preservation Units as well as staff of provincial and district structures, covering both technical and managerial aspects

	Implementation process	Issues arising
Sudan	<ul style="list-style-type: none"> • The Water Policy of 1992 was translated into sector strategies, institutional structures and functions, and national legislation, but capacity for implementation and enforcement was often constrained; there is a need to upgrade the institutions to administer and enforce water policy legislations and regulations; study required of the effectiveness of current enforcement capability • The remaining steps for the Sudan National Water Policy Draft of 2000 (SNWP) are to submit the revised water policy draft to the National Water Resources Council for further improvement and then forward to the relevant executive and legislative institutions for endorsement • Jurisdiction and responsibilities between Ministry of Irrigation and Water Resources and the Agricultural Corporations have to be evaluated and promoted; in the large national irrigation schemes MIWR used to assume responsibility for operation and maintenance of the schemes from the main supply canal to the head of minor canals; in 1995 responsibilities of MIWR were extended to cover minor canals to the Field Outlet Pipes (FOP); this eliminated the confusion that existed for joint responsibility of the minor canals by MIWR and Agricultural Corporations (AC) • In 2000, policy again changed and the responsibility of the minor canals was returned to the ACs, creating confusion and an organizational gap in the operation and maintenance of the irrigation systems of the AC; now with ratification of the new Gezira Scheme Act of 2005, and the introduction of the Water Users Association (WUA) to manage minor canals down to the field, it is important that policy be formulated to allow MIWR to resume its duties and take care of irrigation from the dam to the FOP, leaving water management past the FOP to WUAs • Once WUAs receive proper extension and guidance, management of the minor canals could be transferred to them; compatible groups of private farmers should be organized for each minor canal (WUA); the union of these WUAs would represent the scheme • In pump schemes, the ACs that supply water to the farmers used to be under the MIWR; they are now under the State authorities; the MIWR has agreed to give technical assistance to these schemes 	<ul style="list-style-type: none"> • There is a lack of capacity and resources to implement national water policy and strategies effectively • Regulations on management, pollution control, land use rights related to water, watershed development, environmental quality and pollution control standards are not effective due to lax administrative machinery; enforcement of water legislations and policies depends on relevance of regulations and administrative machinery to implement or ensure compliance; more effective machinery is required, <i>inter alia</i>, in pollution control regulations and aquifer monitoring • The roles of the Federal Government, state governments, private sector, NGOs, local communities and the National Water Resources Council are defined but need to be further identified • Sectoral institutional reform is needed to clearly identify and strengthen the roles, responsibilities, obligations and linkages between the national and states water corporations • Policies and strategies to realign private and public sectors to provide services for irrigation and water resources projects should evolve if sustainable improvements in irrigation benefits are to be realized; in the long run, the private sector should be encouraged to become increasingly active in operating and maintaining irrigation works as MIWR takes major responsibility for planning and research, developments in irrigation infrastructure, operation and maintenance of large dams and the main irrigation and drainage networks as well as resource stewardship • In the short term, the private sector should be assisted, guided and trained to participate effectively in on-farm water management (below the FOP) and in a number of selected services as MIWR is supposed to assume the responsibility of supplying water to the minor canal level which has just been ratified • MIWR's capability as a regulatory and controlling agency should be enhanced, as the private sector becomes more active in providing services; in addition, MIWR should be empowered to establish policies, regulations and guidelines to monitor and control private and public sector performance • Participation of institutions and individuals that are concerned with or involved in water resources management (stakeholders) is still progressing, but is sometimes wholly absent in both the process of formulation and decision making • The mechanism to prevent and resolve conflicts arising among the different stakeholders needs to be more specifically identified and embodied in policy

	Implementation process	Issues arising
Tanzania	<ul style="list-style-type: none"> • Some implementation has taken place; already nine basin Water Boards have been formed (seven formed 2000-2004), such that all water management is under basin Water Boards • By June 2005, 9,283 water committees had been formed • Reforms have also involved formation of municipal and town water authorities (eventually to be privatized when they become commercially viable and self sustaining); 19 Water Authorities and 62 Water Boards have been formed to-date • Training of experts, technicians and other professionals, as well as rehabilitation of data acquisition networks and provision of tools and equipment has been undertaken under the RBMSIIP project • Both public and private sectors are becoming active participants in the water sector using their own resources, as the government moves away from service provision 	<ul style="list-style-type: none"> • NAWAPO is still awaiting a supporting framework for implementation (e.g legislations and strategies); by August 2005 no such framework was in place which is a critical gap • There are imitations in technical, human and financial resource capacities to properly implement the policy • National budgets may vary negatively, so might the anticipated revenue from water user fees; therefore revenues generated from anticipated sources may not match budget requirements • A Regulatory body—the Energy and Water Utilities Regulatory Authority (EWURA)—was formed by the EWURA Act 2001 to regulate water supply and sewerage services, amongst others; however EWURA requires the support of the water legislation to function • A potential incapacitation of EWURA may arise due to upcoming sector legislations, e.g., the Local Government Act, the Energy Act, etc. The EWURA Act, 2001 that established EWURA will be superseded by sector legislation. Harmonization of laws may take a long time • The National Water Sector Development Strategy (NWSDS) is now at final draft stage; an initial draft of the Water Law has been completed

	Implementation process	Issues arising
Uganda	<ul style="list-style-type: none"> • Uganda has developed its framework for water resources management consisting of the national legislation; regulations and by-laws for promoting sound water resources management and constrain potentially harmful practices. The Water Resources Regulations, Water Supply Regulations, Sewerage Regulations and Waste Discharge regulations are all in place • In conformity with the Water Act Cap 152, the first WPC members were appointed in March 1999 by the Minister, MWLE and inaugurated that month; however their term of office expired in March 2002, without major activities; only one formal meeting was held, in addition to training on international Water Laws and Negotiation skills on three occasions • The Second WPC members were appointed on 25 November 2004 by the Minister, MWLE and inaugurated on 17th December 2004; the Secretariat of the Committee has been established in the Directorate of Water Development. It facilitates the functioning of the Committee • New district organizational structures have been approved and established; all districts have sector staff as per the structure, but there is no provision for a specialized water resources management officer; the post is for District Water Officers who are usually trained engineers • For the rural water point sources and gravity flow schemes, the communities have been organized into Water User Groups; for management purposes these groups are led by water and sanitation committee members elected by the users amongst themselves • The private sector stocks spare parts for sale to the public and NGOs, CBOs; other charitable organizations help to mobilize communities for sustainable water source management 	<ul style="list-style-type: none"> • There is inconsistency between different pieces of legislation, e.g. the Water Act 1995 and the Local Government Act have the potential to undermine management practices in the Sector. They should be revisited and streamlined to promote harmony; legislation should also be reviewed with a view to promoting integrated land and Water Management practices • Indicators for successful implementation of the water policy are applicable nationally, but do not address transboundary issues, nor address roles played by the private sector and civil society • Related to this, there is a lack of provision for strengthening human capacity, information and technology to equip Uganda to actively engage in transboundary issues • While trends towards regionalisation can be reasonably assimilated in national policies, they have not yet been sufficiently captured in operational modalities; for instance terms of reference for personnel in the water sector do not adequately reflect their regionally-related responsibilities • The national budgetary processes (e.g. the Medium Term Expenditure Framework MTEF) do not adequately and realistically take into account obligations arising out of or imposed by regional initiatives like NBI • The policy does not adequately reflect how to handle issues such as hydropower dam development on the Nile (technology, information sharing, etc.) • The policy provides guidance to government institutions only yet transboundary issues require many players; it does not provide mechanisms for coordination and harmonizing of the divergent objectives, principles and policies of agencies involved in water resources issues at national and regional levels • The policy does not adequately provide for participation of institutions other than government and yet such institutions are bound by national laws of riparian countries which vary considerably (e.g. registration and accountability requirements can also present complex policy and operational problems in a regional setting) • Additionally, differences in practices and approaches to, and disparity in tariffs and other financing modalities in riparian countries can have adverse implications for private sector interventions (e.g. on modalities for regional private sector investments) • The policy is weak in addressing lengthy and complex constitutional procedures for integrating international, regional principles, conventions, protocols, agreements into domestic law (in order to conform to principles of sovereignty of state)

	Implementation process	Issues arising
Uganda		<ul style="list-style-type: none"> • The policy is weak in compelling compliance from staff from different sectors whose operations impact on water management • The policy is weak in prioritizing water issues vis-à-vis other sectors, although the challenges of balancing economic and social benefits and balancing national and regional interests are well recognized; pragmatic strategies to address them are still somewhat elusive • Policy is inflexible and hence does not easily accommodate new management approaches (e.g. the shift from the old supply-driven approaches in some aspects of water management to a demand-responsive approach that has promoted meaningful participation of stakeholders and hence promoted sustainability of facilities and services)

4 Emerging policy landscape and support needs

The foregoing analysis of the policy landscape in the Nile basin reveals, unsurprisingly for nine vastly differing countries, a wide variety of policy types. Associated with these different types are widely differing support needs—and demands. Nevertheless, there are some common features that are worth drawing out in this short section.

First, the landscape that is presented is discontinuous. That is it is nine relatively discrete areas (as it were, ‘policy islands’) that are neither linked together by common goal nor by a shared sense of the benefits that could be gained through greater coherence and commonality. This policy variegation is the overarching challenge facing the NBI as it attempts to encourage countries to adopt a regional perspective in developing the Nile basin resources.

Second, although the policy landscape is variegated and discrete, the policy messages appearing across this landscape are not, which suggests that there is important potential linkage in the approaches to resource management and development between countries. Not only is there a clear commitment to integrated water resource management across most countries, but there is also acute awareness of the complexity of achieving effective water management and allocation in the face of rising demands for the resource across the board, competition between sectors and the dangers of declining resource quality. This interlinkage can be exploited by the policy support component and can help to move the policy processes that are engaged in over coming years to new levels of regional awareness and joint development, particularly with respect to the incorporation of benefit-sharing concepts.

Third, the level of awareness of ‘difference’ between countries is revealed in calls by some countries for capacity to be ‘evened out’ across the basin—and from some for their existing capacity and knowledge to be put at the disposal of others. The need for basic knowledge, capacity and skills development is paralleled, therefore, by calls for greater cooperation and sharing over policy development. All national consultant reports made this resounding call for greater interlinkage.

Finally, whilst some states are at the very inception of policy reform processes and are seeking to implement current best practice in catchment management, pricing regimes and permit systems, others are still developing policy drafts and even the basic outline of new policies. The experience of the more developed policy environments would be a valuable resource to share with those where policy development is at earlier stages.

To move an environment of variegated policy approaches to one resembling a more coherent whole requires many small steps. These can be in the form of short-term inputs for specific, identified needs—for instance in monitoring progress against policy implementation plans. In parallel with these steps an annual meeting could help to establish a common basis for integrating transboundary issues—and particularly concepts of benefit sharing—within policy environments, at different stages of development and implementation. The PSF might begin by sounding out all governments on their willingness to start a process of drafting a commonly-accepted addendum text that focuses specifically on benefit-sharing concepts, reflecting the already-existing consensus surrounding the NBI’s shared vision, namely to achieve sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin resources.

Regional Assessment

	Needs identified by countries	Support requested
Burundi	<ul style="list-style-type: none"> • Regional cooperation and optimal utilization of trans-boundary water resources must be part of the national policy on water management in Burundi, which provides water for two major systems: the Nile and Congo • Burundi is not crossed by any international waterway which would profit it in case of acute water shortage • Burundi suffers land degradation due to erosion of unprotected upland catchments • The region of Bugesera (northeast of Burundi) is threatened by water shortage; requires action on irrigation development • Food security is no longer ensured; the government intends to start developing new irrigation in the Nile basin • Burundi has an energy deficit; sectoral policy is to encourage the promotion of interconnected hydropower in the sub-region • There is no cooperation framework acceptable by all, which would catalyse the implementation of regional water policy in the Nile basin • A regional database on water demand per country is lacking • Decision support tools are insufficient to highlight rational and equitable management of the shared resource • Support is required to understand appropriation and utilization of water in the international context • Understanding principles of equal water resource sharing under present and future needs • Issues surrounding water ‘sale’ cross-border • Management and exchange of information among countries of the Nile basin • Equal technical ability to formulate national and regional water resources management policy • More efficient decision support tools to highlight rational and equitable management of the shared resource • Need to update agreements that are related to international waters • Develop effective principles and policies connected with emergencies, disasters, conflicts, etc 	<ul style="list-style-type: none"> • Advisory support and technical assistance necessary for the implementation phase of the NWP, particularly in approaches to institutional coordination (dialogue between partners concerned with the sector (including public and private institutions, NGOs) and in order to identify an optimal coordinating institution) • Opinion surveys of political decision makers (including ministers) on institutional structures and reform processes • Elaboration of national regulations governing the management of water resources and examination of existing legislation and codes; help National Working Group to elaborate a national regulation governing water resources management at an international level; organize a workshop to agree on proposals on regulations and rules • Establish national norms of water quality; review existing methods of water quality control and suggest national standards taking into account national technical capacity for the analysis of water (for example, the creation of a national laboratory of water quality); organize a national workshop for the validation of national norms • Supervise and evaluate implementation of the national water policy; collect opinions of national institutions involved in the water sector; develop planning concepts of water resources in the river basin context; review existing competences and required capacities for the planning of the development of water resources; propose a logical and easy plan for the supervision and evaluation of national water policy

	Needs identified by countries	Support requested
DRC	<ul style="list-style-type: none"> • Weak institutional framework in the sector • No provisional measures with which to apply existing laws • No national coordination of the sector, which explains the inefficiency in developing a policy and the conflict in competencies between ministries • No policy on transboundary resource management and low capacity in human resources in the sector (with few hydrologists and hydro-geologists in the country) • Insufficient budget resources devoted to the sector • Unequal technical capacity for the formulation and implementation of national policy on water resources management; some countries far more advanced than others • Basic lack of regional data on demand for water by country with which to compare across the basin and work out an equitable sharing agreement; national tools are not yet strong enough to assist 	<ul style="list-style-type: none"> • Support for policy formulation; understanding of how to promote management of transboundary water, in particular; the principles of benefit sharing; present and future needs by country such that agreement can be reached on benefit shares; financial aspects of transboundary water; management and the exchange of information between countries of the basin; update of agreements on international waters; principles and policies on disasters • Support for the elaboration, drafting, publicising and implementation of the Water Code and water quality standards • Creation of an interdepartmental committee in charge of coordinating the water sector; introduction of national standards of water quality; policy publicisation workshops • Technical and university training schemes; diplomas, study visits, PhDs; the creation of specialized study colleges • Support to quality control in the sector

	Needs identified by countries	Support requested
Egypt	<ul style="list-style-type: none"> • Historical emphasis on centralized approach whereby MWRI is the focal point for managing both supply and the demand; insufficient participation of the main stakeholders in this process causing problems in implementation of plans • Develop new water resources • Improve the water quality status of the water system • Enforce laws that deal with water quality protection • Lack of coordination with other related ministries and authorities added pressure on MWRI because of unplanned demands for water and misuse of resources • Decentralization and privatization now being encouraged by the ministry, resulting in different role for MWRI as a more strategic and supervisory body • Egypt has broad experience in many sectors and in tackling economic reform, structural adjustment and information systems; through the Egyptian Fund for Technical Cooperation (EFTCA) with Africa, the government provides Egyptian expertise overseas • Egypt has experience in institutional reforms, including IWRM concepts, use of IT and GIS techniques, building water resources mathematical models, flood forecasting, and water quality management, which can be made available to other Nile basin countries through joint workshops and training courses or short missions by Egyptian experts to the Nile basin countries • MWRI's training centre hosts the Applied Training centre for the NBI SVP; cooperation can be established with the PSF to organize workshops and training courses for basin countries to cover both on-the-job training and formal courses given by resident and visiting consultants (including climate change impact, river basin simulation models, hydrodynamic and morphological models) • A number of regional workshops could be organized for local policy support unit staff in each country allowing regional exchange of knowledge and experience; an annual workshop for water policy analysis and implementation be held; these workshops would be organized every year in a different country to enhance inter-basin co-operation 	<ul style="list-style-type: none"> • The PSF should focus on integrating regional dimensions in national water policies • This should be followed by a plan for capacity building in each country, providing a roadmap with which to reach proper institutional infrastructure for water resources policy formulation and implementation and with which to define roles in developing that infrastructure in addition to that of national governments • The PSF should design and implement a regional plan for training and technology transfer based on the results of the national baseline studies conducted on each country • The PSF should close the gaps between basin countries and fulfil their requirements in training and capacity building through sharing available expertise and good practices available • The MWRI established the Planning Sector as a focal point for water policy planning; the National Water Research Centre has twelve institutes researching and providing training in various aspects of water resources management • A regional database can be shared by all countries and there should be a mechanism for periodic update to ensure its sustainability

	Needs identified by countries	Support requested
Ethiopia	<ul style="list-style-type: none"> • Accelerated population growth and the disparity of rainfall distribution make production of sufficient food for food security almost impossible in Ethiopia • Ethiopia's water resources developed for irrigation would enable the country to attain an agricultural surplus sufficient for domestic consumption and external markets • Ethiopia's hydropower potential is second only to DRC's in Africa, although only a fraction has been realized • It is six years since the Water Policy was issued; yet its impact on water resources development and management has not been clear due to the absence of an implementation plan with appropriate monitoring and feedback systems; there are no means of assessing the merits and drawbacks of the policy principles since there has been no lesson-learning • The Water Policy lacks public awareness-raising; during formulation consultations reached grassroots levels, but there is no indication of active participation by all stakeholders in the policy implementation. • Institutional arrangements for policy implementation at various levels are clearly defined for the related policies of environment, population and women, but these arrangements do not exist for water, unless it is included in the implementation of WSDP for which such arrangements exist (at least on paper) • Considering that policy is dynamic and not static, policy review requires strong monitoring and feedback mechanisms to enable successes and failures in implementation to be addressed 	<ul style="list-style-type: none"> • Create institutional arrangements for policy implementation at all levels • Improve technical and managerial capacity, data analysis, modelling and preparing technical manuals and guidelines to carry out IWRM more effectively • Assess implementation capacity and training needs; based on the result of needs assessment draw up training programmes and carry out trainings locally and abroad for professionals, community promoters, and skilled personnel at all levels—national, regional, zonal, woreda and community levels, including private sector • Short-term trainings, on-the-job training, study tours, workshops, seminars, etc in different fields of water resources, including international law, negotiations and conflict resolutions, water resources planning, water pricing, community participation, policy awareness-raising, gender mainstreaming, policy and strategy formulation and implementation, policy analysis, policy performance monitoring and evaluation and negotiation skills • Financing estimates for institutional arrangements for policy implementation, training needs assessment and programme formulation and execution of training programme • Clear institutional arrangements for policy implementation at federal, regional, zonal, woreda and community levels • Defined responsibilities, roles, relationships and accountability for policy implementation at all levels • Effective and continuous monitoring and feedback mechanisms during the implementation of the policy; promoting policy popularization and creating public awareness of the policy; Establishing coordination mechanisms at all levels for all stakeholders; establishing the legal basis for policy implementation at regional and lower levels • Creating efficient and effective collaboration among users of water policy; building manpower capacity to implement and review the policy • Undertaking training needs assessment, drawing-up training programmes and implementing the same to provide competent staff to successfully implement the policy • Promoting private sector involvement in the policy implementation; enhancing active community participation, in particular of women, in the implementation of the water policy • Creating an enabling environment to keep trained and experienced staff in work and to reduce staff turnover • Creating forums for effective exchange of information, developing information materials (brochures, leaflets, etc) and undertaking use of media to educate on water policy and strategy

	Needs identified by countries	Support requested										
Kenya	<ul style="list-style-type: none"> • Need for legal reform to remove duplication and overlap in the regulatory and management provisions; achieved by developing clear rules, guidelines and regulations to back existing substantive laws define further actor roles • Lack of skills in institutional management, hence the need for the job training • Lack of water use regulation experts, hence need for short term regulation training in water use and water services regulations • Lack of trained staff in groundwater assessment and modelling, water quality analysis and pollution abatement, hydrometeorology and water law and policy; necessary to fully operationalise the WRMA and its regional offices at the river basin level • Lack of trainers, hence need for on the job 'training of trainers' who will then train Water Users Associations in order to take up their new roles 	<ul style="list-style-type: none"> • Substantial resources are required to build institutional capacity, manpower development and acquire additional expertise; specific support needs include the following:- 										
		<table border="1"> <thead> <tr> <th data-bbox="780 344 858 376">Gap</th> <th data-bbox="865 344 1254 376">Activity</th> <th data-bbox="1260 344 1461 376">Method</th> </tr> </thead> <tbody> <tr> <td data-bbox="780 385 858 739">Institutional and Legislative Reforms</td> <td data-bbox="865 385 1254 739"> Finalization of Water Sector Rules, guidelines regulations and Strategies as follows: <ul style="list-style-type: none"> • Subsidiary legislation on water resources management • Country strategy on integrated water resources management. • Country strategy on water supply and sanitation development. • Preparation of Integrated Water Resources Management Plan (IWRM) • The adoption of water sector communication strategies • Development of rules on conflict resolution mechanisms </td> <td data-bbox="1260 385 1461 739">Hiring a consultant to fine tune the draft and holding national and regional workshops</td> </tr> </tbody> </table>	Gap	Activity	Method	Institutional and Legislative Reforms	Finalization of Water Sector Rules, guidelines regulations and Strategies as follows: <ul style="list-style-type: none"> • Subsidiary legislation on water resources management • Country strategy on integrated water resources management. • Country strategy on water supply and sanitation development. • Preparation of Integrated Water Resources Management Plan (IWRM) • The adoption of water sector communication strategies • Development of rules on conflict resolution mechanisms 	Hiring a consultant to fine tune the draft and holding national and regional workshops	<table border="1"> <tbody> <tr> <td data-bbox="780 766 858 846">Technical Assistance</td> <td data-bbox="865 766 1254 846">Six months on-the-job training of water resources staff in institutional management and IWRM and conflict resolution mechanisms</td> <td data-bbox="1260 766 1461 846">Recruitment of Technical Assistant</td> </tr> </tbody> </table>	Technical Assistance	Six months on-the-job training of water resources staff in institutional management and IWRM and conflict resolution mechanisms	Recruitment of Technical Assistant
		Gap	Activity	Method								
		Institutional and Legislative Reforms	Finalization of Water Sector Rules, guidelines regulations and Strategies as follows: <ul style="list-style-type: none"> • Subsidiary legislation on water resources management • Country strategy on integrated water resources management. • Country strategy on water supply and sanitation development. • Preparation of Integrated Water Resources Management Plan (IWRM) • The adoption of water sector communication strategies • Development of rules on conflict resolution mechanisms 	Hiring a consultant to fine tune the draft and holding national and regional workshops								
		Technical Assistance	Six months on-the-job training of water resources staff in institutional management and IWRM and conflict resolution mechanisms	Recruitment of Technical Assistant								
		<table border="1"> <tbody> <tr> <td data-bbox="780 873 858 1034">Short Term Regulation Training</td> <td data-bbox="865 873 1254 1034">Training of two officers, one on regulations in water use allocation and charges and the other in water services regulation</td> <td data-bbox="1260 873 1461 1034">Two weeks to one month training on regulations</td> </tr> </tbody> </table>	Short Term Regulation Training	Training of two officers, one on regulations in water use allocation and charges and the other in water services regulation	Two weeks to one month training on regulations	<table border="1"> <tbody> <tr> <td data-bbox="780 1061 858 1223">Long Term Training</td> <td data-bbox="865 1061 1254 1223">Training three officers at masters level in groundwater assessment and modelling, water quality testing and pollution curbing, and hydrometeorology; and two officers at PhD level in international water law and policy and the other on water quality management science</td> <td data-bbox="1260 1061 1461 1223">Sponsorship of four officers in overseas universities such ITC in the Netherlands for sciences and Dundee, Scotland for water law and policy</td> </tr> </tbody> </table>	Long Term Training	Training three officers at masters level in groundwater assessment and modelling, water quality testing and pollution curbing, and hydrometeorology; and two officers at PhD level in international water law and policy and the other on water quality management science	Sponsorship of four officers in overseas universities such ITC in the Netherlands for sciences and Dundee, Scotland for water law and policy			
		Short Term Regulation Training	Training of two officers, one on regulations in water use allocation and charges and the other in water services regulation	Two weeks to one month training on regulations								
Long Term Training	Training three officers at masters level in groundwater assessment and modelling, water quality testing and pollution curbing, and hydrometeorology; and two officers at PhD level in international water law and policy and the other on water quality management science	Sponsorship of four officers in overseas universities such ITC in the Netherlands for sciences and Dundee, Scotland for water law and policy										
<table border="1"> <tbody> <tr> <td data-bbox="780 1249 858 1438">Equipments</td> <td data-bbox="865 1249 1254 1438">Equipping six regional water catchment bodies with six modern groundwater assessment tools and six portable paqua labs, six portable UV spectrophotometer mobile water testing kits and GIS software and hardware including digitizers and plotters</td> <td data-bbox="1260 1249 1461 1438">Procurement</td> </tr> </tbody> </table>	Equipments	Equipping six regional water catchment bodies with six modern groundwater assessment tools and six portable paqua labs, six portable UV spectrophotometer mobile water testing kits and GIS software and hardware including digitizers and plotters	Procurement									
Equipments	Equipping six regional water catchment bodies with six modern groundwater assessment tools and six portable paqua labs, six portable UV spectrophotometer mobile water testing kits and GIS software and hardware including digitizers and plotters	Procurement										

	Needs identified by countries	Support requested														
Rwanda	<ul style="list-style-type: none"> • Irrigation water use is insignificant at present; little data is available on water use in industry • Hydropower produces some 68% of requirements, but there is limited additional capacity • Although the country has transboundary lakes and rivers capable of navigation, transport and tourism are under-developed • There is serious erosion of catchments which affects groundwater recharge • Sector financing is inadequate • Human capacity to develop and manage the sector is underdeveloped • There is little decentralisation of management, in part due to financing and institutional constraints • Few Rwandan students study abroad, and there is heavy reliance on foreign expertise, which is costly • Work is frequently carried out and supervised by lead civil servants who are from a narrow set of backgrounds • It is difficult to establish a cadre of qualified personnel not only for national needs, but in order to address equitable management of water resources at a regional level • The National University of Rwanda recently created a course in water management, which is a step in the right direction 	<ul style="list-style-type: none"> • There is weak capacity at both central and decentralized levels; an important starting point is staff training in technical and managerial aspects of the water sector including water and sanitation civil engineering and soil conservation, as well as staff at provincial and district levels • The study reviewed current initiatives and donor support for activities of the water policy. Water resources management programs, drinking water supply programs and donor support were revisited 														
		<table border="1"> <thead> <tr> <th>Gap</th> <th>Activities</th> </tr> </thead> <tbody> <tr> <td>Improve policy dissemination</td> <td> <ul style="list-style-type: none"> • Develop strategies and programs of IWRM • Develop strategies and programs for effective management of transboundary waters • Integrate aspects of thermal springs, mineral and fishing (pisciculture) in the policy • Develop human resource capacity • Establish IWRM and systems of follow-up and evaluation • Install tools for dissemination • Undertake public awareness campaigns </td> </tr> <tr> <td>Reinforce the institutional framework</td> <td> <ul style="list-style-type: none"> • Study the current state and propose improvements </td> </tr> <tr> <td>Establish planning and management tools</td> <td> <ul style="list-style-type: none"> • Establish masterplan for national resource management • Develop IWRM for sectoral strategies in water • Study and publish IWRM and its application • Sensitize key communities to implementing IWRM • Set up four zones for IWRM / catchment management • Create National Agency for WRM (ANGRE) </td> </tr> <tr> <td>Installation of a database on water demand and supply</td> <td> <ul style="list-style-type: none"> • Establish a framework for collaboration with partners • Collect, analyze and publish data on quantities of water (surface and groundwater) • Make inventories of drinking water infrastructure • Analyze needs by different users • Analyze quality of resources and disseminate results • Create system of shared data management on water </td> </tr> <tr> <td>Use of rainwater in economic activities</td> <td> <ul style="list-style-type: none"> • Research techniques for collection of rainwater adapted to Rwanda • Establish range of techniques • Publicise the most suited techniques • Protect catchments against erosion • Provide technical assistance </td> </tr> <tr> <td>Reinforce capacities (centrally, decentralized entities and communities)</td> <td> <ul style="list-style-type: none"> • Short and long-term training in formulation of policies, planning and follow-up and evaluation of resource management programmes • Technical aid in formulation and application of IWRM </td> </tr> </tbody> </table>	Gap	Activities	Improve policy dissemination	<ul style="list-style-type: none"> • Develop strategies and programs of IWRM • Develop strategies and programs for effective management of transboundary waters • Integrate aspects of thermal springs, mineral and fishing (pisciculture) in the policy • Develop human resource capacity • Establish IWRM and systems of follow-up and evaluation • Install tools for dissemination • Undertake public awareness campaigns 	Reinforce the institutional framework	<ul style="list-style-type: none"> • Study the current state and propose improvements 	Establish planning and management tools	<ul style="list-style-type: none"> • Establish masterplan for national resource management • Develop IWRM for sectoral strategies in water • Study and publish IWRM and its application • Sensitize key communities to implementing IWRM • Set up four zones for IWRM / catchment management • Create National Agency for WRM (ANGRE) 	Installation of a database on water demand and supply	<ul style="list-style-type: none"> • Establish a framework for collaboration with partners • Collect, analyze and publish data on quantities of water (surface and groundwater) • Make inventories of drinking water infrastructure • Analyze needs by different users • Analyze quality of resources and disseminate results • Create system of shared data management on water 	Use of rainwater in economic activities	<ul style="list-style-type: none"> • Research techniques for collection of rainwater adapted to Rwanda • Establish range of techniques • Publicise the most suited techniques • Protect catchments against erosion • Provide technical assistance 	Reinforce capacities (centrally, decentralized entities and communities)	<ul style="list-style-type: none"> • Short and long-term training in formulation of policies, planning and follow-up and evaluation of resource management programmes • Technical aid in formulation and application of IWRM
		Gap	Activities													
		Improve policy dissemination	<ul style="list-style-type: none"> • Develop strategies and programs of IWRM • Develop strategies and programs for effective management of transboundary waters • Integrate aspects of thermal springs, mineral and fishing (pisciculture) in the policy • Develop human resource capacity • Establish IWRM and systems of follow-up and evaluation • Install tools for dissemination • Undertake public awareness campaigns 													
		Reinforce the institutional framework	<ul style="list-style-type: none"> • Study the current state and propose improvements 													
		Establish planning and management tools	<ul style="list-style-type: none"> • Establish masterplan for national resource management • Develop IWRM for sectoral strategies in water • Study and publish IWRM and its application • Sensitize key communities to implementing IWRM • Set up four zones for IWRM / catchment management • Create National Agency for WRM (ANGRE) 													
		Installation of a database on water demand and supply	<ul style="list-style-type: none"> • Establish a framework for collaboration with partners • Collect, analyze and publish data on quantities of water (surface and groundwater) • Make inventories of drinking water infrastructure • Analyze needs by different users • Analyze quality of resources and disseminate results • Create system of shared data management on water 													
		Use of rainwater in economic activities	<ul style="list-style-type: none"> • Research techniques for collection of rainwater adapted to Rwanda • Establish range of techniques • Publicise the most suited techniques • Protect catchments against erosion • Provide technical assistance 													
Reinforce capacities (centrally, decentralized entities and communities)	<ul style="list-style-type: none"> • Short and long-term training in formulation of policies, planning and follow-up and evaluation of resource management programmes • Technical aid in formulation and application of IWRM 															

	Needs identified by countries	Support requested																						
Sudan	<ul style="list-style-type: none"> • Training needs and institutional constraint assessment is considered an important phase of the training process as it identifies existing gaps in skills among personnel • Use of new technologies such as electronic equipment for the collection, processing, remote sensing analysis, retrieval and publication of data is vital for water resources assessment • Remote sensing and Geographic Information Systems (GIS) have a key role to play in water resources development and management; a specialist in remote sensing and GIS fields is urgently needed to conduct a training course in Sudan • Additional training fields include socio-economic and environmental modelling of water resources development programming, negotiations and conflict resolution techniques, water law and various fields of computational hydraulics, in particular water resources modelling and sedimentation management • The current decentralization process has led to an acute human resources deficit in technical and administrative areas in many states • Responsibility for integrating water and sanitation services at federal and state levels remains unclear, with pressure mounting for a combined mandate to be granted to national and state water corporations in line with international organizational norms • Some institutions lack staff capacity, current and up to date information, and assessment tools to devise strategic plans and make informed decisions, hindering the identification of national priorities and regional opportunities • Problems of lack of regulation and coordination between different users and fragmentation of Government responsibilities and institutions in the states are becoming serious • Environmental hazards caused by dumping pollutants in the Nile and their serious consequences on human health 	<ul style="list-style-type: none"> • Support is needed to update the NWP (Draft 2000) in the form of data collection and analysis of existing legislation in force, looking specifically at individual and communal rights and governmental powers; • Review and address institutional and organizational arrangements such as mechanisms for coordination at the national, district, and local levels, which should specify responsibility, authority and accountability for planning, regulation, and operations • A monitoring system should assess policy objective achievement, and record lessons learnt • Capacity building depends on adequate institutions, which also depend on human resources; relatively experienced staff is available at federal level and in the Khartoum State Water Corporation, but not at state level • Assessment and development of human resources in Sudan is an area that needs to be addressed by the PSF to enable formulation and implementation of policy <table border="1" data-bbox="783 831 1468 1778"> <thead> <tr> <th data-bbox="790 840 884 871">Authority</th> <th data-bbox="890 840 1461 871">Training Needs</th> </tr> </thead> <tbody> <tr> <td data-bbox="790 880 884 992">TWRO</td> <td data-bbox="890 880 1461 992">Negotiations and conflict resolution; international water law Strategic environmental assessment; socio-economic and environmental modelling; projects formulation / procurement</td> </tr> <tr> <td data-bbox="790 1001 884 1113">NWD</td> <td data-bbox="890 1001 1461 1113">GIS and remote sensing; flood and drought forecast; hydrology for engineers; hydrometry and sediment sampling for technicians. Databases for engineers and technicians; basic and advanced computer technology; telemetry technology and application</td> </tr> <tr> <td data-bbox="790 1122 884 1211">HRD</td> <td data-bbox="890 1122 1461 1211">Simulation of reservoir sedimentation; sedimentation in irrigation schemes; river morphology and river training Computational hydraulics</td> </tr> <tr> <td data-bbox="790 1220 884 1310">IOGD</td> <td data-bbox="890 1220 1461 1310">Water discharge measurement (for technicians); computer technology; computer technology in irrigation Irrigation engineering</td> </tr> <tr> <td data-bbox="790 1319 884 1453">GWWD</td> <td data-bbox="890 1319 1461 1453">Geophysical exploration; integrated use of water resources management; Installing, maintaining, operating monitoring equipment; analysis of water resources data; application of modelling techniques; analysis and data interpretation of water samples; data base management</td> </tr> <tr> <td data-bbox="790 1462 884 1552">SSD</td> <td data-bbox="890 1462 1461 1552">New technology of hydrological survey and mapping GIS and remote sensing Digital elevation models</td> </tr> <tr> <td data-bbox="790 1561 884 1606">RSA</td> <td data-bbox="890 1561 1461 1606">Satellite and software development; remote sensing and data handling; remote sensing applications in water resource</td> </tr> <tr> <td data-bbox="790 1615 884 1637">LUPDC</td> <td data-bbox="890 1615 1461 1637">Statistics and systems analysis; soils and land evaluation</td> </tr> <tr> <td data-bbox="790 1646 884 1713">HCENR</td> <td data-bbox="890 1646 1461 1713">Environmental management; environmental planning EIA; environmental information systems</td> </tr> <tr> <td data-bbox="790 1722 884 1767">SMA</td> <td data-bbox="890 1722 1461 1767">Training of hydro-meteorological experts, observers and data processing staff</td> </tr> </tbody> </table>	Authority	Training Needs	TWRO	Negotiations and conflict resolution; international water law Strategic environmental assessment; socio-economic and environmental modelling; projects formulation / procurement	NWD	GIS and remote sensing; flood and drought forecast; hydrology for engineers; hydrometry and sediment sampling for technicians. Databases for engineers and technicians; basic and advanced computer technology; telemetry technology and application	HRD	Simulation of reservoir sedimentation; sedimentation in irrigation schemes; river morphology and river training Computational hydraulics	IOGD	Water discharge measurement (for technicians); computer technology; computer technology in irrigation Irrigation engineering	GWWD	Geophysical exploration; integrated use of water resources management; Installing, maintaining, operating monitoring equipment; analysis of water resources data; application of modelling techniques; analysis and data interpretation of water samples; data base management	SSD	New technology of hydrological survey and mapping GIS and remote sensing Digital elevation models	RSA	Satellite and software development; remote sensing and data handling; remote sensing applications in water resource	LUPDC	Statistics and systems analysis; soils and land evaluation	HCENR	Environmental management; environmental planning EIA; environmental information systems	SMA	Training of hydro-meteorological experts, observers and data processing staff
Authority	Training Needs																							
TWRO	Negotiations and conflict resolution; international water law Strategic environmental assessment; socio-economic and environmental modelling; projects formulation / procurement																							
NWD	GIS and remote sensing; flood and drought forecast; hydrology for engineers; hydrometry and sediment sampling for technicians. Databases for engineers and technicians; basic and advanced computer technology; telemetry technology and application																							
HRD	Simulation of reservoir sedimentation; sedimentation in irrigation schemes; river morphology and river training Computational hydraulics																							
IOGD	Water discharge measurement (for technicians); computer technology; computer technology in irrigation Irrigation engineering																							
GWWD	Geophysical exploration; integrated use of water resources management; Installing, maintaining, operating monitoring equipment; analysis of water resources data; application of modelling techniques; analysis and data interpretation of water samples; data base management																							
SSD	New technology of hydrological survey and mapping GIS and remote sensing Digital elevation models																							
RSA	Satellite and software development; remote sensing and data handling; remote sensing applications in water resource																							
LUPDC	Statistics and systems analysis; soils and land evaluation																							
HCENR	Environmental management; environmental planning EIA; environmental information systems																							
SMA	Training of hydro-meteorological experts, observers and data processing staff																							

	Needs identified by countries	Support requested
Tanzania	<ul style="list-style-type: none"> • The reform process needs to be accelerated if development targets are to be met; efforts are required to complete the design of the water policy implementation framework • Policy implementation requires high-level consensus building in order to finalise the Principal Water Legislation • Alignment of water policy and legislation with other related sectors depends on the completion of water policy implementation framework • Establishment of a Water Pricing Policy to facilitate the issuing of water use permits is required; as is the integration of the concept of water as an economic good • Improving data acquisition and processing systems and infrastructure at both basin and national levels needs support • Staffing levels and skills need to increase, which requires both short and long-term support; detailed study of the roles and functions and the existing institutions is recommended to establish capacity building requirements • During the RBMSIIP project (1996-2004) priority was given to the Rufiji and Pangani Basins where water use competition was very high and conflicts had reached alarming proportions; external support is now required for the other seven basins (2005) (including Lake Victoria) 	<ul style="list-style-type: none"> • Assist in policy and strategy dialogue which aims to contribute to the consensus building process through exchange of best practice • Support a detailed study to establish requirements for training and employment of key staff, including budgets and programmes, to address properly water policy implementation requirements, focusing on transboundary water management and dialogue • Assist in establishing an appropriate economic water user or abstraction fee system and in establishing a financing mechanism for autonomous water resources management operations • Establish revised legislation and sector development strategy • Establish multi-sector coordination mechanism at an appropriate level in the government that will enable coordination of all relevant sectoral issues, including the alignment of policies to avoid conflict at an operational level • Ensure that lead sector legislation is always recognized in other sector legislation, including water • Establish a proper framework and network for communication and advocacy

	Needs identified by countries	Support requested														
Uganda	<ul style="list-style-type: none"> • Strengthen national capacity for multi-country projects and management through subsidiary action programmes (SAPs) that will add skills and provide support in four areas, namely: IWRM, project preparation, planning and design, project management and administration, • Establish a draw-down support facility to provide technical assistance and advisory support at national level; enhance skills in project planning and management including development of practical guidelines and knowledge bases relevant to NBI activities • Human resources development and strengthening in knowledge sharing, understanding river system behaviour, evaluating alternative development and management schemes, and supporting informal decision making under regional perspectives • Development of a Decision Support System (DSS) to build the technical infrastructure to facilitate water resources planning and management from a basin-wide perspective through: common computer-based platforms for communication, information management, analysis of Nile basin water resources • Institutional development by strengthening institutional and human capacity in DSS development and application through comprehensive short-term on the job training and long-term professional development programmes, and ensuring technical sustainability of the DSS • Technical development using design, development and application of DSS tools through: a basin-wide communication and information management system (IMS) to support the SVP, a river basin planning model to assist the evaluation of alternative development projects at national and regional levels, and develop capabilities and a toolkit of water resources tools • Basin-wide organizational development resource needs: cooperation mechanism through development of common guidelines for the collection, processing, analysis and exchange of data and information • This will address the reliability and accuracy of DSS related data and communication data formats and other procedures for exchange and quality assurance • Financial sustainability issues for the consolidation of DSS use and cooperation • Policy implementation arrangements under capacity needs: coordination committees to comprise national senior water managers and the Executive Director of NBI 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 95%;">Area</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Staff development programmes (training)</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Technical assistance and back up</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Studies and research</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Information dissemination and sensitization of the public</td> </tr> <tr> <td style="text-align: center;">5.</td> <td>Equipment and facilities</td> </tr> <tr> <td style="text-align: center;">6.</td> <td>Operational support and transboundary coordination</td> </tr> </tbody> </table>		Area	1.	Staff development programmes (training)	2.	Technical assistance and back up	3.	Studies and research	4.	Information dissemination and sensitization of the public	5.	Equipment and facilities	6.	Operational support and transboundary coordination
	Area															
1.	Staff development programmes (training)															
2.	Technical assistance and back up															
3.	Studies and research															
4.	Information dissemination and sensitization of the public															
5.	Equipment and facilities															
6.	Operational support and transboundary coordination															

Needs and support summary matrix

	Needs	Support
Process	<ul style="list-style-type: none"> • Management and information exchange • Equal technical capacity to formulate policy between countries • Greater levels of technical expertise • Financial assistance for policy formulation • Greater focus on rural development issues • Local human capacity development to reduce external reliance • Greater knowledge of new technologies for development (GIS/RS) • Greater staff capacity and access to data to make decisions • Better legislative alignment • Capacity development in management, administration and knowledge-sharing • Regional resource database • Decision support system • Basin-wide communication and information management 	<ul style="list-style-type: none"> • Organisation of basin-wide annual workshop for water policy support and implementation • Technical assistance on institutional coordination and dialogue with partners • Support for institutional reform processes and inter-institutional dialogues • Assistance in development of national regulations • Support to incorporation of transboundary principles, including equitable sharing of benefits • Development and drafting of national water codes • Assistance in development of inter-departmental committee on coordination • Creation of reliable resource use databases • Technical and academic training in specific areas including IWRM, planning, community participation, groundwater modelling and assessment, international water law, water quality science, etc • Development of a roadmap for capacity development in each country • Establishment of regional plan for training and transfer of technical expertise • Natural resource master-planning at national level, including developing data on water availability and shared data management • Support to policy updating focusing on communal rights and government powers • Assistance on consensus-building through policy and strategy dialogue • Detailed study of training support requirements
Content	<ul style="list-style-type: none"> • Attention to food security and energy issues • A regional cooperation framework • Incorporation of legal rights issues • Effective principles on disasters, conflicts etc • Transboundary resource management • Data on national water use by sector • Integrate concept of 'economic and social value' of water • IWRM preparation, planning and design 	<ul style="list-style-type: none"> • Share and develop existing basin expertise in formulation, training and capacity building for policy design • Establish national norms on water quality and methods of quality control, etc • Integrate regional water issues in national policy documents • Training on gender mainstreaming • Training in water resource management legislation; IWRM plan preparation; • Training in conflict resolution rules, allocation mechanisms and regulation
Implementation	<ul style="list-style-type: none"> • Equalise technical capacity • Update existing agreements • Develop mechanisms for assisting and monitoring processes including lesson learning • Public awareness-raising and indicators for participation in implementation • Better definition of institutional arrangements for implementation • Strong policy review and feedback mechanisms • Legal reform to remove duplication and overlap in regulation and management • Greater skills in institutional management • Water use regulation and expertise • Technical skills to operationalised new institutions • Training of trainers for new institutional roles • Training in institutional constraints assessment 	<ul style="list-style-type: none"> • Developing joint training programmes with the SVP-AT project • Supervision and evaluation of policy implementation processes, including monitoring against objectives • Help in assessing implementation capacity and training needs • Study tours to different basin countries (and twinning with other basins) • Training in public-awareness raising and tools for dissemination • Assistance in establishing effective performance monitoring, and clear and effective institutional arrangements including role definition • Help in establishing an effective legal basis for implementation • Staff training for implementation • Strategies for promoting private sector involvement • Development of information materials and forums for exchange • Specification of equipment required by decentralised management organisations • Assistance in sensitizing stakeholders to IWRM issues • Development of collaborative frameworks for partners, including frameworks for analysing user needs • Help in reviewing coordinating mechanisms for issues of responsibility, accountability, etc • Assistance in establishing appropriate water user and abstraction fee systems

5 Bibliography

- Abdalla, Seifeldin H. (2005) 'Sudan: Baseline and national water policy needs assessment study', Draft, June. Khartoum.
- Attia, Bayoumi B. (2005) 'Egypt: Water Policy Formulation and Implementation Process Baseline and Need Assessment Study', Final, September. Cairo.
- Haajer, M. (1996) *The Politics of environmental discourse: ecological modernization and the policy process*, Oxford, Clarendon Press
- Kamugasha, Benjamin Nganwa (2005) 'Uganda: Baseline and needs assessment', June. Kampala.
- Lukanda, Mwamba Vincent (2005) 'DRC: Evaluation de base et de besoins pour la mise en œuvre de la politique nationale de l'eau dans une perspective de coopération regionale, Draft, July. Kinshasa.
- Msuya, Meraji O.Y. and Luteganya, Kamugenyi P. (2005) 'Tanzania: Baseline and needs assessment', Final, September. Dar es-Salam.
- Nyaoro, John Rao (2005) 'Kenya: Situation analyses on the national water policy', final, October'. Nairobi.
- Ruberangeyo, Théophile S. (2005) 'Rwanda: Etat des lieux du processus de formulation de la politique et evaluation des besoins pour son amelioration et sa mise en oeuvre', Draft, August. Kigali.
- Sadoff, C.W., Whittington, D., and Grey, D. (2002) *Africa's International Rivers: An Economic Perspective*. The World Bank, Washington, D.C.
- Sinarinzi, Evariste (2005) 'Burundi: Etude de base sur l'état actuel du processus de formulation de la politique de l'eau et evaluation des besoins pour son amelioration et sa mise en oeuvre', Final, June. Bujumbura.
- Workie, Teshome (2005) 'Ethiopia: A baseline and needs assessment study of Ethiopian water policy', Final, September. Addis Ababa.

6 Annexes

Review form

NBI Water Resources Project : Shared Vision Initiative Water Policy Component—Water Policy Formulation and Implementation Process

Baseline & Needs Assessment Lead Consultant Review Sheet:	
1. Executive Summary	
2. Background on the Water Sector	
a) Water resources availability: surface water; ground water; non-conventional water resources	
b) Water present and future usage	
c) Institutional and legal framework	
d) Current transboundary water documentation	
3. Available Information on the Water Policy Process in the Country.	
a) Major strategic documents for the water sector	
b) Current status of the water policy formulation and implementation process	
c) Institutions and sectors involved in the policy formulation and implementation process	
d) Reflection of transboundary issues in the water policy, especially with respect to the NBI objectives	
e) Effectiveness, obstacles and impacts of the water policy	
f) National and regional gaps of the existing water policy (alignment with best practices)	
g) Capacity gaps and training needs for related national staff	
h) Current initiatives and donor support to water policy activities	
4. Suggestions for issues and activities to be addressed by the Policy Support Facility. (incl. assessment of financial resources needed)	
5. Conclusion and Recommendations.	
6. Annexes	
a) Current Water Policy of the Country (if available).	
b) Institutional Set-Up.	
c) Persons and Institutions Consulted.	

Outcome of working groups at Regional Workshop

The following key questions were posed to the working groups and the outcome posted below:

- How to optimize the regional-national linkage in policy development and implementation?
- How can each county best benefit from this component?
- What is, what could be, and how best can we maximize the Policy support Facility's impact on cooperation?

Compiled answers from the three groups:

General

- Emphasize economic impacts of climate change and hydrologic variability, specifically looking at how this issue can be addressed with water policy
- Considering IWRM and related global trends (e.g. MDGs), analyze how national policies do, do not, and can address these
- Assess where there are areas of convergence and difference among the countries as regards the national policies and policy processes. In looking at potential areas of harmonization, what is the current state of affairs?
- Assess and analyze the current state of implementation of policies
- Look more closely at the financial aspects of policy development and implementation in each country and across the region. Perhaps include analysis of how financial constraints and/or support has impacted water policy in the country and beyond.
- Assess the lack of transboundary considerations in national policies. Provide more specificity about what exists and where the gaps are.
- How do/can the countries raise awareness of IWRM to strengthen policy implementation and formulation?
- What areas could have assessment and review of existing policy and implementation?
- What are the national priorities for change/action as regards water policy?
- Where are the major gaps and what are the greatest challenges that countries face in terms of their water policies?

Optimizing regional-national linkages:

- Assess the frameworks that exist (or could exist) to pursue transboundary benefits and cooperation.
- Encouraging consideration of benefit-sharing in policy formulation and implementation processes can have important impacts at the national level.
- Starting at a small/localized transboundary level is key (e.g. Uganda/Kenya river basin cooperation).
- Transboundary aspect of water policy is one linkage, highlight those transboundary issues.
- Better to have tables for transboundary issues.
- Need guidelines on how to cooperate more.
- Assess degree of strengthening in the relationship.
- Create an enabling environment.
- The component should create policy awareness.
- There is a need to sustain and advance the existing political will.
- Follow a phased approach to ensure that national policies are brought to acceptable standards (best practices, NBI principles, etc), in accordance with agreed guidelines that take care of transboundary issues.
- Upgraded national policies could be integrated to a regional water policy that will ensure maximum benefits.
- The existing national policies should be reviewed with respect to cooperation aspects and conflict areas (if any);
- These issues should be resolved at the regional level according to NBI objectives and principles.

- Then national policies should be reviewed/updated according to what has been agreed upon.
- With respect to implementation, a regional body needs to be established to assist countries in monitoring and evaluating policy implementation.
- Transparency should be enhanced among countries in cooperation with the SVP confidence-building project.

How can each country best benefit from this component?

- Help with policy implementation process assessment and review. Specifically, assessment of the current policies to see where there are areas for improvement.
- Be provided with tools for improving policies.
- Recommendations for strengthening implementation structures.
- Raising awareness to ensure that the policy-makers appreciate the importance of the area and what kinds of resources and measures are required.
- Opportunities for shared experiences should be broadened in order to amplify the impact of the component: e.g. Additional participants in study tours; undertake tours as part of a broader process.
- Human and institutional capacity building.
- Lessons learned from strengths and weakness.
- Developing a communications strategy.
- More stakeholder involvement as a result of awareness creation.
- Gaps identified by national consultants to be summarized by the component and report to have gap-matrix.
- Prioritizing what is needed.
- Upgrading of national policies.
- Creation of awareness.
- Participation.
- Institutional Capacity Building.
- Institutional setup.
- Policy implementation.
- Each country should define its needs.
- Countries should focus on a specific set of activities that fit with achieving component objectives.
- Set of activities should be limited to development, reviewing and implementation of water policies.
- A set of criteria for support should be developed and agreed upon.

How to maximize PSF's impact on cooperation?

- Emphasize cooperation and benefit sharing in the guidelines and compendium.
- Sharing information about the current policies, implementation, and results within the NBI.
- Stronger water policies and implementation structures will help to strengthen transboundary issues and thereby enhance regional cooperation.
- Increased confidence and trust among countries.
- Political involvement and participation in the Component will strengthen positively the impact of national policy implementation, as well as cooperation.
- This Component can not maximize cooperation by itself, it has to work with or link to other projects.
- Use a developed Regional Policy to finalize the cooperation framework.

[Additional] Output based discussion:

- Need to prioritize Capacity Building.
- Selling the Concept of water planning focused at government level in IWRM.
- Focus on policy processes.

- Assist countries in:
 - Policy Development.
 - Policy Implementation.
- Prioritizing to be done at two levels:
 - One for Groups of Countries at higher level.
 - Others having Specific Needs at National Level.

Regional Lead Consultant Terms of Reference

The Water Resources Planning & Management Project

The Shared Vision Program (SVP) is composed of eight basin-wide soft projects to provide an enabling environment for action at the sub-basin level. One of these SVP projects is the one for water resources planning and management hosted by the Government of Ethiopia and located at Addis Ababa. The project has four components:

- Water Policy Good Practice Guides and Support
- Project Planning and Management Good Practice Guides and Support
- Nile Basin Decision Support System
- Regional Coordination and Facilitation

The Water Policy Component

Water, by its nature, intersects sectors and political borders. Hence, any water policy should take into consideration policies of other related sectors. Moreover, if countries share a river basin like the Nile their national water policies should consider their impact beyond political borders as well as the impact of the neighboring countries' water policies. As the Nile Basin Countries have embarked on a cooperative path, the water policy component aims to build a common technical foundation for water policy formulation and implementation with a cooperative regional perspective. It aims to enable the Nile Basin Countries to reach a common understanding of the relationship between their national policies, regional needs and cooperative development. The desired outcome of the component, therefore, is that national water policies and strategies are improved or initiated in Nile Basin countries according to sound IWRM and good-practice guidelines, especially those related to international river basins. A baseline and needs assessment study would form a foundation for the component activities.

Objective of Consultancy

The objective is to conduct a baseline study of the current situation of the water policy process in the Nile Basin Countries and assess the needs of these countries to enhance the formulation and implementation of their national water policies within a cooperative regional perspective. The assessment should help in planning the component activities in detail and provide a useful baseline by which the success and impact of the component may be measured. This will be an interactive exercise of regional and national workshops and other activities to ensure that the assessment reflects the needs of the Nile Basin Countries as well as complements current related processes in each of the countries involved. It will also start the process of having a compendium of the national policies indicating their successes and challenges.

Approach and Scope of Work

The Lead Consultant will work with a team of National Consultants, one from each NB country. The National Consultants will prepare the baseline and needs assessment report for their respective countries and hold workshops for review and feed back under the guidance of the lead consultant. Following the international norms and assisted by what is available in the domain and the national reports, the lead consultant will come up with a consolidated report and present it to a regional workshop. The work will include, but not be limited to, the following services:

- Develop a format for the national reports
- Select and report on some examples of best practices for the water policy process
- Review and comment on the national reports
- Compile and consolidate the national reports in one regional report, assisted by what is available on the public domain
- Present the regional report at the regional workshop
- Help in preparing for and facilitating the regional workshop
- Refine the regional report with the outcome of the regional workshop to the satisfaction of the Water Policy Lead Specialist
- Compile the information into a database to be integrated in the new NBI web page accessible for all concerned
- Identify the criteria for the policy support facility and activities planned for country

Deliverables or Outputs

- The Lead Consultant is expected to deliver the following outputs:
- Format for reports of the national consultants prepared
- Some examples of best practices for the water policy process collected
- The national reports reviewed
- Gathered information into synthesized into a consolidated regional report
- Preparation of and facilitation of the regional workshop
- The regional report finalized and compiled into a database for the NBI web page

Expertise Required

- The Consultant should have proven experience, especially at the international level, for a minimum of 10 years in:
- Integrated water resources planning and management
- The water policy formulation and implementation process for countries sharing river basins
- Specialized expertise in baseline studies and needs assessment of countries on the water policy process
- Relevant work experience in developing country context, preferably in Africa and especially in the Nile Basin
- Experience working in a multi-country context, particularly as related to transboundary waters is a significant advantage
- Demonstrated ability to compile and review relevant information from the public domain and the internet
- Proven experience in preparing for, conducting and facilitating workshops
- Fluency in English and a high standard of written presentations
- Working knowledge of French is an advantage

Administrative Arrangement

The Lead Consultant will work in close communication with the Water Policy Task Force Members, the National Consultants and institutions handling water policy formulation and implementation issues. The Consultant will formally report to the Water Policy Lead Specialist for this work.

Period of Service and Contract Terms

The expected level of effort is up to 35 days. Approved travel and subsistence will be reimbursed in accordance with GTZ roles and regulations, with appropriate receipts. Other consumables (phone, copying, etc) will be reimbursed to an agreed upon maximum with appropriate receipts.

Expected Schedule

A detailed schedule will be developed when the Lead Consultant is on board. A tentative schedule may be as follows:

- | | |
|-----------------------------------|--------------|
| • Format for National Consultants | April 20 |
| • Examples of best practices | May 10 |
| • Review of national reports | May - July |
| • Draft consolidated report | August 10 |
| • Regional workshop | September 15 |
| • Final report on database | September 30 |

National Consultant Terms of Reference

Objective of Consultancy

The objective is to conduct a baseline study of the current situation of the water policy process in each of the Nile Basin Countries and assess the needs of the country to enhance the formulation and implementation of the national water policy within a cooperative regional perspective. The assessment should help in planning the component activities in detail and provide a useful baseline by which the success and impact of the component may be measured. This will be an interactive exercise of regional and national workshops and other activities to ensure that the assessment reflects the needs of the Nile Basin Countries as well as complements current related processes in each of the countries involved. It will also start the process of having a compendium of the national policies indicating their successes and challenges.

Approach and Scope of Work

The Consultant will work as a member of a team of National Consultants, one from each NB country with a Lead Consultant for the basin, to prepare the baseline and needs assessment report for the respective country and hold workshops for review and feed back. Following the international norms and assisted by what is available in the domain, the Consultant will come up with a report and present it to a national workshop. The work will include, but not be limited to, the following services:

- Compile available information in the country and from relevant domains on the water policy process
- Determine current status in the country in policy formulation and implementation
- Ascertain impacts (positive and negative) of the policy, and analyze effectiveness as well as obstacles
- Gauge alignment with best practice (e.g. multi-sectoral, IWRM, stakeholder participation, etc.)

- Assess institutional set-up for policy formulation and implementation
- Explore reflection of transboundary issues in the policy, particularly with respect to NBI objectives
- Identify other on-going major policy related initiatives (e.g., donor supported policy review)
- Identify gaps, national and regional, in existing water policies
- Identify capacity gaps and training needs
- Assess resource needs
- Compile the gathered information in a report to be presented to a national workshop
- Prepare for, conduct and facilitate the national workshop
- Refine the report with the outcome of the national workshop and the review of the Lead Consultant to the satisfaction of the Water Policy Lead Specialist
- Participate in the regional workshop to discuss the outcome of the study
- Other related tasks as required by the Water Policy Lead Specialist.

Deliverables and Outputs

The Consultant is expected to deliver the following outputs:

- A format for the report
- A first draft of the report containing the synthesized gathered information
- Preparation, carrying out and facilitation of the national workshop
- The final report following the workshop input and the Lead Consultant review

Expertise Required

- The Consultant should have proven experience in:
 - Integrated water resources planning and management
 - The water policy formulation and implementation process for countries sharing river basins
 - Specialized expertise in baseline studies and needs assessment on the water policy process
 - Experience working in a multi-country context, particularly as related to transboundary waters is a significant advantage
 - Demonstrated ability to compile and review relevant information from the public domain and the internet
 - Proven experience in preparing for, conducting and facilitating workshops
 - Fluency in English or French as appropriate and a high standard of written presentations
 - Working knowledge of the other language is an advantage.

Administrative Arrangement

The Consultant will work in close communication with the Water Policy Task Force Member and institutions handling water policy formulation and implementation issues. The Consultant will formally report to the Water Policy Lead Specialist for this work.

Period of Service and Contract Terms

The expected level of effort is up to 25 days. Approved travel and subsistence will be reimbursed in accordance with GTZ roles and regulations, with appropriate receipts. Other consumables (phone, copying, etc) will be reimbursed to an agreed upon maximum with appropriate receipts.

Expected Schedule

A detailed schedule will be developed when the Consultant is on board. A tentative schedule is as follows:

Format for the report	April 20
First draft of the report	May 15
National workshops	June -July
Final report	July 15
Regional workshop	September 15

Acronyms

AAU	Addis Ababa University	Ethiopia
ADLI	Agricultural Development Led Industrialisation	Ethiopia
AEP	Alimentation en Eau Potable	Rwanda
AEPA	Alimentation en Eau Potable et Assainissement	Rwanda
AMCOW	African Ministerial Conference on Water	Rwanda
ANGRE	Agence Nationale de Gestion des Ressources en Eau	Rwanda
APRP	Agriculture Policy Reform Program	Egypt
BAD	Donor, unspecified	DRC
BCM	billion cubic metres	Kenya
BCWUA	Branch Canal Water User Association	Egypt
Bm3	Billion cubic metre	Ethiopia
CAAC	Catchment Areas Advisory Committee	Kenya
CBOs	Community Based Organizations	Tanzania
CEMAC	NF	DRC
CICOS	NF	DRC
CIDA	Canadian International Development Agency	Egypt
CLC	Country Level Collaboration	Kenya
CLEQM	Central Laboratory for Environmental Quality Monitoring	Egypt
CNAEA	Comité National d'Action pour l'Eau de l'Assainissement	DRC
CNE	Commission Nationale de l'Energie	DRC
CSA	Central Statistical Authority	Ethiopia
CSOs	Civil Society Organizations	Uganda
DFID	Department for International Development (UK)	Uganda
DGATE	Génie Rural et Protection de sols	Burundi
DGHER	Directeur Générale de l'Hydraulique et des Energies Rurales	Burundi
DOM	Department of Metrology	Uganda
DPFRI	NF	DRC
DRA	Demand Responsive Approach	Tanzania
DRC	REPUBLIQUE DEMOCRATIQUE DU CONGO	DRC
DRE	Direction de Ressources en Eau	DRC
DSS	Decision Support System	Uganda
DTS	Droit de Tirages Spéciaux	Rwanda
DWD	Department of Water Development	Kenya
DWD	Directorate of Water Development	Uganda
EAC	East Africa Cooperation	Kenya
EAC	East African Community	Uganda
EEA	Ethiopian Energy Agency	Ethiopia
EELPA	Ethiopian Electric Light and Power Authority	Ethiopia
EEPSCO	Ethiopian Electric and Power Corporation	Ethiopia
EFTCA	Egyptian Fund for Technical Cooperation	Egypt
EHD	Environmental Health Division	Uganda
EIA	Environmental Impact Assessment	Kenya
ELECTROGAZ	Société de Production et de Distribution d'Electricité, d'Eau et de Gaz	Rwanda
ENSAP	Eastern Nile Subsidiary Action Program	Egypt
EPA	Environmental Protection Authority	Ethiopia
EPADP	Egyptian Public Authority for Drainage Project	Egypt

EPE	Environmental Policy of Ethiopia	Ethiopia
EPIQ	Environmental Policy & Institutional strengthening indefinite Quantity	Egypt
ESAs	External Support Agencies	Tanzania
ESTC	Ethiopian Science and Technology Commission	Ethiopia
EWRMP	Ethiopian Water Resources Management Policy	Ethiopia
EWURA	Energy and Water Utilities Regulatory Authority	Tanzania
FAO	Food and Agriculture Organisation	Rwanda
FPMU	Federal Programme Management Unit	Ethiopia
FYs	Financial Years	Uganda
GDP	Gross Domestic Product	Tanzania
GECAMINES	NF	DRC
GIRE	Gestion Intégrée des Ressources en Eau	Rwanda
GIS	Geographical Information System	Burundi
GOE	Government of Ethiopian	Ethiopia
GoU	Government of Uganda	Uganda
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation Agency)	DRC
Gwh	Gaga Watt Hour	Ethiopia
ha	hectare	Ethiopia
HAD	High Aswan Dam	Egypt
HDP	Hydropower Development Programme	Ethiopia
HYROMET	Hydrometeorological records	Uganda
IAS	Irrigation Advisory Services	Egypt
IBN	Initiative du Bassin du Nil	Rwanda
ICBP	Institution and Capacity Building Programme	Ethiopia
ICCON	International Consortium for Cooperation on the Nile.	Egypt
ICS	Interconnected System	Ethiopia
ID	Irrigation Department	Egypt
IDP	Irrigation Development Programme	Ethiopia
IDWSSD	International Drinking Water Supply and Sanitation Decade	Uganda
IGAD	Inter-Governmental Agency for Draught	Uganda
IGC	NF	DRC
IGEBU	Institut Géographique du Burundi	Burundi
IHP	International Hydrological Programs	Egypt
IIP	Irrigation Improvement Project	Egypt
IMS	Irrigation Management System	Egypt
INECN	Institut National de l' environnement et de la Nature	Burundi
INERA	Institut National d'études et de Recherches Agronomiques	DRC
ISAE	Institut Supérieur d'Agriculture et d'Elevage	Rwanda
ISTA	NF	DRC
IWRM	Integrated Water Resources Management	Rwanda
JICA	Japan International Cooperation Agency	Kenya
KBO	Kagera Basin Organization	Uganda
Kwh	Kilo Watt Hour	Ethiopia
KWS	Kenya Wildlife Service	Kenya
l/s/km 2	Litres per second per square kilometre	Tanzania
LCV	Local Council (Five) – Elected Head of a district	Uganda
LG	Local Government	Uganda

LVBC	Lake Victoria Basin Commission	Kenya
LVDP	Lake Victoria Development Programme	Uganda
LVEMP	Lake Victoria Environment Management Programme	Uganda
LVFO	Lake Victoria Fisheries Organization	Uganda
m ³ /h	Cubic Metres per Hour	Tanzania
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries	Uganda
MALR	Ministry of Agriculture and Land Reclamation	Egypt
MCM	million cubic metres	Kenya
MDG	Millennium Development Goals	Kenya
MED	Mechanical and Electrical Department	Egypt
METELSAT	NF	DRC
METTELSAT	NF	DRC
MGLSD	Ministry of Gender, Labour and Social Development	Uganda
MHUNC	Ministry of Housing Utilities and New Communities	Egypt
MINAGRI	Ministère de l'Agriculture et de l'Élevage	Rwanda
MINALOC	Ministère de l'Administration Locale, des Affaires Sociales et du Développement Rural	Rwanda
MINATET	NF	Burundi
MINECOFIN	Ministère des Finances et de la Planification Economique	Rwanda
MINEDUC	Ministère de l'Éducation, de la Science, de la Technologie et de la Recherche Scientifique	Rwanda
MININFRA	Ministère des Infrastructures	Rwanda
MINISANTE	Ministère de la Santé	Rwanda
MINITERE	Ministère des Terres, de l'Environnement, des Forêts, de l'Eau et des Ressources Naturelles	Rwanda
MIS	Management Information System	Tanzania
MME	Ministry of Mines and Energy	Ethiopia
MOE	Ministry of Electricity	Egypt
MOES	Ministry of Education and Sports	Uganda
MOH	Ministry of Health	Uganda
MOHP	Ministry of Health and Population	Egypt
MOI	Ministry of Industry	Egypt
MOLD	Ministry of Local Development	Egypt
MOP	Ministry of Planning	Egypt
MOT	Ministry of Transportation	Egypt
MOTS	Ministry of Trade and Supply	Egypt
MoWR	Ministry of Water Resources	Ethiopia
MPE	Ministry of Public Enterprises	Egypt
MSEA	Ministry of State for Environmental Affairs	Egypt
MW	Mega Watt	Ethiopia
MWLE	Ministry of Water, Lands and Environment	Uganda
MWRI	Ministry of Water Resources & Irrigation	Egypt
NBI	Nile Basin Initiative	Rwanda
NELSAP	Nile Equatorial Lakes Subsidiary Action Program	Egypt
NEMA	National Environmental Management Authority	Kenya
NEPAD	New Partnership for Africa's Development	Rwanda
NGO	Non Government Organization	Egypt
NHIF	NF	Kenya
NILECOM	Nile Council of Ministers	Uganda

NILE-COM	Nile Committee of Ministers	Egypt
NMSA	National Meteorological Services Agency	Ethiopia
NMWP	National Master Water Plan	Kenya
NOPWASD	National Organization for Potable Water and Sanitary Drainage	Egypt
NRBAP	Nile River Basin Action Plan	Uganda
NSC	National Steering CommSuite	Ethiopia
NWP	National Water Policy	Uganda
NWRC	National Water Research Centre	Egypt
NWSC	National Water and Sewerage Corporation	Uganda
O&M	Operation and Manual	Egypt
O&M	Operation and Maintenance	Tanzania
OAD	Old Aswan Dam	Egypt
OBK	l'organisation, l'aménagement et le développement de la rivière KAGERA	Burundi
OBNIL	NGO name	DRC
ODM	Objectif de Développement du Millénaire	Rwanda
ONATRA	Name org	DRC
ONG	Organisation Non Gouvernementale	Rwanda
OVD	Office de Voirie et Drainage	DRC
PAF	Poverty Action Fund	Uganda
PBDAC	Principal Bank for Development Land Agricultural Credit	Egypt
PDNE	Plan Directeur National de l'eau	Burundi
PEAP	Poverty Eradication Action Plan	Uganda
PECHE	NF	Burundi
PGNRE	Projet de Gestion Nationale des Ressources en Eau	Rwanda
PMS	Policy Management Support	Uganda
PMU	Gestion du Projet	Burundi
PNA	Programme National d'Assainissement	DRC
PNE	Politique Nationale de gestion des ressources en Eau	Burundi
PNEA	Plan National d'Action Environnementale	DRC
PNUD	Programme de Nations Unies pour le Développement	DRC
POE	Panel of Experts	Egypt
PPDV	Name org	DRC
PRSP	Poverty Reduction Strategy Paper	Rwanda
PS	Planning Sector	Egypt
PSF	Policy Support Facility	Egypt
PSP	Private Sector Participation	Tanzania
R&D	Research and Development	Ethiopia
RDC	Régie des Voies Navigables	DRC
REGIDESO	Régie de distribution de l'eau et de l'électricité	Burundi
RPMU	Regional Programme Management Unit	Ethiopia
RVF	Régie des voies Fluviales	DRC
RVM	Régie des voies Maritimes	DRC
RWS	Rural Water Supply	Tanzania
S&T	Science and Technology	Ethiopia
SADCC	NF	DRC
SANRU	Org name	DRC
SAP	Strategic Action Programme	Egypt
SAP	Subsidiary Action Programme	Uganda

SCEVN	Service Commun d'Entretien des Voies Navigables	DRC
SCS	Single Contained System	Ethiopia
SDIPP	Schéma Directeur des Investissements Publics Prioritaires	Rwanda
SEP	société d'exploitation pétrolière	DRC
SETEMU	Service Technique	Burundi
SIDA	Swedish International Development Agency	Uganda
SIG	NF	Burundi
SNEL	Org name??	DRC
SNHR	Service National de l'hydrologie Rurale	DRC
SNNPR	Southern Nations Nationalities Peoples Region	Ethiopia
SRU	Strategic Research Unit	Egypt
STP	Science and Technologies Policy	Ethiopia
SUP	Shared Vision Programme	Ethiopia
SWAP	Sector Wide Approach	Rwanda
TAC	Technical Advisory Committee	Egypt
TECCONILLE	Technical Cooperation Committee for the Promotion of the Development & Environmental Protection of the Nile Basin	Uganda
TECONILE	Technical Committee for Promotion of Development and Environmental Protection of the Nile	Egypt
TLU	Tropical Livestock Unit	Ethiopia
UE	l'Union Européenne	DRC
UEA	Unité Eau et Assainissement	Rwanda
UFW	Unaccounted for Water	Uganda
UK	United Kingdom	Ethiopia
ULGA	Uganda Local Governments Association	Uganda
UN	United Nations	Tanzania
UNCED	United Nation Conference on Environment and Development	Tanzania
UNDP	United Nations Development Programme	Ethiopia
UNESCO	United Nations Educational, Scientific and Cultural Organization	DRC
UNICEF	United Nations Children Fund	Uganda
UNIKIN	Org name	DRC
USAID	US Agency for International Development	Egypt
USD	United States Dollar	Rwanda
UWASNET	Uganda Water and Sanitation NGO Network	Uganda
UWSAs	Urban Water Supply Authorities	Tanzania
UWSS	Urban Water Supply and Sewerage	Tanzania
WAB	Water Appeal Board	Kenya
WB	World Bank	Egypt
WID	Women In Development	Ethiopia
WMED	Water Mines and Energy Department	Ethiopia
WMO	World Meteorological Organization	Ethiopia
WP	NF	Burundi
WPC	Water Policy Committee	Uganda
WRDP	Water Resources Development Programme	Ethiopia
WRM	Water Resources Management	Tanzania
WRMA	Water Resources Management Authority	Kenya
WRMP	Water Resources Management Policy	Ethiopia
WRPM	NF	Burundi

WS&S	Water Supply and Sanitation	Egypt
WSDP	Water Sector Development Programme	Ethiopia
WSP	Water Services Providers	Kenya
WSPS	Water Sector Programme Support	Uganda
WSRB	Water Services Regulatory Board	Kenya
WSRS	Water Sector Reform Secretariat	Kenya
WSS	Water Supply and Sewerage	Tanzania
WSSDP	Water Supply and Sanitation Development Programme	Ethiopia
WSTF	Water Services Trust Fund	Kenya
WUA	Water User Association	Egypt
ZSR	Zones de santé Rurales	DRC