AFRICA REGIONAL PAPER

Bridging Divides in Africa's Water Security: An Agenda to Implement Existing Political Commitments

AFRICAN DEVELOPMENT BANK GROUP

WARNING:

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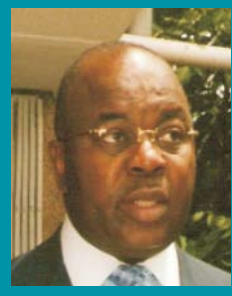
FOREWORD



The aim of the Africa agenda for the 4th World Water Forum in Mexico was to contribute to the dialogue on water development. The Ministerial Declaration issued in Mexico noted that to improve water security, "African countries need to invest in water infrastructure up to the level where they can, in order to achieve a self-sustaining auto-induced growth to eradicate poverty and achieve sustainable development". Good results are beginning to show. For example, the Infrastructure Consortium for Africa (ICA) reports that total ICA commitments to the water sector increased from US$1.8 billion in 2006 to US$2.9 billion in 2007, an increase of 60%.

The years between Mexico and Istanbul have witnessed a number of significant events and declarations. These include the Ministerial Conference on Sanitation (eThekwini), the organisation of the First African Water Week and Ministerial Declaration (Tunis), the dedication of the African Union (AU) Summit in June 2008 (Sharm El Sheikh) to water and sanitation, the Ministerial Meeting on Water for Agriculture and Energy (Sirte), and the establishment of the Groundwater Commission. These events have increased awareness of regional water security and sanitation issues, notably water for growth and development, the achievement of the water and sanitation MDG targets, impact of climate change and variability on water resources, food security and need for improved regional co-operation on water resources management and infrastructure development.

Africa has now reached the point where there needs to be greater convergence between the high level commitments and delivery through concrete and unambiguous actions, strengthening and scaling-up of existing mechanisms and initiatives, and refinement of strategies to close gaps.

The Africa regional preparations towards participation in the 5th World Water Forum benefited from a number of regional events at the levels of Heads of State and Government, Ministers and stakeholders, all of which have provided useful bases for defining concrete actions. Tunis, Lusaka Accra and Abidjan hosted regional consultations where representatives from countries, Regional Economic Commissions, Basin Organisations and civil society provided inputs. This Regional Paper, which was approved by AMCOW on 29th January 2009, is founded on their contributions. What is most important beyond the 5th World Water Forum will be the character and means of engagement of regional actors to vigorously pursue implementation at the local, national and regional levels.

The actions defined in this Paper require it to be treated as a living document that will provide a reference point for reporting progress on water and sanitation at events such as the African Water Week, AU July Summit of Heads of State and Governments and at the 6th World Water Forum.

The Africa Regional Paper launched at the Africa Day in Istanbul, seeks to bring to the attention of the region's partners, regional institutions, member governments and citizens what it will take to address the contribution of water to Africa's socio-economic development. It is my hope that everyone will align with the agenda set forth by AMCOW in this document and play their part accordingly.

The World Water Forum has served as an important platform for bringing Africa's water security challenges to global attention and has helped provide greater visibility to what the continent is doing to address these. The 6th World Water Forum in 2012 will no doubt be the penultimate lap before the "Year of the MDGs". Africa will be delighted to host the event, as it will give considerable push to its efforts at reaching the goals and move beyond in developing its water resources for social and economic gains.

On behalf of AMCOW, I wish to thank the African Development Bank for its leading role in putting this Paper together and in leading the Regional Process for Africa's participation in the 5th World Water Forum.

Hon. Bruno Jean Richard ITOUA
President of AMCOW and Minister of Water and Energy, Republic of Congo
31st January 2009

Organisation Of Africa's Participation In 5th World Water Forum

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- A. R. Rakotobe, Director of Water and Sanitation& African Water Facility, AfDB, (Co-Chair)
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- Prof. E Kairu, Chairperson, African Civil Society Network on Water and Sanitation (ANEW)
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Regional Co-ordination Committee

- Charles Ngangoue, AMCOW-TAC Chair (Co-Chair)
- Tefera Woudeneh, Regional Coordinator (Co-Chair)

Thematic Consortia

Theme	Topics	Consortium Members ([L] indicates Lead)
1. Global changes and risk management	▪ Adaptation to climate change ▪ Changing land uses ▪ Water-related hazards	GWP[L], SSO, ICLEI/UCLG, NEPAD
2. Advancing human development and MDGs	▪ Water sanitation and hygiene ▪ Energy ▪ Agriculture ▪ Multiple uses	UN-Water/Africa[L], ADB, WWC, WSP, IWMI, ANEW
3. Managing and protecting water resources	▪ Basin and trans-boundary ▪ Infrastructure ▪ Ecosystem ▪ Surface, groundwater, rainwater	ANBO[L], CEDARE[L], AGC (with UNESCO and UNEP), SADC, NEPAD, AWF, SSO, WWC
4. Governance and management	▪ Right to water ▪ Regulatory approaches ▪ Ethics, transparency, empowerment ▪ Public and private roles ▪ Institutional arrangements	AMCOW-TAC[L], ANEW[L], ADB, GWP, ICLEI/UCLG, AfWA, UN-Habitat. WSP
5. Finance	▪ Financing local water authorities ▪ Pricing strategies ▪ Pro-poor financing strategies	ADB[L], ECA, AfWA, WSP, ANBO, NEPAD
6. Education, knowledge and capacity development	▪ Education and capacity development ▪ Water science and technologies ▪ Professional networks/associations ▪ Data for all ▪ Water and culture	UNESCO[L], AfWA, NEPAD, GWP, WWC, SSO, CREPA, WMO, UN-HABITAT

Author of Regional Paper: Kwabena Sarpong Manu, with input from Andy Bullock and other consultants. This report is financed from the ADB Multi-Donor Water Partnership Programme (MDWPP) Fund and was commissioned by the African Development Bank on behalf of AMCOW. Opinions expressed do not necessarily reflect those of the Bank or AMCOW.

Acknowledgements

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The preparation of the paper was coordinated, facilitated and supervised by Mr. Tefera Woudeneh, Chief Water Operations Officer, African Water Facility and Regional Co-ordinator for Africa's participation in the 5th World Water Forum and Mr. Charles Ngangoue, Chair, AMCOW Technical Advisory Council (TAC) and Co-Chair of the Regional Coordination Committee. The active participation of AMCOW Sub-Regional Chairs, Agencies of the United Nations System, Regional economic Commission, River and Lake Basin Organisations and Civil Society. It received input from staff of the African Development Bank and regional water and sanitation actors through consultation workshops held in Lusaka and Accra and through direct contributions. The thematic sections of the Paper have been informed by presentations made during the First African Water Week held in Tunis in March 2008.

The draft of the Regional Paper was reviewed by the Bank Task Force and Regional Co-ordination Committee for Africa's participation in the 5th World Water Forum and was approved for publication by the Regional Steering Committee at its meeting in Abidjan held on 29th January 2009. The Bank expresses gratitude to both the Regional Co-ordination Committee and the Regional Steering Committee for their comments and guidance in finalising the report.

The Bank would like to thank all those who contributed to the preparation of the Regional Paper, including Ms. Monia Moumni, Chief Water and Sanitation Engineer, Water and Sanitation Department, AfDB, alternate Regional Co-ordinator.

Finally, AMCOW and the African Development Bank express their sincere gratitude to the World Water Council and the 5th World Water Forum Secretariat for their support to the regional preparations towards participation in the forum and the finalisation of the Regional Paper. Special mention goes to Daniel Zimmer of the Council, and Aysen Nergiz and Zeynep Saglam of the forum secretariat for their contribution.

[1] Supported by funds from the governments of Canada, The Netherlands, Denmark and the African Development Bank

Executive Summary

Key message

Amid the hundreds of topics to be discussed in Istanbul, Africa's message is a simple one. The most significant divide to bridge is that between commitments already made and delivery of benefits to Africa's citizens - delivery of an acceleration of progress to attain the Millennium Development Goals and delivery of an expansion of Africa's water infrastructure to boost economic growth towards the double-digit rates needed to reduce poverty. Finance requirements are estimated at US$50 billion per year over the next twenty years, more than double previous estimates due to the inclusion of water resource infrastructure.

Every theme at Istanbul has relevance to Africa's agenda. Africa invites all those present at Istanbul to use their dialogues to help deliver on the 'who' and 'how' of bridging Africa's divisive divide.

The Africa Water Agenda and the 5th World Water Forum

The 5th World Water Forum has convened in Istanbul under the overarching theme of **'Bridging Divides'.** Global preparations for Istanbul have brought some coherence to a complex array of water issues. Some 30 issues have been framed within six themes. Worldwide contributions will support over 100 sessions.

This Regional Paper brings the distinctive African agenda to the 5th World Water Forum. The target remains those aspirations set out in 2000 in the Africa Water Vision 2025. In 2009 at Istanbul, Africa's agenda is the implementation of political commitments already made.

In recent years, African Heads of State and Government have demonstrated great political commitment and leadership. The year 2008 witnessed a series of commitments by Ministers at eThekwini, in Tunis, and in Sirte. The African Union dedicated its June 2008 Summit in Sharm El-Sheik to water and sanitation where African Heads of State made important commitments for accelerating the achievement of the goals in Africa. They have carried Africa's water crisis and policy challenges from the margins to the centre-stage of the regional development agenda.

At Istanbul, this African Regional Paper will drive the much-needed shift from the policies of 'what' and 'what not' to aim for to the practicalities and realities of the 'how' and the 'who' of implementing the Africa Water Vision. The Istanbul Forum provides an opportunity to build the new alliances and the strengthening of existing partnerships to support Africa in that vital change.

Broadly speaking, the implementation challenge has three principal areas: a) continuing to put in place and water resources infrastructure for basic services and economic development through existing and new initiatives; b) strengthening the institutional capacity and operational mechanisms in areas where low implementation capacity is a bottleneck to progress; c) refining strategies and policies where these are needed.

There are many countries with different starting positions. Therefore, the challenges to progress are different. Some countries can scale-up delivery because the operating environment has been set in place. Other countries need to strengthen their operational mechanisms and will require support, particularly the fragile states.

This Regional Paper has been prepared under the guidance of African Ministerial Council on Water. They have recognised the importance of the consultative framework that the World Water Forums have provided – to convey Africa's messages to a global audience and to secure cooperative responses. The 5th World Water Forum provides a platform to set in train the necessary actions that Africa is taking to deliver on the said commitments.

The Regional Paper launched in Istanbul, makes specific recommendations for actions that can be carried through the various sessions at the Forum into the Ministerial Declaration and other Forum Outcomes in order that those decisions taken at Istanbul will bear fruit from addressing the urgent challenges in the coming months and years.

African Perspectives on Water Security and Sanitation Issues

The Regional Paper presents African perspectives on themes of the Forum. These include:

MDGs: Ensuring water, sanitation and hygiene for all: Progress in MDG attainment across Africa is not on track, and the gaps in target coverage are the widest of any region of the world. Countries differ in their rates of progress, with the poorest of them

needing to make the greatest efforts to get on track. Immense effort has been directed into improving the implementation setting, and a major effort to raise the importance of sanitation has achieved results. Yet there remain some missing links to the achievement of the MDG water and sanitation targets and to accelerating rates of delivery..

Water and Economic Growth: The biggest challenge in delivering African water resource development is putting in place the appropriate storage infrastructure and institutional platform that will boost growth to the double-digit rates needed to reduce poverty. Many African economies are extremely vulnerable to hydrological variability. Africa loses 5% of GDP due to poor coverage of water and sanitation, 2% to power outages, between 5 - 25% to droughts and floods in affected countries, and perhaps a further 5% to the future impacts of climate change. Only 7% of Africa's hydropower has been developed and there is a growing gap in electrification. Africa's agricultural water management is woefully deficient, with a food import bill of over US$17 billion. Progress on energy and food securities is vital if growth is not to continue to be held back.

Financing: The investment requirement to meet Africa's deficient water situation can be updated as a result of recent analyses and publications. The revised overall price tag is US$50 billion per annum for the next twenty years, and US$30 billion per annum for thirty years after that. This updated figure significantly exceeds the US$20 billion per annum estimated in the Africa Water Vision in 2000. While the cost estimates of attaining drinking water and sanitation targets and institution building remain broadly the same (around US$12 billion per annum), the principal difference lies in the near ten-fold increase in the estimations of the cost of water resources infrastructure to support economic growth, food and energy securities and adaptation to climate change and hazard management.

Basin Management and Trans-boundary Water Cooperation: About half of the 63 international rivers in Africa are shared by three or more riparian countries and 10 basins are shared by four or more countries. New work is revealing the extent of trans-boundary aquifers. This very significant inheritance calls for joint development and management of the international waters as a key to achieving water security. Institutional development needs to be addressed at various political, administrative and scientific levels.

Adapting to climate variability and change: Responses within the water sector are key if adaptation to a difficult and changing climate in Africa is to be successful. Both climate variability and climate change must be tackled alongside the other factors that make-up water insecurity on the continent. The scale of global climate change as a global political issue is demanding of a response that better integrates the climate change agenda with water for development.

Institutional development and capacity-building: There are a number of capacity constraints at local, national and regional levels which hinder progress. These constraints manifest at the different points of water-use infrastructure development, operations and maintenance. For many, one of the major problems in the water sector is the lack of capacity in terms of adequate institutional arrangements, ineffective organisations and insufficient numbers of professionals, and the low level of participation and awareness among users.

Investing in Information, Knowledge and Monitoring: The value of information and knowledge is only realised when it is put to use. Good information aids decision-making and enables better choice and design. The surge in engagement by a wide number of actors has placed new demands upon communicating knowledge. But these demands have not yet been met. Insufficient resources are invested in the supply and dissemination of water information in Africa and not enough information is produced. Information that does exist is poorly disseminated and inaccessible, and connections between knowledge and operations are weak. Consequently, good knowledge gets lost, there are not enough Centres of Excellence and case studies of what works and what doesn't work and much more could be taken from what already exists. The need is all the more pressing given Africa's low manpower resources, and its complex arrangements of institutions.

Delivery on Existing Commitments

The key African message to Istanbul is 'DELIVERY ON THE COMMITMENTS'. Clear actions are set out in this Regional Paper that will convert political commitments to action. They are focused on: i) implementing through existing and **new** instruments, ii) improving the operational setting, and iii) refinements of existing strategies, where these may be needed. These actions are summarised under each of the main themes of the 5th World Water Forum. But delivery will be demanding of a better of the enabling mechanisms of governance, finance and

knowledge with Africa's twin delivery ambitions on the MDGs and economic growth.

The main actions set out in Chapter 3 are backed by an operational matrix, attached as an Annex to this Report. This will be updated in the weeks after Istanbul to inform the African Ministerial Council on Water how Africa's implementing bodies and development partners have aligned themselves with Africa's commitments to deliver.

Among the many actions set out, some key recommendations are:

- Accelerating progress on drinking water and sanitation, including under existing initiatives such as RWSSI and the Water for African Cities initiative
- Creation of National Finance Strategies that link the three 't's of tax, transfers and tariffs to implementation plans
- Ongoing sector and utility reforms to improve operational efficiencies and cost recovery
- Specific recommendations on closing the finance gap into Capital Expenditure and recurrent Operation and Maintenance
- Securing better connections between water infrastructure and economic growth
- Urgent action on small-scale water control under the Africa Food Crisis Response
- Strengthening of the African Water Facility
- Strengthening AMCOW to deliver on the many commitments and responsibilities entrusted to it.

Targeted Messages to the 5th World Water Forum

The principal thrust now must be the delivering of change for many millions of people through the instruments that have already been set in place. Delivery is aimed at an acceleration of progress to attain the MDGs and boosting economic growth towards the double-digit rates needed to reduce poverty.

- **The MDGs can be achieved within the remaining years if efforts and finance are directed where they are most needed.**
- **A major expansion of Africa's infrastructure must begin soon, in ways that deliver economic growth.**
- **A major scaling up of finance is required, to US$50 billion per annum over the next twenty years**

Key messages at Istanbul from the regional process include, but not be limited to:

- **launch during 2009 of the Annual Report on progress to Africa's Heads of State**
- **progress towards the meeting of African Water Ministers and Finance Ministers, together with development partners**
- **progress on the 2008 eThekwini Declaration and AfricaSan Action Plan, notably the schedule to have developed national sanitation and hygiene policies within 12 months of AfricaSan 2008;**
- **a short-term African Water Finance Task Force to bring together the finance story, and to monitor impacts of the current financial crisis on African water;**
- the strengthening of AMCOW's Secretariat to play a stronger co-ordination role in Africa's water and sanitation development;
- scaled-up support to Country Sector Reviews, National MDG Investment Plans and National Finance Strategies;
- preparations for the 2nd RWSSI International Conference to review achievement and to mobilise resources for 2nd and 3rd phase implementation; and
- practical steps towards a road-map to accelerating progress in drinking water and sanitation in Africa's fragile states, where the coverage gaps are greatest, under the aegis of AMCOW

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BRIDGING DIVIDES IN AFRICA'S WATER SECURITY

1.1 The Africa Water Agenda and the World Water Forum

The 5th World Water Forum has convened in Istanbul under the overarching theme of 'Bridging Divides for Water'. Global preparations for Istanbul have brought some coherence to a complex array of water issues. Some 30 issues have been framed within six themes. Worldwide contributions will support over 100 sessions.

This Regional Paper brings the distinctive African agenda to the 5th World Water Forum. The African agenda has matured over the time span of the series of World Water Forums, and from the dialogues that have taken place in Marrakech, The Hague, Kyoto and Mexico City. The target remains those aspirations set out in 2000 in the Africa Water Vision 2025 (Box 1.1). In 2009 at Istanbul, Africa's agenda is the implementation of the political commitments already made.

Box 1.1: Africa Water Vision 2025

"An Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment"

The Africa Water Vision indicates the need for a minimum:

- investment of USD 20 billion per annum to meet the basic needs in water supply, sanitation, food, energy and other economic, social and environmental uses;
- 75% and 70% access to improved water supply and sanitation respectively by 2015, and 95% for both access to improved water supply and sanitation by 2025;
- 100% increase in irrigated area by 2025;
- 25% of hydro power potential developed by 2025

In recent years, African Heads of State and Government have demonstrated great political commitment and leadership. They have carried Africa's water crisis and policy challenges from the margins to the centre-stage of the continent's development agenda. The year 2008 witnessed a series of commitments by Ministers at eThekwini, in Tunis, and in Sirte. The African Union (AU) dedicated its June 2008 Summit in Sharm El-Sheik to water and sanitation where African Heads of State made important commitments for accelerating the achievement of the goals in Africa. This Regional Paper has been prepared under the guidance of African Ministers for Water. They have recognised the importance of the consultative frameworks that the World Water Forums have provided – to convey Africa's messages to a global audience and to secure cooperative responses.

At Istanbul, the African Regional Paper will drive the much-needed shift from the principles of 'what' and 'what not' to aim for the practicalities and realities of the 'how' and the 'who' of implementing the Africa Water Vision. The Istanbul Forum provides an opportunity to build the new alliances and the strengthening of existing partnerships to support Africa in that vital change.

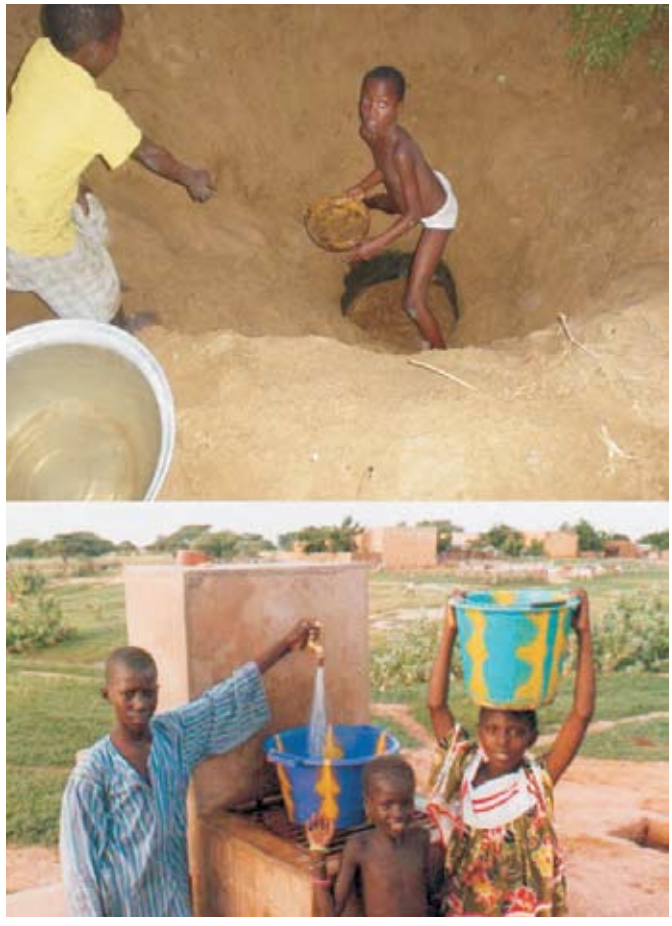
The planning of the 5th World Water Forum has channelled the themes of overcoming global risks, advancing human development and the MDGs, and managing water resources into the important overarching aim of providing water for sustainable development. For Africa, there are two simple aims for its citizens: First, accelerating progress to attain the Millennium Development Goals in drinking water and sanitation. Second, investing in the much-needed water infrastructure that will boost economies towards the double-digit rates of growth that are needed to eliminate poverty.

Box 1.2: Africa's Water Divides

- Closing the gap in attaining the MDGs and the outstanding 'unserved'
- Integrating water as key to poverty reduction and socio-economic development and expanding Africa's water infrastructure assets to achieve this.
- Fostering transboundary cooperation
- Mobilising the financial resources needed to build the infrastructure assets
- Building and strengthening institutional and technical capacity and skills; the water data base, information knowledge and monitoring capacity
- Fostering partnership with stakeholders for full participation
- Closing the implementation gap between Africa's agenda and the policies of Development Partners
- Tackling the climate change challenges and building resilient adaptation systems

A second overarching aim of the Forum is the enabling mechanisms for development, underpinned by themes on governance, finance and capacity. This Paper presents important African perspectives on each of the global themes. But the biggest divide that Africa currently faces in water is bringing together these two overarching aims in ways that change the lives of millions of African citizens. From an African position, the numerous themes and topics cannot be tackled in isolation from one another. They have to be brought together in ways that accelerate progress on the MDGs and boost economic growth. For example, overcoming the climate variability and difficult hydrology that regularly knocks 15-25% of the GDP of economies should be linked to developing instruments for multi-country investments from multi-donor platforms into storage of regional importance. Making the governance arrangements work for service delivery of drinking water and sanitation cannot in isolation of the institutional arrangement needed to build the infrastructure for economic delivery, more so in Africa's fragile states. Putting in place the operational capacity in Africa's water utilities to increase the rate of service delivery in drinking water should go along with the capital and operational investment for sustainable delivery.

Water has risen to centre-stage on the high-level African development agenda not only because of the urgency of the challenges faced within the sector. It is also because of the impact that the weak development of water and sanitation is having on the continent's health, cities, agriculture, energy, industry and environment. The Tunis Declaration by Ministers firmly placed the challenges in water resources development into the challenge of developing water infrastructure to boost economic growth. Economic growth is not a theme of the 5th World Water Forum. But it is the principal driver of Africa's water infrastructure challenge, and African participation at Istanbul will seek to strengthen that critical link. Action on water resource infrastructure to boost economic growth in Africa is at least as important to poverty reduction as action on drinking water and sanitation.



1.2 The Implementation Challenge

The target of Africa's efforts remains the Africa Water Vision 2025. Broadly speaking, the implementation challenge has three principal areas for action:

(a) First, to continue those arrangements already in place to put basic services and water resources infrastructure, and to increase the rate at which more African citizens benefit from action. This means scaling-up, strengthening and supporting programmatic instruments such as the Rural Water Supply and Sanitation Initiative, African Water Facility, and the Water for African Cities Programme. It means improving the investment pipeline through project identification and preparation mechanisms. It also means raising finance to the levels that are needed, making the flows of funds more predictable, and targeting them where they are most needed;

(b) Second, a strengthening of the operational mechanisms in areas where arrangements have not yet been properly set in place, presenting a bottleneck to progress. This will embrace a number of actions in relation to Africa's institutions – national and regional - for example sector and utility reforms, putting in place the right capacity, trans-boundary co-operation, and perhaps some easing of the complexity of institutional arrangements in some areas;

(c) Third, the refinement of strategies and policies where these are needed, but only insofar as they sharpen the high-level commitments that have already been made: There remain many opportunities to improve strategy formulation in drinking water and sanitation at national levels. Water resources management remains disconnected from development priorities, instead of being central to it, and much work is still needed to connect to the African framework of economic growth.

Many of the existing mechanisms are adequate to drive forward on Africa's water agenda; they only need to be strengthened. The real focus has to be on implementation, with any new mechanisms serving only to sharpen, and not compete with or duplicate, existing ones.

There is a need for some strategy refinement, especially as lessons learned from practical experiences can have a bearing on the success of implementation. It is important to break the pervasive cycle of continually revising and renewing development plans and strategies, that can pull manpower out of the important delivery challenge. Strategies and policies on particular topics and themes will only serve their purpose if they are tied into Africa's priorities.

The big picture of the implementation challenge in Africa must not obscure the fact that some African countries have made great strides in service delivery and water resources management. Some countries have already taken actions, and others are underway, that address their water security and sanitation vision. South Africa and countries in North Africa, among others, are very good examples in this regard.

There are many countries with different starting positions! Therefore, the challenges to progress are different. Some countries can scale-up delivery because the operating environment has been set in place. Other countries need to strengthen their operational mechanisms.

Trans-boundary co-operation in water resources development holds the key for many African countries.

Bridging the implementation divide is vital because of the high social and economic costs that are suffered due to low levels of progress on the ground and a pervasive gap between policy and action. What is set out in this Paper is encouragement to those who are teetering on a change to action, and an invitation to the region's peers and partners to continue to support that change.

The 5th World Water Forum provides an invaluable platform to set in train the necessary steps to deliver on Africa's commitments. The months and years after Istanbul are critical to Africa's water future, and, through water, to the continent's development. It is expected that this Regional Paper will gain universal acceptance so that Africa's people, regional bodies and international development partners, the private sector (local and foreign), NGOs (national and international), will bring themselves into alignment with the urgency to deliver change for Africa's citizens, with AMCOW playing a central role.

1.3 Africa extends an open invitation to help meet the continent's water challenges.

1.3 The rising challenge of Financing for Economic Growth

In 2000, the Africa Water Vision projected an annual requirement of US$25 billion over 25 years if development aspirations were to be attained. Over half of that requirement was foreseen into drinking water and sanitation. Economic growth for poverty reduction has risen to the fore since 2000, and with it, the need to tackle Africa's weak water infrastructure if growth is to be boosted and sustained. So, estimating the financing requirement must now take much more account of the costs of infrastructure than was originally foreseen. As a consequence, the scale of the finance requirement represents a significant departure from the price tag presented in the Africa Water Vision 2025.

It is now projected that an annualised rate of US$50 billion per annum is needed over the next twenty years to achieve both the MDG targets and to boost growth into double digits, 2.5 times the projection foreseen in the Africa Water Vision. A further US$30 billion per annum is likely to be needed possibly for a further 30 years after. The projected total finance requirement over the next 50 years of about US$2 trillion is at least four times the US$500 billion foreseen in the Africa Water Vision 2025, published in 2000.The costs of attaining drinking water and sanitation targets and institution building remain broadly the same as those estimated in the Vision.

Investment of US$12 billion per annum in drinking water and sanitation over the next ten years should be sufficient to attain the Millennium Development targets, provided the investments are properly targeted. Early investments in agricultural water management, hydropower and flood control will make in-roads into boosting economic growth and improving food and energy securities, including 35% access to electricity.

The scale of effort needed to attain goals in food and energy security is massive and there are long-lead times involved in achieving an expansion of water storage. Extension beyond the 2025 target date of the Vision may be needed for some outcomes in food and energy securities. A long-run view is needed, but one that is not at the expense of short-term gains.

African Governments and development partners have taken major steps to respond to the finance requirements of Africa's aspirations in the drinking water and sanitation sector, though a finance gap remains, of the order of US$4 billion p.a. Major financing initiatives and actions instigated by AMCOW and its regional and Development Partners have been delivering reasonably on their stated objectives but require significant up-scaling, more innovation and speed of implementation. These initiatives include the Rural Water and Sanitation Initiative (RWSSI), the African Water Facility (AWF) and the Infrastructure Consortium for Africa (ICA). There are good prospects that a finance gap of US$4 billion could be closed quickly through continuing commitment by all parties within a National Finance Strategy.

However, raising finance to the levels of around US$30-35 billion p.a. in water resource infrastructure that are required to boost growth across the continent is demanding of wholesale new dialogue between African Governments and development partners. The finance needs far exceed the capacity of most African Governments. Securing economy-wide returns from new infrastructure will be crucial if today's finance is not to become tomorrow's debt burden.

1.4 Institutional Setting for the Implementation of the Africa Agenda

There remains a significant gap between policy and action. Part of this gap can be put down to the widespread retrenchment of capacity under structural adjustment programmes. The development of water as a public good was stifled in favour of activities that could be privatised. With an urgent need now to take action on water for social justifications and to put the proper regulatory regimes in place, many African countries find themselves ill-equipped in manpower numbers.

The institutional complexity of 54 countries, of central and decentralised functions, sectors and sub-sectors, many bilaterals and multilateral partners, UN and international NGOs, national and regional structures, River Basin Authorities and Regional Economic Commissions, emergency and disaster responses, all present a formidable challenge for a continent in need. For example, decentralisation of responsibilities has shifted the onus for action onto local authorities and municipalities, creating a whole new set of responsibilities, but often with the devolved resources, and again a shortage of experienced manpower.

Africa's 54 countries may each have their own water resources management plan. But the sharing of several river basins among a number of African countries makes a regional approach to infrastructure construction a necessity. The RECs and RBOs have crucial roles in driving this expansion of large infrastructure.

AMCOW leadership of the region's water agenda has assured considerable support for the sector, and has brought greater visibility to the issues of water and sanitation within individual member states. The ongoing strengthening of the AMCOW Secretariat is key to the linking of political will and implementation on the ground.

2

PERSPECTIVES ON THE THEMES OF THE 5TH WORLD WATER FORUM

2.1 Global changes and risk management

2.1.1 Climate change and adaptation

Responses within the water sector are key if adaptation to a difficult and changing climate in Africa is to be successful. Both climate variability and climate change must be tackled alongside the other factors that make-up water insecurity on the continent. Economies are dependent on water resources and water resources are inextricably linked with climate. GDP and GNP fluctuate with rainfall. Climate variability has always presented a problem, and has become more prominent as populations have risen and as Africans have begun to exploit more water.

The prospect of global climate change with widening variability, increasing scarcity, more floods and droughts has serious implications through water resources into regional development. The scale of projected climate change will have serious negative impacts on many water-using sectors including hydropower generation and agriculture in the major river basins in Africa. It poses especial threat to the poor who rely on rain-fed production as the major source of staple foods and livelihoods.

Box 2.1: Climate Change and Africa

Climate change is affecting all countries, but will be most immediately and severely felt in the poorest and most vulnerable countries, which do not have the means and resources to adapt to the changes in their natural environment. Africa will be particularly hit in terms of food security, water management and extreme weather phenomena such as droughts, floods and cyclones

The Africa-EU Strategic Partnership

Africa is also characterized by a low adaptive capacity that is reflective of the current state of water management and development. The occurrence and the impact of the various groups of disasters differ between the regions. For instance, although many of the reported climatological disasters in 2007 occurred in Europe (43% of the total), Africa's population was the most affected (50.6% of the victims). Table 2.1 provides data on the occurrence and impact of major disasters in Africa.

In the prevailing African setting of an underdeveloped water resource, it is vital that climate change adaptation is pursued in a development context. There is a need to overcome the long-

standing difficult hydrology of Africa that is characterised by levels of variability rarely witnessed elsewhere in the world. The climate change agenda dictates that those developments that tackle variability take account of projected changes.

Box 2.2: African Disasters in 2007 [Source: Annual Disaster Statistical Review 2007]

"East and West Africa were the regions of Africa most badly hit by natural disasters in 2007. They were particularly affected by an unusually high number of hydrological disasters, especially during two series of floods that hit the continent.

The first series occurred in January and essentially affected East and Central Africa, causing about 2 million victims.

The second series of floods happened during July and August and affected a huge band of central Africa from the West to the East, producing more than 2.6 million victims.

Climatological disasters were also a major source of suffering and casualties in 2007. Although the number of victims was well below the 2000–2006 average, East and Southern Africa were particularly affected by drought. Zimbabwe, with more 2 million reported victims was the country hardest hit by these events, but smaller countries such as Lesotho and Swaziland were also badly affected"

It should be noted, however, that the lack of available information on the economic impact of natural disaster in Africa makes it difficult to get an accurate picture of the damage caused by natural disasters.

Table 2.1: Occurrence and Impact of Major Disasters in Africa (Source: Annual Disaster Statistical Review, The Numbers and Trends, 2007)

Type of Disaster	Occurrence	No of Victims	Damages (US$,000)
Geophysical 2007	1	2005	-
Average 2000 -06	3.7	107,843	901,330
Climatological 2007	10	4,070,908	-
Average 2000 -06	8.6	10,400,600	1,544
Hydrological 2007	65	5,136,117	514,141
Average 2000 -06	38.6	2,098,215	335,039
Meteorological 2007	9	389,128	241,200
Average 2000 -06	8.9	449,801	59,309
Total	85	9,598,158	755,341
Average 2000 -06	59.7	13,056,460	1,297,211

[2] Ref: Annual Disaster Statistical Review, The Numbers and Trends, 2007

Climate change is a major global issue that has very high political capital behind it that has to be built on. Investments under climate change adaptation funds can be better brought into the finance strategies for water infrastructure development. Adaptation is also very amenable to local actions, which can often be kick-started much more rapidly. Adaptation through water development in Africa is at least as important a response to global climate change as action on carbon and biodiversity, but has not yet been converted to action with anything like the same level of urgency.

Projections show that the impacts of climate change are likely to be uneven across the continent. It is important to focus efforts into those areas of Africa that are projected to be most affected by climate change. At least as much attention, however, is needed in water-short areas that, even though they may benefit from higher water availability under climate change, will continue to have water resources that are low and variable compared to the economic and social demands. Focusing infrastructure development solely into regions projected as the most vulnerable to climate change will distort infrastructure expansion to meet Africa's development needs.

Substantially, the greatest impact of climate change upon Africa's rural poor will be felt through agriculture and especially the rain-fed production of staple foods, already highly volatile in its productivity due to unpredictable climate regimes. The target group is large, diverse, widespread and often difficult to reach. The majority of African farmers are already producing at levels well below achievable yields due to a basket of input challenges, of which access to water is but one. Climate change adaptation is a vital driver for improving small-scale production, and action would be best-placed within broader rural development programmes that tackle the number of constraints that farmers face.

Increasingly, climate change models are routing the impacts of climate change in upstream areas onto downstream users, bringing a vital understanding of how river basins will respond as a whole alongside local climate changes. Such regional dimensions are crucial if potential tensions are to be identified before they explode as conflicts.

Equally important, but so far weakly developed, is the recognition that climate change around the world will also impact upon Africa. Of most significance will be the climatic changes in the food producing areas of North America, Europe and Asia that currently supply Africa (especially urban food purchasers) with nearly US$20 billion worth of foodstuff each year. With even middle income households characterised by the lowest ability to pay for food were global markets to become very competitive, Africa's urban population is inherently vulnerable to the long-term

Box 2.3: African Development Bank Group responds to Climate Change through water management

The ADB Group has geared up and 'retooled' to play a significantly greater role. The Bank recognizes that river basins are important geographical units for managing water resources to meet agricultural and energy needs in the face of a changing climate. The Bank has instigated climate risk due diligence within its own operations. The Bank is supporting the implementation of the Niger River Basin Action Plan, which includes major storage infrastructure.

The Bank is also supporting the Lake Chad Basin Commission to find solutions to reverse the near disappearance of this important lake. The Bank is also supporting the riparian countries of the Congo River Basin to establish a river basin organization, the Congo Basin Forest Fund (CBFF) and CLIM DEV Africa.

price rises that would follow from global food shortages induced by climate change. This was highlighted by Africa's vulnerability to the 2008 food price crisis – a powerful portent of the future. Shifts in production to biofuels in those production areas to meet carbon targets will quickly expose Africa's vulnerabilities through food insecurity. Water shortages elsewhere in the world could see a rising trend in the desire to exploit Africa's underdeveloped agriculture, but with few, if any, benefits to Africa's citizens.

Specific issues to be addressed under climate variability and change from an African perspective therefore include: i) understanding the translation of climate variability and change into economy-wide impacts through changing water availability and extremes; ii) understanding the direction, magnitude and locations of hydrological change in Africa; iii) forecasting and prediction capability of both variability and change, especially in support of short-term operational decisions; iv) increasing adaptive capacity; v) putting in place practical adaptation measures; vi) adapting to impacts of world-wide change (African vulnerabilities to global food production, supply and prices); and vii) reducing tensions and conflict under increasing scarcity.

The scale of global climate change as a global political issue is demanding of a strategic African response led by AMCOW. Such action would best focus on mobilising climate mitigation and adaptation funds in a way that can better bring together the climate change agenda with water for development.

Table 2.2: Access to Improved Sanitation

Region	Sanitation coverage (%)		Coverage needed to be on track in (%)	MDG target coverage (%)	Progress
	1990	2006			
Southern Asia	21	33	46	61	Not on track
North Africa	62	76	74	81	On track
Sub-Saharan Africa	26	31	50	63	Not on track
Developing regions[3]	41	53	60	71	Not on track

Source: UNICEF/WHO JMP, Progress on Drinking Water and Sanitation: Special Focus on Sanitation, 2008

Table 2.3: Improved Access to Drinking Water Supply

Region	Water Supply coverage (%)		Coverage needed to be on track in (%)	MDG target Coverage (%)	Progress
	1990	2006			
Southern Asia	74	87	82	87	On track
North Africa	88	92	92	94	On track
Sub-Saharan Africa	49	58	65	75	Not on track
Developing regions	71	84	80	86	On track

[3] In charting progress towards the MDGs, the United Nations has classified the world's countries into three regions: developed regions, developing regions and the Commonwealth of Independent States. The developing regions are further divided into subregions

2.2 Advancing Human Development and MDGs

2.2.1 Ensuring water, sanitation and hygiene for all

As summarised in Tables 2.2 and 2.3, progress in MDG attainment across the Africa region is not on track, and the gaps in target coverage are the widest of any region of the world.

Service deficits are strongly correlated with poverty and gender since the majority of the unserved populations belong to the poorest social groups. The main burden of water and sanitation deficits falls on women and girls. Countries differ in their rates of progress, with the poorest of them needing to make the greatest efforts to get on track, clearly demonstrating the link between access to improved water and sanitation and economic growth.

Immense effort has been directed into improving the implementation setting, and a major effort to raise the importance of sanitation during the International Year of Sanitation has

achieved results. Yet there remain some missing links to the achievement of the MDGs, and these are not all financial. Some, but not all, countries have prepared sector investment plans, and some have yet to establish a clear and costed roadmap for achieving the MDG water and sanitation targets. Sector finance strategies are needed urgently in all countries, matching the 3 't' financial sources of tax, transfers and tariffs with investment plans.

Other missing links were identified during Africa's First Water Week held in Tunis in March 2008, and in-country status overviews undertaken on behalf of AMCOW by the Water and Sanitation Programme (WSP Africa) and the AfDB. These include:

i. The weak institutional leadership and country ownership of the MDGs targets (water and sanitation programmes;

Box 2.4: Rural Water Supply and Sanitation Initiative (RWSSI)

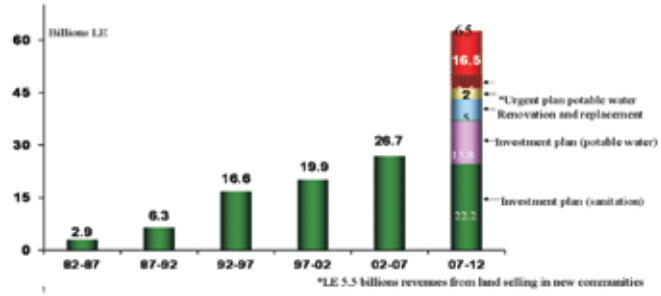
RWSSI has taken important steps to reach 66% access to water and sanitation by 2010 and 80% by 2015. Reaching this target would entail giving around 270 million people access to improved water supply and 300 million to adequate sanitation. The Bank's ambition is to focus the Initiative on the 30-40% of the poorest rural areas where its poverty impact would be maximised.

ii. The poor links between water and sanitation, and between water and sanitation and hygiene, health and poverty relief programmes;
iii. The many knowledge and analytical gaps which hamper the way the MDGs are tackled, including a failure to differentiate the target groups or recognise crucial country differences – especially the special problems of working in fragile states: The implications of choice of target groups, access criteria, levels of service, technology and other key variables for the rate of progress, whilst equity and costs are also not well understood;
iv. There has also been little obvious consideration of the plight of the remaining un-served populations after 2015;
v. The actual and potential shortage of funds for the MDGs, and the immediate priority of removing obstacles to spending from existing programmes and donor commitments;
vi. The strong need to fully engage other potential partners in implementation, namely public utilities, private business, and other parts of civil society such as NGOs;
vii. Improving accountability of suppliers to their customers and to the general public as citizens; and
viii. The weak monitoring and evaluation framework in many countries that inhibits good planning and follow-up: Many countries are unable to track performance towards the achievement of the MDGs.

The picture is not all gloom as there are good lessons on the continent from which others can learn. For example in the rural water supply and sanitation sub-sector in Uganda, Ghana and Burkina Faso (among others), a number of notable achievements provide a good basis for scaling up in the next lap towards achievement of the MDGs. [4]Governments and development partners now give relatively higher priority to rural water and sanitation (RWSS). Greater country ownership can be progressed through a programmatic approach (as introduced in 60% of the RWSSI interventions), increased use of country systems for procurement and financial management, and better coordination and harmonization of donors and partners at national level. Enhanced community action is proving beneficial, with gender issues main-streamed at all levels of implementation. Quicker programme development and start up is however needed.

Box 2.5: Sanitation in Egypt

An increase in investments has led to an increase in the capacity of utilities. Sanitation service coverages had reached 60% in 125 cities and towns by 2007 and at 4% in 170 villages. Current projects will see sanitation service coverages reach 100% for 222 cities and towns and 11 % for 486 villages. An executive plan has been set to raise the coverage of sanitation services in villages to 100% within the next fifteen years.



Current plan investments are more than the sum of the three previous plans

2.3 Water and Economic growth

The First African Water Week in Tunis in 2008 identified the biggest challenge in delivering African water resource development to be the putting in place of the appropriate storage infrastructure and institutional platform which will boost growth. Africa has a unique water legacy which is one of extreme hydrological variability, a feeble base of installed infrastructure and political borders that effectively dissect river basins. Many African economies are extremely vulnerable to hydrological variability, and that vulnerability has often discouraged the economic growth and structural change that would enhance resilience.

[4] Ref: The Rural Water Supply and Sanitation Initiative (RWSSI), AfDB

Despite the world financial situation, the economic outlook for Africa is more positive now than for the past 50 years. Growth performance has improved markedly due to policy changes, improved governance and management. Due to favourable international market developments, strong demand for its commodities and favourable international initiatives such as comprehensive debt relief, growth should continue at around 6% in the period ahead. But 6% growth is not sufficient to propel Africa into prosperity, nor to eliminate poverty, disease and hunger. Africa needs to go beyond the sale of commodities to increase productivity.

The continent is striving to attain the double-digit rates of growth necessary to reduce poverty. Yet, Africa loses 5% of GDP due to poor coverage of water and sanitation, 2% to power outages, between 5 and 25% to droughts and floods in affected countries, and perhaps a further 5% to the future impacts of climate change.

The amount of water withdrawn in Africa for agriculture, water supply and industry amounts to only 3.8% of internal renewable water resources, a reflection of the low level of water resources development. Per capita water withdrawal in Africa is the lowest of any region in the world, being just one-fourth of the global average. Even the region with the second lowest water withdrawal per capita, Southeast Asia and the Pacific, uses approximately twice the water per person, while more developed regions such as North America and Europe withdraw more than five times as much.

Infrastructure developments need to maximise social and economy-wide returns. They need to be installed in ways that minimize the environmental and social impacts of their development. Many developments have already delivered essential economy-wide benefits. In some cases, these benefits have caused significant local detriment, including displacement of people, increasing erosion and flooding, loss of land, loss of income from downstream fisheries, etc. Many of these impacts are manageable if implemented in line with accepted safeguards. But for many regions of Africa a move out of water insecurity requires regional water infrastructure development in combination with smaller, local storage and harvesting schemes.

The Infrastructure Consortium for Africa has the primary objective of building a strategic partnership among donors to facilitate the development of infrastructure in support of economic growth and poverty reduction in the areas of water and sanitation, energy, transport, telecommunications and urban infrastructure. This is to help improve the quality of life and economic well-being of Africans through promoting and supporting greater investment in infrastructure development in Africa by both the public and private sectors. Total commitments by ICA members to the water sector were US$2.9 billion in 2007, an increase of 60% from the US$1.8 billion committed in 2006.

Central to water and economic growth are the energy and agricultural sectors.

2.3.1 Water and Energy

Only 7% of Africa's hydropower has been developed and there is a growing gap in electrification. The needed growth rate of 1.9% of new households is met by only 1% rate of new connections. There are strong regional disparities, though. Access to electricity is above 97% in North Africa, 47% in Southern Africa, 29% in West Africa, 10% in East Africa and less than 10% in Central Africa & Island States. Outside of West Africa, only the richest 20 percent of households have electricity. There is growing demand, and the gap in supply is widening.

It is imperative to exploit Africa's hydropower potential, as part of a generation mix with thermal and other renewable options. Investors and sector managers need to know from Governments what that mix is to be, and what part hydropower developments are playing in sustainable energy strategies that deliver access to electricity.

Hydropower revenues have often provided the primary financial revenues from multipurpose river regulation and water storage investments, where other benefits include public and private goods (e.g. irrigation) and less readily monetized benefits (e.g. flood and drought management). The technical hydropower potential of Africa is around 1,750 TWh, which is about 12% of the global capacity See Table 2.4.

[5] Ref: Data gathered from presentations made at First African Week
[6] Ref: David Gray and Claudia W. Sadoff, Presentation at First African Water Week on Achieving Water Security in Africa: Investing in a Minimum Platform

Figure 2.1: Number of people without Electricity, 1970-2030 (Source: International Energy Agency)

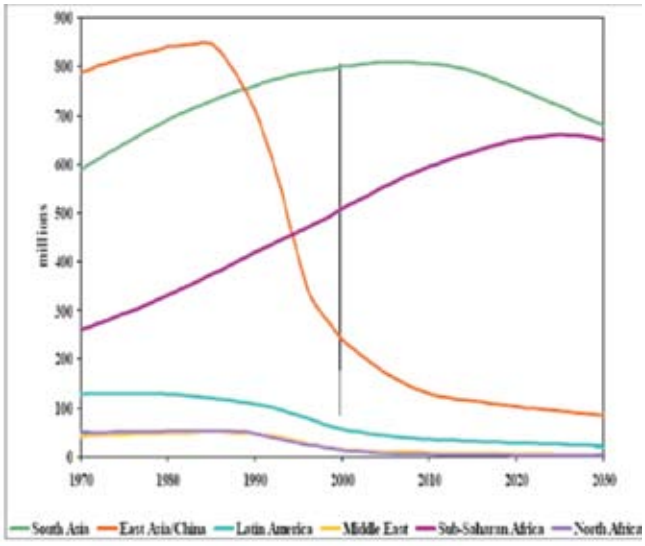


Table 2.4: Hydropower potential and capacity within Regional Power Pools

	Large Hydropower (MW)			Small Hydropower (MW)		
	Installed	Potential	%	Installed	Potential	%
Northern Africa	1 541.67	-		26.45	52.65	50
Western Africa	638.82	3 740	17	11.64	1 178.08	1
Central Africa	4 819.95	218 605	2	18.59	241.17	8
Eastern Afric a	418.24	4 380	10	7.92	418.24	2
Southern A frica	1 062.13	5 056	21	25.51	-	

Note: Data from Power Pools do not reflect the full Regional Hydropower Potential and Capacity

Large energy resources remain unexploited, concentrated in a handful of countries physically distant from the main centres of power demand. There are exceptions notably South Africa, with its coal, and Nigeria with its oil and gas resources. Although most countries possess at least some untapped hydropower potential, the majority of unexploited capacity is in Ethiopia and the Democratic Republic of Congo, economies that are small relative to the multi-billion dollar investments needed to develop that potential.

Market size is hampered by economies that are small and fragmented. Economies of scale are constrained in landlocked countries, island states, post conflict, and fragile states. There is a major mismatch between the scale of national energy utilities, national economies and the investment size of large hydropower installations. With the stronger Regional Power Pools, the burden of investment in power assets for export need not be raised exclusively from domestic resources. Some can be underwritten by importing countries, with investment viability and cost recovery linked to regional markets in electricity. The geography of those markets is not the same as river basin boundaries. Potential barriers, of course, lie in the exposure of energy security to the vagaries of regional politics, potential risks of conflict and the susceptibility of long transmission lines through often-inaccessible areas.

Box 2.6: Hydropower in Ethiopia

Hydropower Potential	Capacity	Completion
Gross potential	650,000MW	
Technically feasible	250,000MW	
Economically Developpable	162,000MW	
Developed	2,800MW	
Planned [total]	>6000MW	
Under Construction		
Gribe III	1870MW*	2011
Gribe II	420 MW	2009
Beles	460 MW	2010
Amerti Neshe	100 MW	2010
Tekeze	300 MW	2009

*This will feed the Regional Power Market, with substantial off-take by Kenya
Source: Hydropower Design Department, Ministry of Water Resources, Ethiopia

Another prospect for hydropower expansion lies with the demand-intensive industries. Traditionally, they have benefited from heavily subsidised energy prices linked to the locking-in of baseload demand to support very large-scale power projects. There are now competing intensive demands – from industrial smelting, mining and urban growth poles that can absorb this supply capacity and may increasingly be brought into PPPs for capital expenditure.

In addition, climate change funds are driving low-carbon energy solutions through the carbon mitigation agenda. In recent years, drought conditions have seriously reduced the available power in the hydro-dependent countries in West and Eastern Africa, forcing countries with significant hydropower installations in vulnerable catchments—such as Burundi, Ghana, Kenya, Madagascar, Rwanda, Tanzania, and Uganda— to rely increasingly on expensive thermal power.

The importance and scales of energy markets to capital investments and cost recovery mean that river basin approaches are needed, and RBOs become key players. But river basins are not the only determinant of scale in regional water management. As in food and agriculture, energy markets make an essential case for regional approaches that also bring market-scales and different energy actors to the table.

Regional Basin Organisations with well-developed Power Forums are key to unlocking the untapped hydropower potential of the region. Funding regional infrastructure through regional institutions from multi-donor platforms is undoubtedly more complex than traditional bilateral-country relationships on finance. Despite the inherent complexities in doing so, they must be evolved nonetheless.

Small hydropower, essential to access in areas isolated from reticulated grids, is largely driven within a package of renewable solutions. Technical water inputs support energy sector-led projects, often in conjunction with private investors.

At their meeting held in Johannesburg, South Africa, African Ministers responsible for energy and water underscored the need to develop infrastructure that responds to the continent's multiple demands for water. They called for multipurpose infrastructure, as necessary and where viable, including retrofitting of existing dams where feasible.

Box 2.7: Development of Inga (Congo River)

The Congo River has a huge potential – estimated at 100,000 MW - to address the region's energy needs. At the moment there is production from Inga 1 built in the 1960s, and Inga 2 built in the 1970s. These last two schemes are currently being rehabilitated. Pre-feasibility studies are underway for Inga 3 (4,000 MW) and the Grand Inga (40,000 MW). The economic justification for the development of the full potential of the Congo River was in the past hinged on interconnection with Europe. This is no longer the case as there is sufficient demand on the continent itself due to growing economic performance, the trend towards stability and regional integration. For example South Africa needs 20,000 MW, Egypt needs about 6,000 and Nigeria needs a further 6,000 MW. SADC Member States (Angola, Botswana, DRC, Namibia and South Africa) have formed a consortium for the Western Corridor Power Project (WESCOR) to tap and interconnect electricity from the Grand Inga.

2.3.2 Water, Food Security and Agriculture

Additional food in Africa comes from increases in the amount of land cultivated, but as good land becomes less available, the region has to increase yields per hectare. Both rain-fed and irrigated agriculture will need to be intensified, the latter through both expansion and through rehabilitation of existing schemes.

Investments in small-scale water control are best suited to public expenditures and ODA, being justified by policy objectives in safety nets, household poverty reduction and food security, tackling the global food price crisis, offsetting the risk of shifts to biofuels among food suppliers, climate change adaptation, and uplifting farming enterprises. Significant gains in production and productivity in rain-fed areas, matched with local market developments, can partly offset the continent's annual food import bill of US$17 billion p.a., achieving a long-term shift in the continent's emergency relief bill towards development aid, and reducing reliance upon international food aid.

Agricultural policies that target the poorest and most malnourished areas, rural poverty headcount ratios, caloric availability, and mean stunting ratios would lead to a greater focus on the Indian Ocean islands, countries in the Gulf of Guinea, and the Eastern parts of Africa. Agricultural policies tackling the susceptibility of Africa's food status to rising food prices and a shift to bio-fuel production in exporting nations would target national food self-sufficiency in countries that import more than half their total cereal demand—primarily those in the Sudano-Sahelian region.

However it is important to establish that these policies cannot be developed or refined without reference to water resources development. Food security and water security are closely interlinked.

Table 2.5: Cereal imports position of Low Income Food Deficient Countries (LIFDCs),000 tonnes)

	2006/07 or 2007	2007/08 or 2008				2008/09 or 2009	
		Requirements		Import position[2]		Requirements	
	Actual Imports	Total Imports	of which food aid	Total Imports	of which food aid pledges	Total Imports	of which food aid
Africa (44 countries)	**36 958**	**39 385**	**2 803**	**34 893**	**2 532**	**40 066**	**2 527**
North Africa	15 768	18 501	0	18 501	0	18 361	0
Eastern Africa	5 488	5 524	1 760	4 920	1 628	4 996	1 430
Southern Africa	2 868	3 188	482	3 188	482	3 868	563
Western Africa	11 174	10 544	463	7 562	333	11 063	449
Central Africa	1 661	1 628	98	722	89	1 778	85

Table 2.6: Regional distribution of public irrigation across Africa (Source: FAO. Aquastat. 2005) *(Note: the extent of private schemes and informal irrigation is not represented)*

	Area under irrigation		
	Hectares (,000)	In % of total	In % of cultivated land
Northern	6 340	47	22.6
Sudano -Sahelian	2620	20	6.8
Gulf of Guinea	565	4	1.0
Central	132	1	0.6
Eastern	616	5	2.0
Southern	2 063	15	6.3
Islands	1 108	8	29.2
Total	13 445	100	6.4

Improvements in cost recovery from farmers that support operation and maintenance must be linked to the capital investment programme driving the expansion of irrigated areas. Prospects of greater success in cost recovery than in the past lie in the value-chain approach that will see new irrigation developed in a market led manner rather than as the commodity-production, and government-driven infrastructure of the past.

Many African countries are faced with economic water scarcity, lacking the financial or human capital to adequately develop their water resources. Establishing the appropriate linkage between water security and food security requires: i) the harnessing and development of water infrastructure to support agricultural production; ii) stabilising agricultural output, especially through mitigating vulnerabilities to climate variability; iii) improving land and water productivity; and iv) securing poverty reducing and auto-inducing growth returns from agriculture, among others.

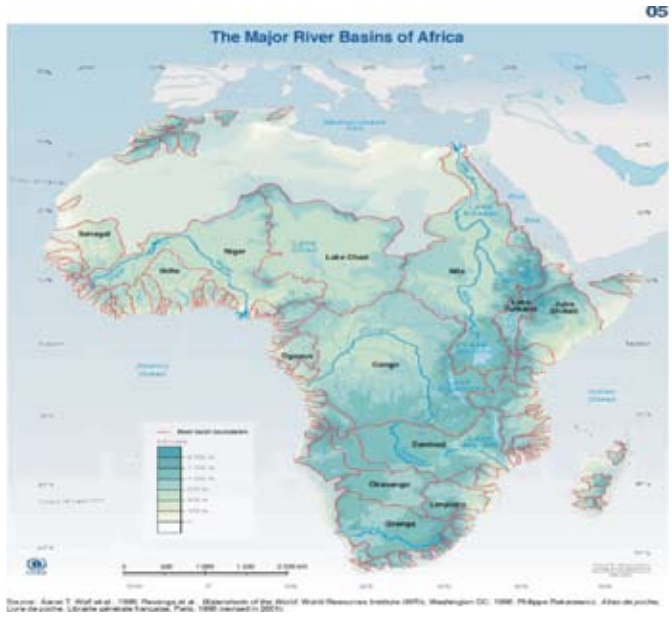
2.4 Managing and protecting water resources

2.4.1 Basin Management and Trans-boundary Water Cooperation

Most of Africa's water resources are trans-boundary. About half of the 63 international rivers in Africa are shared by three or more riparian countries and 10 basins are shared by four or more countries. New work is revealing the extent of trans-boundary aquifers. This very significant inheritance demands the joint development and management of the international waters if water security is to be achieved. Consequently, institutional development needs to be addressed at various political, administrative and scientific levels. It also necessitates establishing cooperative mechanisms and meaningful cooperation and coordination of all trans-boundary issues, underpinned by physical development.

Regional integration is essential not desirable. This cooperation is needed to advance the proper infrastructure platform necessary for benefit sharing, trans-boundary regulation of rivers against floods and droughts, groundwater management and protecting watersheds and wetlands. Cooperation, coupled with trans-boundary benefit-sharing, allows countries to leverage the productive potential of their shared rivers, lakes and aquifers, including locating economic activities where they are most efficient.

Figure 2.2: Major River Basins of Africa



Africa Governments have responded by creating a number of new River and Lake Basin Organisations (RLBO), building on the positive experiences on the continent such in the Senegal, Niger and Nile River Basins and SDAC region.

More needs to be done, as embryonic. The African Network of Basin Organisations (ANBO) has been established to create better governance of water basins and fills a marked gap in communications and exchanges of experience, expertise and know-how related to IWRM. AMCOW has developed a framework for co-operation with the Network.

Box 2.8: Regional Co-operation in Water Resources Management within SADC

There are 15 major shared watercourses in the region some of which like the Zambezi are shared by as many as 8 riparian states.

The Regional Strategic Water Resources, Management and Development, now in its second phase of implementation is the guiding framework. Important progress has been made in a number of areas. The region is implementing a Regional Water Supply and Sanitation Programme assisting Member States in achieving their MDGs. The region adopted a Regional Water Policy and Strategy in 2005/2006. Six of the 16 shared watercourses have now established joint commissions for the management of the shared watercourses. Within the framework of the regional IWRM Demonstration Projects, a number of communities have benefited from small infrastructure projects ranging from small dams for irrigation and fisheries and other livelihoods programmes. The regional programme on Strategic Water Infrastructure contains over 60 water infrastructure projects of regional significance. These are currently being packaged in preparation for a donor conference on finance. A 2008 regional Communication and Awareness Strategy is currently under implementation based on a Regional Multi-Stakeholder Dialogue. Over 100 professionals have been trained through the Waternet Masters programme on IWRM since 2006. A number of initiatives have been implemented on Regional Water Resources Management and Planning, including the Groundwater Drought Management Project, SADC Hydrological Cycle Observing System Phase 2, and Regional Economic Accounting of Water Use.

2.4.2 Ensuring Adequate Water Resources and Storage Infrastructure to Meet Agricultural, Energy and Urban Needs

The Average per capita storage in Africa is about 50m^3 compared to 3,500m^3 per person in Europe, and 6,000 m^3 in USA. Despite its hydrology being inherently much more difficult to manage than those other continents. Quantitative estimates of environmental use are generally not available. A sizeable part of irrigation potential is already used in North Africa but in the rest of Africa a large proportion of the available water also remains unused.

Historically, the majority of storage has been driven by hydropower, with electricity tariffs viewed as the 'cash-cow' that will bring sustainability. Deficient electricity supply across the continent means that the power sector will continue to invest in storage for the foreseeable future. The mining and industrial processing sectors are also significant players, and both hold significant prospects for PPP engagement in new investments.

However, an expansion of storage in response to energy needs also has to be responsive to rising municipal and industrial water demands, large hydraulic infrastructure needed for an expansion of irrigation and for hazard management (flood control and drought mitigation). For example, many new dams will be needed if an expansion of irrigated land is to be achieved, though not all new irrigation will require new storage. Operating rules could be improved in some existing dams to release environmental flows and reduce degradation of the downstream environment. The nature of the challenges of climate change means that the financing of new storage also becomes a global public good – an adaptation measure by African communities placed at risk by external factors driven by the high-carbon emitting nations beyond the continent.

It is important that countries with good damn sites potentials cater for other countries through benefit sharing. Those countries may lie within or beyond the river basin. Regional integration over development outcomes will be key if dams are to make their most effective contribution to African citizens.

Preliminary estimates are that over 130 dams are currently under construction or planned. It is forecast that these will yield around 18.5 billion cubic meters of water to the agricultural sector and

enable an expansion of irrigation. The current projection of dam construction and plans for development may cover all the needs in Northern Africa; 40% of storage needs in Western Africa, 30% in Central Africa, and 75% in Southern Africa. Further analysis is needed at country and basin level to assess the potential use and infrastructure development needs.

Although the storage demands are large, critical investments in storage are feasible in the short and medium terms if they are focused into select areas that will yield high economic returns. The scale of the investment requirement in storage for hydropower, agriculture, municipal demands hazard management and climate change adaptation, and the poverty reducing benefits may be demanding of a new African policy vehicle, particularly on financing an expansion of storage.

Table 2.7: Water Storage capacity Increase *(Source AfDB)*

Region	Actual storage capacity (km3)	Estimated addional capacity from dams under construction or planned soon(km3)	% of capacity increase	Agricultural share (%)	Water for agriculture (km3)	Main pspose
Northern	194	9.85	5.0%	50%	5	WS/irrigation
Western	254	22.6	9.0%	20%	4.4	Hydro / Irrigation
Central	15.6	>7	40.0%	10%	0.7	Hydropower
Eastern	10.9	n.a.	n.a.	0%	n.a.	
Southern	313.3	>8	2.5%	30%	2.4	Hydro / Irrigation
Total	787.5	>47	6.0%		12.5	

2.4.3 Groundwater

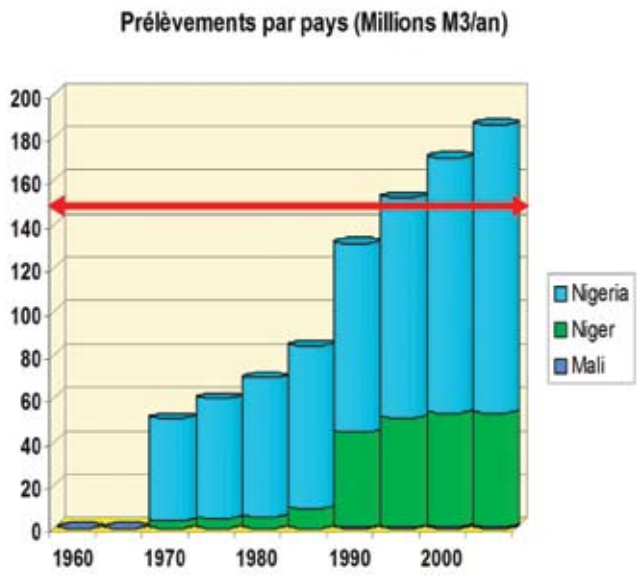
Groundwater in Africa has a strategic role to play in the upliftment of millions of people from abject poverty. Most African countries rely to a large extent on groundwater for their drinking water supply in both rural and urban settings, ranging from shallow hand-dug wells to deep public supply boreholes. In North Africa, and in other countries including Namibia and Botswana, groundwater has become of strategic importance to development and growth, especially in agriculture. Yet the following features can be observed:

- Information on groundwater resources is inadequate;
- The importance of groundwater is not adequately reflected in policies and practices in a number of countries;
- Legislation catering for groundwater is in place, but is often outdated and lacks harmonization across the region;
- Investment in groundwater, relative to its potential to address national objectives, is limited;
- Ineffective maintenance makes a large proportion of water points inoperative;
- Groundwater points often have multipurpose potential but often fall under institutions with single purpose mandates
- There remain critical shortcomings in the organizational framework and institutional capacity for ground-water.
- Groundwater resources may be at risk from pollution

To turn around the present inefficiencies and unsustainable use of Africa's groundwater resources is an immense challenge. AMCOW have recognised the significance of groundwater and have responded to the challenge through the Africa Groundwater Commission.

Box 2.9: The Sahara Sahel Observatory

The OSS action area is characterized by arid semi-arid and sub-humid climate, with groundwater resources mainly concentrated in the great aquifer basins. The known resources are under high pressure (for drinking water, agriculture and export-based agro-industry) to satisfy the requirements of development. This water abstraction is soaring above the natural rate of recharge from rainfall and/or runoff. The consequences of this situation are disastrous and calls for effective trans-boundary management. For these reasons, the joint management of shared water resources, typified by the OSS Water Programme, contributes to face to the challenges such as combating desertification, the mitigation of – and/or adaptation to –drought and climate change, eradicating poverty and improving living conditions. The relevance of the concerted transboundary water management appears clearly in the case of the North-Western Sahara Aquifer System (NWSAS) in North Africa and the Iullemeden Aquifer System (IAS) in West Africa.



2.5 Governance and management

2.5.1 Implementing the Right to Water and Sanitation for Improved Access

There is an ongoing debate on the right to water and sanitation. Many countries have provisions in their National Water Policies for the citizens' right of access to clean water and sanitation, meeting the basic human needs of present and future generations and promoting equitable and affordable access to water. In reality, these have represented intentions rather than a firm commitment to deliver. Uganda and South Africa have recognised the right to water. With strong political commitment dating from the time of real political independence in 1994, South Africa has demonstrated that 'it can be done', once the will is there to make water issues a central focus of a country's development agenda. The institutional leadership provided by the Department of Water Affairs and Forestry has helped to provide the necessary platform for the country's water, food and energy security, and is leading in forging the connections to growth.

2.5.2 Optimizing Public and Private Roles in Water Services

The public sector had traditionally been the predominant, and in some cases, the only vehicle for delivery of water services. This thinking has changed over the last decade as part of the reforms that many African countries have undertaken. The policy, legal and regulatory arrangements for the participation of the private sector have not always been well-articulated, transparent and effective. This has led to conflicts and expectations that were not supported by the contractual arrangements. Sector reforms often led to the invitation of multinational water operators to participate, through various contract arrangements, in the management of urban water utilities. The scorecard has been mixed on the overall impact on service delivery. Whilst a number of contracts delivered greater efficiencies in service delivery (Cote d'Ivoire, Senegal), others did not see any improvement, for reasons that included earlier termination or abrogation of contracts (Gambia, Tanzania, Mali).

But the private sector need to play a greater role in Africa's water resources development. While the associated risks and expectations of the private sector may not see significant investment in infrastructure per se, in the foreseable future, it is recognised that greater partnerships based on harnessing the strengths of the public and private sectors will help achieve some of Africa's broad objectives. Public sector funding for water infrastructure will continue to be the driving force, whilst private sector initiatives are concentrated on management and service delivery. The energy sector has demonstrated an ability to attract private sector capital into infrastructure development, with the private sector assuming part of the project risk. The case of the West African Gas Pipeline, a joint-venture of Nigeria, Ghana, Benin and Togo and Shell and Chevron is a significant public-private partnership scheme that is worthy of emulation in

Box 2.10: Public-Private-Partnership in Irrigation – the Guerdane Project, Morocco

The Guerdane project is a major new PPP irrigation project providing urgently needed surface water for 10,000 hectares of commercial citrus farming, from which more than 100,000 people earn their living in local and export markets. Groundwater supplies drawn from the Souss basin had been rapidly diminishing. The PPP heralds the creation of Morocco's first ever domestic private infrastructure operator arrangement, led by a Moroccan industrial consortium. The consortium will enter into a 30-year concession for the construction, co-financing, and management of the irrigation network channelling water from a dam 60 miles away. The Guerdane irrigation project will cost US$85 million to build. The Moroccan government will provide around US$50 million - half as a loan and half as grant. The tariff structure for irrigation water submitted by the consortium is significantly lower than that citrus farmers paid for groundwater supplies.

Importantly, however, it is Africa's own local private sector operators that are engaging in service delivery, especially through management contracts and small-scale water enterprises. Utility partnerships are also coming to the fore. The private sector is now increasingly engaging in the rural and small town water sector as a result of policy reforms undertaken in some countries, as are community- and NGO-led programmes. Away from the reticulated systems in the urban and peri-urban setting, many

developing some of Africa's hydropower potential.

poor consumers still depend on the expensive small scale, unregulated private water supplier for services, as utilities have not yet reached them. They are the default providers, without whom many people will remain un-served.

2.5.3 Institutional development and capacity-building

There are a number of capacity constraints at local, national and regional levels that hinder progress. These constraints manifest at the different points of water-use infrastructure development, operations and maintenance. For many, the lack of capacity is seen as a much bigger problem than that of the lack of financial resources. Addressing the challenges of building adequate capacity for the water and sanitation sector and related institutions in Africa should involve:

- putting manpower in place to meet the MDGs – for example it has been estimated that for Uganda to meet the MDG targets, it will have to increase the number of professionals and technicians working in sanitation fivefold, and the number working in water threefold;
- building knowledge among sector practitioners to drive and support various interventions (building learning networks);
- instituting a continuous capacity building process for national agencies, local, and community level actors (prioritize local actors and build on local knowledge);
- improving the current low involvement of local private firms in the various sub-sectors that will help to internalise some of the benefits of the interventions and provide quick back-up responses (target and encourage local firms);
- enhancing innovative scientific and social research to support water-use infrastructure delivery in Africa;
- promoting co-operation among regional institutional in knowledge-generation and dissemination.

2.6 Finance

In view of its importance in Africa's water infrastructure development, the Finance theme is discussed more extensively in the next Chapter of the Paper.

2.7 Education, Information and Knowledge

2.7.1 Investing in Data, Information and knowledge

In order to ensure water security, data and information on quantity and quality of available freshwater is crucial for the planning and efficient and sustainable water resources development and management in Africa. For example, the status of hydrological network in Africa is generally inadequate to satisfy the minimum needs for information. Responding effectively to rainfall variability needs short-term forecasting that is tied in institutionally to water management and disaster management.

Climate change adaptation strategies for the future require hydrological data and information to enable assessment of the impacts of climate change on water resources at basin scale. In order to have adequate information on water resources, a number of organisations led by the United Nations Organizations, including the World Meteorological Organization, have been assisting its Members to strengthen their capacity and enhance the collection, storage, processing and analysis of water related data and information. In this regard, since the 1960s UNDP, UNEP, FAO, WMO, UNESCO, other UN agencies and financial institutions such as World Bank (WB) and African Development

Bank (AfDB), have been assisting African countries to improve their capabilities in water resources assessment.

The value of information and knowledge is only realised when it is put to use. Good information aids decision-making and enables better choice and design. The surge in engagement by a wide number of actors has placed new demands upon communicating knowledge. But these have not yet been met. Insuf-ficient resources are invested in the supply and dissemination of water information in Africa and not enough information is produced. Notwithstanding sensitivities over some information, the information that does exist is poorly disseminated and inaccessible.

Box 2.11: Tackling Capacity Gaps in Africa Water Institutions

African Water Academy

To tackle capacity gaps several actions from African water institutions are undertaken at various levels. The African Water Association (AfWA) is putting in place the first African Water Academy at a continental level dedicated to Leadership Development and Change Management, which will be located in Kampala UGANDA. The African Water Academy will operate as a changing to develop organisation patterns capable of bringing improvement in the management of water and sanitation sector.

Water Operators Partnership

Another important initiative going on in favour of Capacity building in Africa and implemented by AfWA and the Eastern and South African Region for International Water Association, is the Water Operators Partnerships –Africa Programme (WOP Africa). The WOP Africa initiative arose from the need to improve the performance of WSS operators and its basic strategy is to seek accelerated improvements through more intense and systematic knowledge sharing including support partnerships between operators.

WOP Africa is being set up to organize exchanges and peer-support partnerships between African utilities; whereby staff from one utility with strong performance in a certain operational area would transfer expertise and good practices to those with expressed need through a structured program of hand-on problem solving and training.

Consequently, good knowledge gets lost, and there are not enough case studies of what works and what doesn't work. Much more could be taken from what already exists. In the short-term, information systems need to aim as much at consolidation of existing information as at generating new knowledge through research. The information needs of the implementation agenda are not yet bearing enough influence on knowledge generation.

The need is even more pressing given Africa's low manpower resources, and its complex arrangements of institutions. National and regional centre of excellences and technology development are prerequisites for investment on building the infrastructure assets.

The strong analytical platform of the Africa Infrastructure Country Diagnostic is beginning to yield key insights into sector status and trajectories. That knowledge is beginning to inform institutional responses among Africa's development partners, and will have wider benefit when disseminated more widely.

2.7.2 Monitoring and Evaluation

Monitoring and evaluation enhance the effectiveness of development activities by establishing clear links between past, present and future interventions and results. Monitoring and evaluation (M&E) extracts relevant information that can subsequently be used as the basis for fine-tuning, reorienting and planning programs.

Key factors constraining the planning and monitoring of development activities at the national, sub-regional and continental levels in Africa are

- human and financial resources;
- appreciation of the importance of monitoring;
- understanding of the economic value of hydrological data and services;
- properly developed indicators;
- infrastructure and systems for collection, aggregation and dissemination of available data and in-formation.

Box 2.12: Pan-African M&E Framework

Monitoring and evaluation of the water sector is considered the weakest link in efforts to achieve the Africa Water Vision 2025 and the Millennium Decade Goals (MDGs). At the Paris Conference in 2005, the African Ministers of Water and Finance committed to establishing a regional mechanism for tracking progress towards achievement of the MDGs.

The first Governing Council of the AWF, 2005 agreed that M&E and Information and Knowledge Management should be priority areas of intervention for the African Water Facility.

The overall objective of the M&E subcomponent is "to support the establishment of water sector M&E systems and management capabilities at national and regional levels in consultation with stakeholders. As a result, improved M&E standards and methodologies will be developed, and regular M&E reporting mechanisms will be established and become operational in RMCs. The availability of timely and regular monitoring and evaluation results will enhance planning, implementation and management of water sector investments."

Data enables monitoring progress towards the MDGs, but it is observed that many African countries have deficient M&E mechanisms. This is a bottleneck to tracking progress with the MDGs and responding appropriately. Of the 16 African countries that participated in the Country Status Overviews (CSO), 15 conceded having a weak monitoring system for water and sanitation.[7] In most African countries, it is not a matter of absence of data, but a case of multiplicity of data collection and monitoring systems that do not relate to each other. Even though most African countries generally concede that there are challenges in meeting the water and sanitation MDGs, figures released by various bodies on the tracking of progress e.g. JMP, are often questioned by regional actors. In addition disagreements on data exist, even among national actors, as a result of an absence of commonly-agreed definitions and indicators. In large part this stems from the absence of an effective and participatory national monitoring and evaluation system. AMCOW, through the African Water Facility, has taken on an initiative to address the weaknesses in M&E at the regional and national levels through the Pan-African M&E Framework.

The rationale for the action is further informed by growing domestic and international demand for M&E, an increase in the harmonization of resource flows within national priorities, increased decentralization and participatory practices, and an enhanced approach to development (e.g. SWAp, Budget Support).

[7] Ref: Published by the WSP Africa and the AfDB on behalf of AMCOW, the Country Status Overviews present a summary of each country's progress on these issues and shows the extent to which the sixteen participating countries have started to make progress towards their WSS MDG targets, and the areas in which they need to redouble their efforts. It reveals that very few countries are reaching high levels of preparedness, and a large number are very far from being prepared to take on the challenges of the sector.

3

FINANCING SUSTAINABLE EXPANSION OF AFRICA'S WATER INFRASTRUCTURE

3.1 Update of Infrastructure Investment requirementst

The issue of financing lies at the core of Africa's water security agenda. The Regional Paper projects the required level of finance and establishes the magnitude of the gap in order to draw attention of Africa's governments and development partners to the scale of investments needed to attain Africa's 2025 Vision and beyond. The Paper makes proposals and suggests avenues for closing the identified gaps. The financing figures used in this chapter as well as in the next chapter of the Paper are based on a broad assessment made in a Working Paper commissioned by the African Development Bank.[8]

[8]The estimated investment requirements for Africa's water infrastructure under the AWV was **US$20 billion** per annum, with the demands of water supply for basic needs and sanitation and hygiene set at **$12 billion** per annum.

Figure 3.1 indicates the scale of investment estimates - classified for both hardware – infrastructure and related capital expenditures – and software – institutional, education and research and development, among others.

Figure 3.1: Africa Water Vision Summary of Investment Requirements (US$ billions)

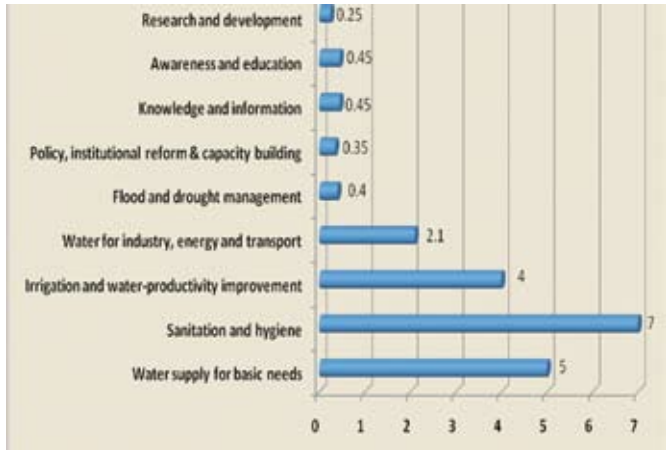
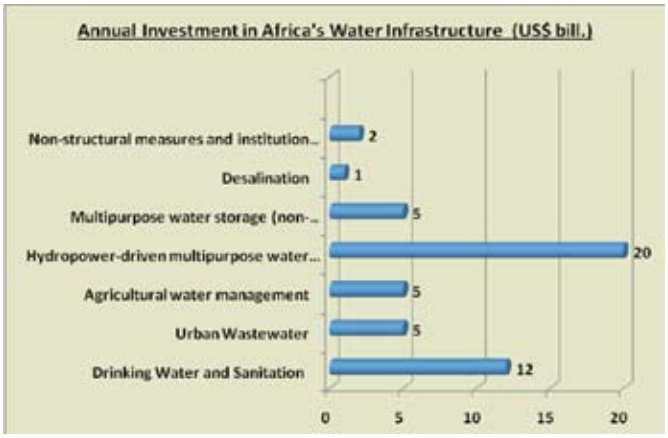


Figure 3.2 shows that the updated requirements over the next 20 years are now estimated at **US$50 billion** per annum. This requirement is 2.5 times that projected in 2000 for the AWV.

While the cost estimates of attaining drinking water and sanitation targets and institution building remain broadly the same, the principal difference lies in the near ten-fold increase in the estimations of the cost of water resources infrastructure to achieve economic growth, food and energy securities and hazard management.

Figure 3.2: Updated Summary of Investment Requirements for Africa's Water Infrastructure (Source: AfDB Working Paper on Financing Africa's Water Infrastructure



Estimates of **US$6 billion** in the AWV for irrigation, energy and industry do not seem to have given enough attention to the need for securing an expansion of new water storage. The estimate of US$4 billion to irrigation is roughly equivalent to only the needs in small-scale water control and irrigation rehabilitation, let alone an expansion of irrigation schemes and accompanying large-scale hydraulic works. A projection of **US$2 billion** to industry, energy and transport does not get close to meeting Africa's hydropower requirements. ODA support to Bujagali Hydropower scheme alone approached **US$1.2 billion**.

The following sections examine the current financial flows and requirements for the main activities.

3.2 Drinking water and sanitation

3.2.1 Water supply and sanitation

The estimated finance requirement to meet the basic water supply and sanitation services across the continent is equivalent to **US$12 billion** per annum. This is equivalent to between 1.5 - 2% of GDP across the continent, and may be more in some countries. This overall cost is linked to three main pathways to attaining MDG targets. First, the new, extended coverages necessary to attain the MDG targets. Second, the maintenance of existing coverages to prevent those already with access to drinking water and sanitation from falling back, with large rehabilitation needs arising from long-standing under-maintenance. Third, the recurrent costs associated with maintaining new coverages.

The World Health Organisation (WHO) have estimated that a total of **US$94 billion** is required into new and existing water and sanitation infrastructure in Africa to meet the MDG target. In water, the projection is **US$37 billion**, whilst for sanitation the figure is **US$57 billion**, as shown in Table 3.1.

Existing expenditure in drinking water and sanitation has reached levels of around **US$6.1 billion** per annum. At the pan-African scale, around **US$2.8 billion** is being invested in capital expenditure, of which about half is from Development Partners. Existing spending on recurrent Operation and Maintenance has reached levels of **US$3.5 billion** through Government public expenditure (including recovered costs from tariffs), with little evidence of recurrent expenditure by development partners.

With annualised investment needs estimated at around **US$10 billion** per annum (excluding programmatic costs, which are presumed to be around **US$2 billion**) and annual investments at **US$6.1** per annum, the finance gap is currently around **US$4 billion** per annum. Around **US$1 billion** of that gap exists in capital expenditure, while **US$3 billion** per annum, lies in recurrent costs of operation and maintenance.

The cost of under-pricing of water services in Africa amount to **US$1.9 billion** per annum. Around 90% of those with access to piped water belong to the richest 60% of African society. Prices are not low for end users, but achieving cost recovery across the continent and across all water consumers is complicated by equity considerations.

[8] The Working Paper, under the title 'Financing a Sustainable Expansion of Africa's Deficient Water Infrastructure' is based on figures compiled from a number of studies undertaken recently. These include the ongoing drafts of the Africa Infrastructure Country Diagnostic (AICD), the work of the Infrastructure Consortium for Africa, including the November 2008 meeting on 'Financing Water for Growth in Africa', the December 2008 Sirte meeting on Water for Agriculture and Energy in Africa, the 2008 WHO publication on 'Regional and Global Costs of Attaining the Water Supply and Sanitation Target (Target 10) of the Millennium Development Goals', ongoing country-level diagnostics in water and sanitation by WSP, and the October 2008 publication on "Creditor Reporting System: Aid activities in support of water supply and sanitation, 2001-2005 by the OECD/DAC Water Task Team, and the contribution on 'Financing and pricing water' by OECD to the December 2008 Global Forum on Sustainable Development'.

[9] The figures in the table are calculated by WHO based on data from the end of 2004 to the start of the MDG target year of 2015, a period of 10 years. Thus, the overall cost of US$94 billion annualizes to US$9.4 billion per annum, excluding programmatic costs. WHO sub-regions AFR-D and AFR-E do not include every African country, as a number of North African countries are included with Middle East nations in the EMR region. WHO are also explicit in their exclusion of programme costs. Thus, a financial requirement of US$12 billion per annum for MDG target attainment is adopted for indicative budget purposes. The AICD has estimated a similar annualised requirement of US$10 billion per annum into drinking water and sanitation, composed of US$ 2.7 billion p.a. into capital expenditure and US$7.3 billion p.a. into operating expenditure for existing infrastructure. These figures equate to 0.4% and 1.2% of GDP respectively.

[10] The WHO classification groups countries by mortality strata. The countries in the groups are:
AFR-D: Algeria, Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Comoros, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Togo
AFR-E: Botswana, Burundi, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

Table 3.1: Total spending on new and existing water and sanitation [9]

WHO Sub-region [10]	Total sp ending on Water (US$ million)			Total Spending on Sanitation (US$ million)		
	Capital	Recurrent	Total	Capital	Recurrent	Total
AFR-D	6.4	10.9	17,296	15,817	11,454	27,272
AFR-E	7.3	12.5	19,852	18,711	10,989	29,700
TOTAL	13.7	23.4	**37,148**	34,529	22,443	**56,972**
TOTAL per annum			3.7			5.7

3.2.2 Wastewater

The WHO report estimating the costs of attaining the drinking water and sanitation targets is explicit in that it does not take account of the costs of upgrading the significant fraction of waterborne sewerage that carries untreated or inadequately treated sewage. Indicative costs are not available. For purposes of ensuring the inclusion of this important intervention for which there is an extensive need as ageing urban infrastructure becomes increasingly dilapidated and pressures on water resources demand improvements in the quality of receiving water, an annualized cost of **US$5 billion** is assumed.

3.2.3 Desalination

Growing water scarcity, especially in North Africa, is likely to drive an expansion of desalination capacity to serve near-coastal water demand. For example, 2008 saw the commissioning of Africa's largest desalination plant to-date in Algeria. At an investment cost of **US$250 million**, the Hamma Seawater Desalination Plant (SWDP) supplies 200,000 cubic metres per day to residents of Algiers. The viability of investments depends on energy costs. The recent fall in oil prices and moves towards expansions of nuclear power, specifically to support desalination in the Middle East, investments at a rate of **US$1 billion** p.a. may become realistic in North Africa and coastal middle-income countries where water shortages become increasingly pronounced as demands rise from other sectors.

3.3 Agricultural water management

CAADP originally estimated a requirement for recurrent Operation and Maintenance in agricultural water management of US$35 billion p.a. over the period to 2015. The annual requirement increases as the area under water control expands, and becomes increasingly significant through an order of magnitude increase as the targeted area under improved water control is achieved compared with current extents. For projection purposes, O&M is assumed to grow from an average US$0.5 billion p.a. in the initial four years, through US$1.5 billion p.a. in the medium term, reaching around US$3.5 billion in the long-term. The December 2008 Sirte meeting similarly made an update of the overall requirements for capital and operation and maintenance investments.

An indicative annualised estimate of the combined investment costs for irrigation development and recurrent O&M costs, for an overall timeframe of 50 years, is given as about **US$5 billion** per annum over the long term investment scenario as shown in Table 3.2.

Table 3.2: Indicative schedule of total investment requirements in agricultural water management (US$ billions)

	Annualised short-term costs (Years 1 - 4)	Annualised medium-term costs (Years 5- 8)	Annualised long-term costs (Years 9 - 50)
New investment	4.5	5.5	0.5
Recurrent costs		1.5	3.5
Total	5.0	7.0	4.6

* Excluding major hydraulic storage works

Agriculture consistently receives less than 10 percent of the national budget in most African countries despite its contribution to gross domestic output of between 20 and 50%. In Maputo, in 2003, the Heads of State and Governments of the African Union committed to allocate at least 10% of their national budgetary resources for agriculture and rural development.

At the UN Conference on Financing for Development, at Monterrey in 2002, governments and agencies committed themselves to increasing their aid by 25%. This could raise an extra US$12 billion a year. In the context of soaring food prices and after the High Level Conference held in Rome in June 2008, several countries and organizations announced their contributions to help overcome this crisis totalling **US$10.8 billion** which, added to the funds pledged at the beginning of the year 2008, gives a sum of **US$22.26 billion.** However, there is no framework that allows differentiation of the financial commitment made to improving water control.

It is not possible to discern the precise size of the finance gap in agricultural water management, but it is tentatively assessed as being in the region of **2-3 billion US$** per annum, principally into small-scale water control to upgrade rain-fed farming systems and into operation and maintenance (including rehabilitation) of existing irrigation schemes. It is useful to bear in mind new sources of financing towards agricultural water control. For example, the first India-Africa Summit in early 2008 launched a new initiative to improve India's collaboration with a number of African countries in the fields of agriculture (particularly irrigation and water resource management) and regional integration (with support to infrastructure projects and regional institutions).

Box 3.1: ODA in African Agriculture

The share of agriculture in official development assistance declined sharply over the past two decades, from a high of about 18% in 1979 to 3.5 percent in 2004. It also declined in absolute terms, from a high of about $8 billion (2004 US$) in 1984 to $3.4 billion in 2004. The bigger decline was from the multilateral financial institutions, especially the World Bank. From 1993 to 2003, international aid for irrigation and drainage declined substantially. In the late 1970s and early 1980s the bulk of agricultural ODA went to Asia, especially India, in support of the green revolution. All of the top six bilateral financers have witnessed declining shares of aid resources allocated to agriculture directly. World Bank global lending to irrigation dropped by 50 percent from US$2 billion in 1980 to US$1 billion in 1993. Having increased in the 1980s, total ODA to agriculture in Africa is now back to its 1975 level of about $1.2 billion.

Multilateral financing of irrigation may be approaching US$ 500 million per annum and has started on an upward trajectory. The African Development Bank is in the process of investing US$1 billion in the Agriculture Sector bringing its portfolio to US$4.8 billion before the end of 2010. After a significant decline in lending during the 1990s, a resurgence in World Bank lending to irrigation began in 2000. Investment approvals in 2006 and 2007 reached record levels ($120 million in 2007). Current pipeline commitments amount to $81 million in 2008 and $37 million in 2009.

3.4 Hydropower

The Infrastructure Consortium for Africa has estimated that a target of achieving 35% electricity access by 2015 across sub-Saharan Africa (excluding South Africa) carries a price tag of US$47.8 billion in each of the intervening years. That need is shared almost equally between investment and operations, and about two thirds towards generation and one third between transmission and distribution. Unfortunately, the relative contributions of hydropower and other forms of energy are currently unavailable. What is know is that hydropower will become an increasing source given the trend towards cleaner energy and measures taken to address environmental and social concerns in large dam infrastructures.

The tentative requirement for hydropower investments is in the region of US$20 billion.[12] Total commitments to the energy sector by the members of the Infrastructure Consortium for Africa were US$3.9 billion in 2007, a rise of almost US$ 1.5 billion (62%) for US$2.4 billion in 2006. Over the period 2001–2006 China's financing of African energy projects averaged US$1.7 billion a year, the focus of which has been six large hydro-power projects with a combined generating capacity of more than 7,000MW. When completed, these projects will increase Africa's installed hydro-power capacity by 40 percent.

Details of the composition of the investment among different energy generation sources are not yet available, but investments in hydropower are thought to have been significant. For example, commitments of US$1.2 billion in East Africa are largely due to multi-donor finance of Uganda's Bujagali Hydro Project.

3.5 Water resource storage

The AICD has preliminarily estimated that increasing per capita storage levels in Africa, as a whole (with the exception of the North), to those of South Africa would require an estimated investment of $150–$700 per capita. The annualized cost of expanding storage per capita levels to 750 cubic meters ranges from less than 1% to about 9% of GDP per year for 50 years in different countries (Table 3.4). Cost-benefit analyses suggest that

[11] As shown in the preparatory work of the Sirte Conference, the cumulative amount of investments for ongoing and pipeline projects in water for agriculture and energy on the continent reaches about US$64.6 billion. The investment framework specifies the size of irrigation infrastructure (small-scale irrigation, rehabilitation of irrigation, large hydraulic projects) and distinguishes between projects and programmes in the short (<4 years), medium (between 4 and 8 years) and long term (> 8 years). The highest proportion of the cost is noticeably allocated to large-scale projects including large-scale irrigation schemes development and hydropower projects. Similarly, 56 percent of the total investment envelope is expected to be exhausted in the medium term, showing a clear need to enhance the planning for investments in the long term to ensure sustained and permanent growth in the agriculture and energy sector to meet the food and energy security goals.

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[12] The AfDB 2008 Clean Energy Investment Framework has projected the total investment requirement to implement a scenario for universal access to reliable and increasingly cleaner electric power in all the 53 countries on the African continent by 2030 to be US$ 547 billion. This averages out at US$ 23.8 billion per year. For the SSA countries and the island states, the total capital requirement is estimated at US$ 282 billion – or, on average, US$ 12.3 billion per year.

the financial commitment required is beyond that of most African economies. However, critical investment in storage is feasible if it is focused on select areas associated with high economic value rather than on covering the whole country, including growth nodes and development corridors. Benefits may be experienced sooner through international cooperation, which by linking to regional markets enhances feasibility in terms of investment viability.

Assuming **US$30**0 per capita within the range of US$150 – 700 per capita, and further assuming an average total African population of 1.5 billion over the period to 2060 yields a total cost of US$450 billion. Over a time period of 50 years, this annualises to an average of **US$10 billion p.a.** A further annual investment of **US$5 billion p.a.** is projected in new storage where other flow regulation, hazard protection and other climate change adaptation demands mean that hydropower generation is not a feasible option within multipurpose planning.

Table 3.3: Indicative estimated storage costs as a share of GDP (Source AICD)

Storage costs (per cent of GDP)	Countries
Less than 1.00	Angola, Botswana, Equatorial Guinea, Gabon, Mauritius, Namibia Swaziland
1.00–1.99	Benin, Burkina Faso, Congo, Rep., Guinea Mauritania, Nigeria, Tanzania, Togo, Uganda
2.00–3.99	Central African Republic, Chad, Ethiopia, The Gambia, Kenya, Madagascar, Rwanda
4.00 and more	Burundi, Malawi, Niger

3.6 Closing the Financing the Gap

Knowledge of the composition of the finance requirement and gaps allows more responsive policy actions to be taken. The finance gap can broadly be differentiated between capital expenditure and recurrent costs across the different water sectors. Specific strategies can be formulated that better link finance needs to likely sources in line with the 3 't's of tax, transfers and tariffs. Those specific recommendations have been made within the operational settings of accelerating progress on the MDGs, and economic growth.
Alongside these, general policy-level actions to close the finance gap would focus on:

a) Preparation of National Sector Finance strategies in the drinking water and sanitation arena, building on the recommendations of the OECD Water task Team. The architecture and evidence is now sufficiently well-formulated for rapid progress to be made over the next year, in at least 20 countries, and for progress to be reported at the 3rd African Water Week (2010);

b) Encouraging equivalent processes to evolve National Sector Finance Strategies in the agricultural water, energy and storage arenas, mindful that the starting point is further behind. Africa's main financing partners are invited to prepare a road-map for financing strategies in water resources, building on the work of the African Water Facility, Infrastructure Consortium for Africa, the AICD and the OECD Water Task Team, and to report progress at the 2nd African Water Week (2009);

c) A new short-term African Water Finance Task Force is invited to work in close conjunction with the AWF, ICA, AICD, OECD, EUWI and GWP to bring together the different strands of the finance story, to report through the ICA Annual Report on finance across the whole water sector, and in particular to monitor impacts of the current global financial crisis on the African water sector, reporting in the first instance to the 2nd African Water Week;

d) Commissioning of a strategic and operational study by the ADB/AWF on the role of water in Africa's economic development, returns to Government society and action plan to develop the water infrastructure assets (2009/10);

e) As per the decision of the 2008 AU Assembly, the African Development Bank will take steps to convene a meeting of AMCOW Ministers, Ministers of Finance and development partners by the end of 2009, around Finance Strategies, and returns to Government and society;

f) Organisation of the 2nd RWSSI International Conference to review achievement and mobilise resources for the 2nd and 3rd phase implementation;

g) An urgent disbursement of funds committed under the Africa Food Price Crisis;

h) Evaluations of the following finance issues are invited, each to be reported at the 2nd African Water Week.

- accessibility and modalities of existing Infrastructure Funds and Facilities for financing drinking water and sanitation and water resources infrastructure, including those of the IFIs, emerging partners and sovereign wealth funds,
- accessibility and modalities of Climate Change Funds for water development is invited, to be reported at the 2nd African Water Week,
- prospects and modalities of multi-donor platforms for

financing of regional infrastructure is invited, to be reported at the 2nd African Water Week,

- assessment of the scale of private sector investment flows into irrigation,

- assessment of the scales of investment needs in upgrading waterborne sewerage facilities, and desalination facilities,

i) Invitation to Development Partners to help boost African capacity in project preparation, and to build capacity at country level to absorb the additional financing and use of country systems in line with the Paris Declaration; and

j) Increased commitment to the African Water Facility to scale up its operations in support of major programmes and projects.

4

DELIVERING ON WATER SECURITY AND SANITATION

4.1 Driving the Agenda of Political Level Commitments

4.1.1 Consolidation of commitments

The various declarations and commitments, particularly those of eThekwini, Tunis, Sharm El Sheikh and Sirte, address almost all the key challenges facing Africa's water security and sanitation, as well as water for agriculture and energy. The key declarations of eThekwini, Tunis, Sirte and Sharm El Sheikh are presented in Annexes 1A-1D. These have been consolidated for purposes of defining the actions carried in this Paper.

Over the period of its existence, AMCOW has strengthened its collaboration with development partners and civil society organizations. This resulted in formalizing its relations with the African Civil Society Network on Water and Sanitation (ANEW) and the Global Water Partnership. In addition a dialogue on Mobilizing Concerted Action on Africa's Water Agenda was organized in Berlin in cooperation with the German Ministry of Development Cooperation. AMCOW has also established close collaboration with the G-8, whose summits over the last five years have adopted initiatives on water for Africa. Dialogue over the G8 Evian Action Plan is ongoing. AMCOW has similarly co-operated with the European Union in the implementation the EU Water Initiative.

In this Regional Paper, these commitments have been consolidated for the purpose of defining operationalising actions. Detailed actions are presented in Annex 3. The matrix captures input from regional actors and at this time is work-in-progress. The actions on the regional commitments are defined for the short (up to 2010), medium (up to 2015) and long (up to 2025) term. In this Paper, only the short-term actions are presented. It is clear that for some, these actions may have been taken already, while for others it may be a starting point for action or serve as a check-list in reviewing sector performance. These actions, having been determined by regional stakeholders through the consultative processes preceding the 5th World Water Forum and endorsed by AMCOW, will be the focus for dialogue with Africa's partners in Istanbul. The actions that have been defined herein capture follow-up processes and new ones, in relation to What Africa is doing to meet its Vision 2025; What Africa should be doing; and Where support is most needed.

The actions have been categorised into the following:

- Delivery – which focuses on programmes and initiatives to deliver the expected outputs and may require strengthening;
- Improvements to the operational setting – which addresses

the process, institutional, capacity and operational mechanisms for supporting the delivery of the outputs; and

- Strategy refinement – which focuses on the refinement of policies and strategies to ensure that delivery is on-course or to support scaling-up.

Substantial discussion of finance and proposals for addressing the gap was made in Chapter 3. As such these are not repeated in the discussion of actions to close the financing gap that appears under the various themes treated in this chapter.

4.2 Commitment to action by political leaders

4.2.1 Delivery

AMCOW's individual members must sustain their efforts in driving forward the in-country implementation of declarations already made on water and sanitation. There is a need for much better tracking at country-level of the delivery process to enable AMCOW to better report to AU. That requires the strengthening of the ongoing projects and programmes (of which there are many hundreds at this time) to make more explicit what they are delivering in terms of numbers of beneficiaries, service coverage and service standards. This evidence needs to be mapped against the MDG gaps. This is the responsibility of national institutions. AMCOW's request for regular country sector reviews, the Pan-African M&E Framework and the African Water Week, among others, will provide it with the information on the extent to which commitments are being met in-country. As a body, AMCOW should promote the peer-review mechanism on the successes of its water actions.

Many of the initiatives and programmes with which AMCOW is involved or is aligned are showing positive gains. These need to be scaled-up. There is no need to establish new initiatives under those themes where current ones are sufficient for delivery. AMCOW can take steps to strengthen these where refinements have been recommended in relation to existing programmes. Where water programmes are not led by AMCOW, it is important that they demonstrate their alignment with AMCOW's commitments and establish the delivery mechanisms that will allow AMCOW to meet its obligation of implementing and fast-tracking actions.

New AMCOW-led initiatives (ranging from position papers to programmes, possibly with MoUs with key ac-tors) may also need to be established to improve outcomes in the main thematic areas, as appropriate. Par-ticularly, where high-level decisions can be influential upon complex institutional architectures, weak links exist to the implementation agenda, and where strong leadership is needed. A review of the status of implementation and institutional mechanisms across the thematic areas could inform AMCOW's response, including helping to identify where institutional complexity could be eased to make the most of existing manpower.

Box 4.1: African Water Facility

The African Water Facility, led by the African Ministers' Council on Water (AMCOW), has become established as a Special Water Fund managed by the African Development Bank. It is an instrument conceived to facilitate the availability of financial resources to build Africa's water institutions and management capacity to meet the MDGs and targets of the African Water Vision.

The objective of the AWF is to improve the enabling environment and strengthen water resources management to attract the massive investment necessary to achieve the regional objectives. Since inception, the Facility has mobilized cash contributions amounting to €87 million. The Facility provides support in strengthening water governance; investment to meet water needs, strengthening the financial base and improving water knowledge. The experiences gained over the 3 years of its operations have positioned the facility to support more interventions.

4.2.2 Operational setting

At the national level:

a) Engagement by AMCOW with Ministries of Finance, convened by ADB, to advance the presentation of finance strategies, including dialogue on increased budgetary allocations, mobilisation of domestic resources through innovative approaches, specificities regarding cost sharing, incentives to local private sector etc;

b) Engagement with other Ministers and cabinet – partnerships in respect of energy, agriculture and food, environment; seek greater alignment with economic growth by supporting national growth and development strategies;

c) Building on national World Water Day celebrations which have become established in many countries, holding of a National Water Week (to precede the African Water Week), during which each country will take stock of the actions and the outcomes of the various commitments that have been made by the political leadership;

At the continental level:

a) Pursue steps to establish AMCOW as a key regional mechanism, strengthening its secretariat and its sub-regional nodes;
b) Launch during 2009 the annual reporting of progress to Heads of State
c) Further the strengthening of partnership with G8, including definition of a clear agenda for dialogue over the Evian Water Action Plan
d) Continue to represent African voices in global processes – MDG summits etc, and establish appropriate mechanisms for feedback to countries.

4.2.3 Strategy refinement

Regional and international actors should recognise the key role of politics in converting recommendations into actions. Strategy refinements will only bear fruit if they are accepted by politicians. Events like the 5th World Water Forum, the African Water Week and others will be the continuing vehicles to bring the African agenda water to the table.

The sub-regional and cross-sectoral make-up of AMCOW now has much better prospects for taking on board the array of strategic refinements.

4.3 Drinking Water and Sanitation MDGs

4.3.1 Delivery

There is not yet enough information available to be able to identify the scales of service expansion and maintenance that are being delivered by sector investments across the continent, or where effort is being directed. Country Sector Reviews are tracking progress made by countries towards the achievement of the MDGs. The first of these reviews was undertaken in 2006 by the WSP-Africa working in collaboration with the AfDB in around one third of African countries. In line with a triennial cycle, the second review is scheduled to be prepared during 2009.

WHO have estimated that approximately three quarters of the investment is required into sanitation, and around 60% of the total for drinking water and sanitation is required in rural areas. Accordingly, delivery under the Rural Water and Sanitation Initiative (RWSSI) is accelerating access to water supply and sanitation services in rural Africa. The initiative is striving to attain 80% coverage for an estimated investment of US$14.2 billion. As at the end of 2007, the finances mobilised (about US$3.2 billion, 70% of the Phase I financing needs of US$ 4.56 billion) were targeting extended water supply to 29.6 million people and sanitation to 27.6 million people by 2015. The scale of the programme is delivering a significant step-change in coverages on rural water supply in the region. However RWSSI faces some constraints and challenges in delivery, including: i) insufficient funding to cover the demand for investments; ii) inadequate capacity of local service providers (consultants, contractors, artisans); and iii) increasing per-capita costs of provision. In spite of these constraints, RWSSI is meeting its stated objectives but needs more funding to scale-up its operations.

Widespread urban water sector reforms were initiated in the 1990s, including the commercial orientation of utilities, formal regulation and private sector participation. Some 29 water PPPs have been signed over the last 2 decades, concerning 26 million people. Sector and utility reform are actively underway in a number of countries, aimed at improving utility efficiencies.

4.3.2 Operational setting

Country level actions:

a) Preparation of National Plans

Where these have not yet been put in place, countries need to take urgent action in preparing or updating national plans for achieving the MDG targets for water and sanitation. The low income and fragile states, where the greatest need exists in terms of closing the MDP gap, will need support to undertake this exercise. In all countries sector finance strategies that link the 3't's of financial sources (tax, transfers and tariffs) to investment plans are needed;

b) Closing the finance gap

The following sources hold prospects:

i. Delivery by African Governments on the eThekweni commitment on financing sanitation (a substantial

proportion of which may be through health budgets);

ii. Replenishment of the Rural Water Supply and Sanitation Initiative;

iii. Development partners to meet their commitments, with greater clarity on how the many financial disbursement instruments target capital infrastructure, replenishment of existing funds and facilities, and improvements in channels of sub-sovereign finance;

iv. States that are able to do so to take up as much as their own capital requirement as possible through public expenditure. This would enable development partners to target their increasing commitments to ODA into low-income countries and fragile states, where the finance gap is greatest;

v. Increasing the contribution of non-OECD partners from the current US$400 million per annum, for example in conjunction with the China Africa Development Fund, the EXIM Banks and Arab sovereign wealth funds.

vi. Scaling-up, and fine-tuning of Africa's positive experiences of raising local private and equity finance from its current low base. As part of this, the Water and Sanitation Program and African Development Bank to expand the accomplishment of shadow credit rating of seven utilities in support of mobilising local finance

Depending upon affordability, raising capital expenditure is likely to be through Government revenues, loans from multilateral finance institutions (MFI) and bilateral development assistance. If successful, these different opportunities should make the closing of the finance gap in SSA in capital expenditure in drinking water and sanitation a realistic prospect, and bring the trajectory of MDG attainment back towards track.

Capital expenditure for the expansion of service the two most effective and realistic means of closing the US$3 billion gap lie in utility reform that reduce operational inefficiencies, and in cost recovery. Other strands (in unison) that hold best prospects for closing this gap:

Box 4.2: Water and Sanitation Sector Monitoring Platforms in Ghana, Nigeria and Mozambique

Monitoring of water and sanitation activities and progress often fails to accelerate decisions on national sector investments, resource allocation, and relevant policy directions among others. Civil society equally has difficulty in getting relevant information to challenge or support sector decisions. Generally, data streams are not harmonized and data literacy across the sector. Different institutions, both local and international, provide different data on drinking water and improved sanitation as a result of factors such as differences in definitions and indicators.

Piloting of Water Sector Monitoring Platforms (WSMP) is being supported by the JMP in 3 countries – Ghana, Nigeria and Mozambique. The main aims are to reassert national government ownership, with its local partners, as the pivotal point for country sector monitoring and align efforts and avoid duplication in sector monitoring. The specific objective of the platform is to assemble, analyze, re-package and disseminate all relevant water and sanitation data at regular intervals and serve as a centre for sector information. The two main products are: a) convergence of existing national and sub-national WASH information streams and data; b) increased accessibility by different stakeholders to relevant WASH sector information through regular media briefs, regular publications, regular dissemination forums, meetings, workshops, e-mails and informal discussions with sector professionals in order to get available information out to relevant stakeholders.

The platforms are not to generate primary information or duplicate functions of existing bodies.

i. Good institutional frameworks driven by sector and utility reforms that reduce operational inefficiencies could pay off in US$1 billion gains by reducing losses, and improving service continuity and collection rates.

ii. Nearly US$1 billion of the finance gap exists in middle-income countries, where tariff reforms hold best prospects for cost recovery.

iii. Building on experiences in Output Based Aid, development partners could work more closely with African Governments on targeted subsidies, especially for the poorest in all countries and in low-income countries in particular, targeting instruments that could disburse around US$1 billion per annum.

c) Prioritizing drinking water and sanitation

Countries have to ensure that their PRSPs and the Country Strategies that govern partner relations ade-quately capture water and sanitation if the sectors needs are to establish a clear link with the budgeting process. Civil society has an important role

in following up this commitment, especially in the next rounds of PRSP processes.

d) Building utility partnerships

The existing African Water Operators Partnership (AWOP) to further build utility-to-utility partnerships, and report (what is working and what isn't) on corporate governance and access to multi-source finance.

e) Monitoring and evaluation

Being one of the weakest links in the sector in most African countries, the development of effective and par-ticipatory monitoring and systems is of immediate priority. This requires as a first step an assessment of the various M&E systems in place at project, programme, national and basin levels, and consensus on definitions, measurement standards and indicators for the sector.

To establish these systems will require funding for capacity-building and the procurement of the necessary hardware and software. It also requires a platform through which all water and sanitation actors can collaborate and share information. For example, the UN-mandated body to report on progress on the achievement of the MDGs, the UNICEF/WHO JMP, is supporting the establishment of National Water and Sanitation Monitoring Platforms in Ghana, Nigeria and Mozambique to pilot and streamline MDG water and sanitation to follow up progress with the achievement of the MDGs. (See Box 4.2). Other African countries may wish to establish similar platforms if these do not exist.

A process leading to a second round of 30 Country Status Overview reports on water supply and sanitation will run from Jan 2009 to mid 2010. It will be carried out under the auspices of AMCOW by WSP in collaboration with AfDB, UN-Water, UNICEF, WHO and regional civil society networks.

f) Actions on Governance and Capacity Development

Actions discussed elsewhere in this Position Paper on Governance and Capacity Development need to be better integrated into the operational setting to accelerate the rates of service delivery.

4.3.3 Strategy refinement

Strategy refinements will be most effective as they respond to lessons learned from Country Sector Reviews. An increase in the number of Country Sector Reviews is foreseen in 2009. With 2015 fast approaching, it is timely to begin looking beyond 2015, and the MDG targets.

Preparation of good technical and financial proposals will improve the chances of success for requests for financing from both Development Partners and other financial institutions. This aspect of capacity should be highlighted in training institutions and Centres of Excellence.

4.4 Economic Growth through Agricultural Water Use

4.4.1 Delivery

Delivery on the actions shall be driven by the following:

a) The portfolio of agricultural water management projects that are currently underway has been captured by national reports feeding the December 2008 Sirte Conference on Water for Agriculture and Energy. The scale of ongoing delivery of improved agricultural water use is yet to be synthesized from this port-folio: The scale of private activity in irrigation remains largely unknown, but significant. Sirte acknowledges that more work needs to be done to uncover the level of private sector activity.

b) Immediate and short-term actions need to be effected that will enhance access to water and small-scale irrigation as part of intensifying agricultural production and productivity in response to high food prices. The Africa Food Crisis Response is expected to avail €0.5 billion in the short term and close to €1.5 billion in the medium to long-term;

c) The Maputo Declaration, CAADP and Sirte processes can be furthered by converting pipeline opportunities into bankable investments. Some progress has been registered in line with the commitment of the 2003 Maputo Summit to allocate within 5 years 10 percent of the national budget to agriculture, but the average allocation of all the African Union member countries is still far from reaching the agreed target, and that commitment awaits conversion to action;

4.4.2 Operational setting

The operational setting will require:

a) Tackling bottlenecks to bankable projects: Initiate dialogues over bottlenecks in the process of 'bankability', notably i) the commonly arising gap between African propositions and the responses of financers, ii) incentives and disincentives to investment in agriculture, and iii) the agricultural policy targets that development partners intend to support;

Box 4.3: The NEPAD Comprehensive Africa Agriculture Development Plan (CAADP)

The NEPAD Comprehensive Africa Agriculture Development Plan (CAADP) is a manifestation of African governments' commitment to address issues of agricultural sector growth, rural development and food security. It promotes interventions that best respond to Africa's well-known food insecurity. CAADP has been designed to promote investment in four key areas that can make a difference to Africa's food and agriculture situation: i) extending the area under sustainable land management ii) reliable water control and improving rural infrastructure iii) trade-related capacities for improved market access, and increasing food supply and reducing hunger; and iv) agricultural research and dissemination and adoption of technology. CAADP estimates that a total need of US$250 billion could be leveraged, with over half coming from national public and private sources and the remaining 45% from external sources.

b) Public-Private Partnerships: Create a more coherent policy framework for public-private partnerships that will attract increased private capital into the agriculture sector. Review existing infrastructure funds and facilities, and private sector development initiatives (e.g. PIDG) in light of their potential support to the irrigation sector

c) Closing the Finance Gap: This will include:

- Water investments under the Maputo public expenditure pledge to be carried through,
- Explicit statements by development partners on financial contributions to drinking water and sanitation can be matched by equivalent statements in agricultural water management,
- An urgent implementation response to disbursement of 2008 'Food Price Crisis' pledges,
- Response to the 2008 India-Africa summit,
- Investments into small-scale water control through national rural development and food security programmes in conjunction with the IFIs, IFAD, bilaterals and NGOs.
- Leveraging of co-financing, especially from the private sector, is critical.
- Leveraging finance from the numerous investment and PPP funds and facilities that target African infrastructure,
- A better understanding is needed of the scale of private investments into irrigation, currently largely unmonitored. In some countries, rates may be at least as high as Government investments.

It is estimated that O&M costs will grow to around US$3.5 billion per annum as the irrigation base expands. Improvements in cost recovery from farmers that support operation and maintenance must be linked to the capital investment programme driving the expansion of irrigated areas. Prospects of greater success in cost recovery than in the past lie in the value-chain approach that will see new irrigation developed in a market-led manner.

4.4.3 Strategy refinement

Support sectoral strategies and policies in the field of agricultural water, within contexts of broad-based agricultural approaches, that embrace:

a) connections between agriculture and economic growth in the African setting (acknowledging the variety of different livelihood situations of Africa's farmers and households)

- a ten-year projection of how countries propose to source their food, and the implications thereof for markets, linked to an expansion of small-scale irrigation, irrigation rehabilitation, and irrigation scheme expansion (including where new dam storage is or is not needed),
- food security programmes and MDG Target 2 on the reduction of malnutrition,
- market-led irrigation expansion and rehabilitation that drives economic growth and contributes to MDG Target 1 on reducing household poverty by raising incomes and enhancing livelihoods,
- capacity to absorb foreign investment in agriculture (to meet rising food needs in Asia, Middle East etc) alongside achieving national development objectives through agriculture and food ,

- opportunistic responses to global food-price crises and emergency drought assistance,
- returns to Government in terms of reduced food import bills, reduced reliance on food aid, agricultural taxation and food security; returns to society in terms of the number of beneficiaries (entrepreneurs, full-, part-time and seasonal labour and income levels), their livelihood strategies and and household revenues,
- financing strategies based on the mix of financing sources, targeting both capital expenditure and recurrent expenditures,
- and that clarify which forms of agricultural water management will or will not attract public expenditure (including ODA) and which are left to the market and private sector.

4.5 Economic Growth through Water for Energy

4.5.1 Delivery

Action is currently focusing on:

- construction and the advanced planning stages of over 130 dams across the continent (not all of which are within the energy sector) is increasing the installed capacity for hydropower generation;
- steps to retrofit the existing installed capacity;
- implementation of a number of small hydropower installations.

4.5.2 Operational setting and strategy refinements

The following operational factors are noted:

a) The guiding agenda is the 20-point action plan of the African Ministerial Conference on Hydropower and Sustainable development.

b) Historically, the capital costs of power sector development have been almost entirely subsidized by the state or by donors. Yet, few of the region's countries can exploit economies of scale in generation. Current trends in investing in emergency power (diesel generators) risk displacing investments in long-term, and more efficient long-term capacity.

c) If current trends continue, one of the most likely sources of capital expenditure lies externally, among Africa's emerging partners, especially China, and Arab Sovereign Funds. Whilst, multi-donor platforms including traditional and non-OECD financers are gaining ground, it is essential to re-engage traditional Development Partners to scale up their contributions.

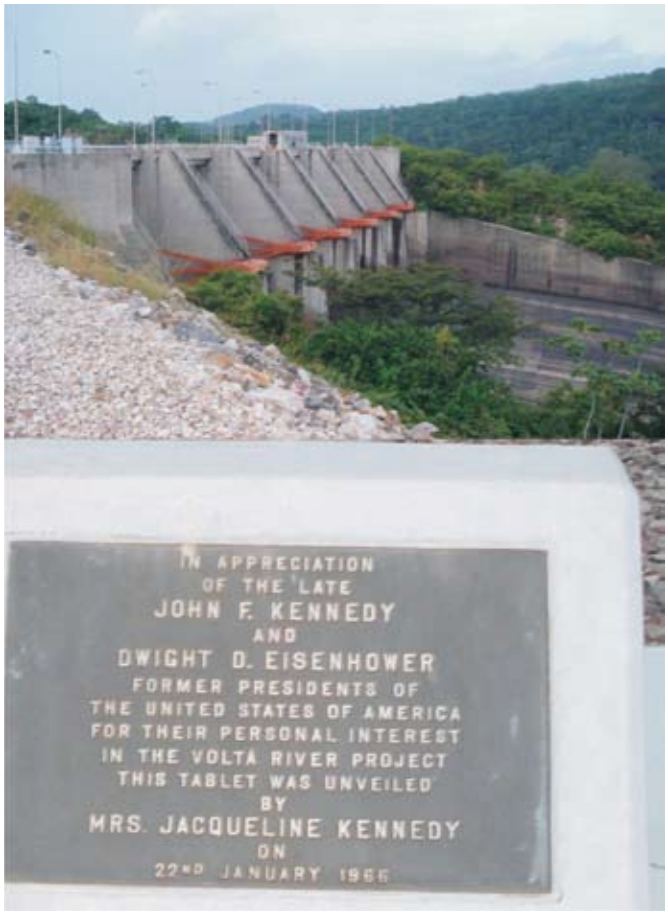
d) Other sources include:

- International investment consortia composed of energy suppliers from power pool nations;
- demand-intensive industries and urban growth poles through PPPs; and
- climate change funds that are driving low-carbon energy solutions.

Box 4.4: Supporting Africa's Growth through Water Infrastructure Development

Developed nations need to share the experiences they have with using water infrastructure investment to facilitate the creation of a platform for growth and as a way to break cycles of poverty. To this end it would be useful to start a process of evaluating/assessing multiple purpose development of water on key large rivers in Africa for their potential to break cycles of poverty. For example there is a need to ask for stories from the United States on successes and failures in their water infrastructure development e.g. sharing the experiences of the US Army Corps of Engineers, TVA and BPA etc.

e) The trend that has seen regional finance rise to nearly one quarter of overall development assistance needs to increase further, and reach in excess of one half of total investments in water infrastructure, targeting hydropower and storage. In this light, the architecture and mechanics of regional investment instruments needs review.



f) With the African power sector experiencing similar structural problems to the water sector, best prospects for securing recurrent expenditure in hydropower lie with cost recovery through energy tariffs, again driven by utility reform. Regional trade in energy means important cost-sharing arrangements are needed if host countries of large infrastructure are not to bear a disproportionate burden of O&M while utilities in power pool distributors derive revenues;

Further work is needed to project the financial requirements of Africa's storage expansion.

4.6 Managing and protecting water resources and trans-boundary activity

4.6.1 Delivery

The outstanding challenge is to advance a platform of infrastructure that provides the essential water storage to boost economic growth.

The African Development Bank has set a target for the period 2008-2013 to increase water storage capacity by at least 8.5 billion cubic meters. The Bank has planned several water development projects of about USD 865 million during the same period. The main areas of focus include: (i) the optimization of existing water storage facilities for agriculture production; (ii) increasing dams' storage capacities; iii) building new large water storage facilities; and (iv) the enhancement of knowledge and information in the agriculture water sector.

Africa's Lake and River Basin Organisations and Regional Economic Commissions continue to pursue existing water sharing agreements, and action is being initiated in shared watercourses where institutional arrangements are currently weak and present a barrier to development.

4.6.2 Operational setting and strategy refinements

a) National Governments need to respond to national development plans - and the policies, strategies and plans of the main water-using sectors, and other policies in integration and security - by identifying their implications for water management, and building new alliances that will deliver the water management objectives;

b) Formulate an investment programme for infrastructure of regional importance. Critical investment in storage in the short-term is feasible if it is focused on select areas associated with high economic value rather than on covering the whole country,

including growth nodes and development corridors. These opportunities need to be identified. Benefits may be experienced sooner through international cooperation, which by linking to regional markets in the benefits of storage, enhances investment viability.

c) Operationalise approaches that will reduce potential tensions over new infrastructure - including local conflicts, disadvantaged regions and regional equity.

d) Progress the already-established regional partnerships on groundwater, including implementation of the Road-Map for the African Groundwater Commission

e) Prepare Guidelines on the implementation of inter-basin water projects

The scale of investment needed into new water storage dwarfs investment needs in the water-using sub-sectors. The scale and complexity of the investment requirement in storage for hydropower, agriculture, municipal demands hazard management and climate change adaptation, and the poverty reducing benefits, is deemed to be demanding of a new policy vehicle to unlock the financial complexities behind the necessary expansion of this critical infrastructure.

4.7 Climate change adaptation

4.7.1 Delivery

Climate change has become a global theme currently receiving considerable discussion at the regional and international levels. Actions to address the challenges are primarily being country-led.

A number of water and climate change relevant initiatives and programs are ongoing or proposed to be launched in the near future. These include: i) Regional strategic action plan for integrated water resources development and management in the SADC and ECOWAS countries; ii) The Water and Nature Initiative (WANI); and iii) actions within the Nile Basin Initiative.

Action is underway to improve early warning systems and better climate and hydrology data including i) the World Hydrological Cycle Observing System (WHYCOS) project; ii) African Monsoon Multidisciplinary Analysis project, (AMMA); iii) Famine Early Warning System Network (FEWS NET); and iv) CLIM DEV Africa. It is important that the information products from these information initiatives have impact into day-to-day water management, and into the delivery agenda of economic, social and environmental change.

4.7.2 Operational setting

At the national level:

a) There is need for knowledge-building to understand the translation of climate change and variability into economy-wide impacts through changing water availability and extremes, as well as the direction, magnitude and locations of hydrological change in Africa; and forecasting and prediction capability;

b) Increasing adaptive capacity, including adequate assessment of water resources in-country, identifying risks and adaptation measures and work these into national plans, and piloting new risk mitigation instruments (e.g. weather micro-insurance).

At the regional level RECs and RLBOs are:

a) Developing regional adaptation strategies, from which the recommendations need to be carried into delivery

b) monitoring projects and partnerships for effective exchange and sharing of information and resolving conflicts.

4.7.3 Strategy refinement

The climate variability and climate change agenda and the water development agendas cannot run in parallel or in isolation from one another. Strategy refinements are needed to bring the two communities much closer together than has hitherto been the case within the setting of Africa's water development. This requires giving operational meaning to activities required at national and basin level.

4.8 Governance and management

4.8.1 Delivery

Issues of governance and management are crucial alongside the building of infrastructure. Key actions underway are in many

regional institutions and countries to:

a) Build the infrastructure and technical base to support service delivery;

b) Make effective the engagement of local authorities in service delivery, and to support decentralised bodies with the necessary resources to fulfil their mandates;

c) A number of African Governments are at various stages of setting up specialist units to promote greater use of Public Private Partnerships;

d) Take deliberate steps within existing projects and programmes to address the role of women and youth.

4.8.2 Operational setting

a) Dialogues with citizens of unserved communities, including actions to address the role of women and youth

b) Build greater inclusivity with actors from across the water-using communities, gaining understanding of their policy objectives and the implications of these for water management

c) Identify practical steps that will operationalise the achievement of balance among the social, environmental and economic components of water infrastructure development

4.8.3 Strategy refinement

High-level executive bodies on integration of resources at national and regional levels to advise of strategy refinements

4.9 Education, Knowledge and Capacity Development

4.9.1 Delivery

The 4 urgent targets for capacity strengthening are local government, civil society, project developers, and in monitoring.

TIGER Training session, Cape Town, 2006

4.9.2 Operational setting

a) Build institutional and human resources capacity at all levels, especially empowerment of local government to implement decentralised programmes

b) Carry out effective engagement of African civil society and public participation

c) Channel resources in building African capacity in project development

d) Establish and enhance the role of Regional and National Centres of Excellence

e) Strengthen the information and knowledge base through linkages with existing initiatives such as TIGER and HYCOS.

f) Improve monitoring capacity at local, national and regional levels.

4.9.3 Operational setting and strategy refinement

Strategy refinements will focus on a major expansion in human resources in the next generations of water practitioners and upon the right means within the education system to endow them with the skills they will require.

Box 4.5: TIGER Initiative

TIGER is an AMCOW endorsed initiative that involves more than 150 African universities, water authorities and technical centres. TIGER supports African partners with access to space-borne data and products, by offering specific training on EO applications for water management, by funding North-South collaborative projects aimed at developing tailored EO-based water information systems, and by favouring take-up, operationalisation and technology transfer of those demonstrated systems to African water authorities.

The EO-derived information and maps would, among others:

a. Contribute to overcome the water information gap in Africa, complementing scarce or deficient in-situ data network infrastructures;

b. Provide homogeneous overview of large regions, facilitating integration of information from local to national to trans-boundary scale;

c. Enable continuous retrieval of different hydro-geological variables and biophysical parameters of the water cycle;

d. Provide neutral information for integrated management of Africa's trans-boundary surface and ground water systems;

e. Support improved water governance and decision-making by using space-based information to provide accurate and timely geo-information for the integrated water resource management process;

f. Contribute to enhance institutional, human and technical capacity; and

5

TARGETED MESSAGES TO THE 5th WORLD WATER FORUM

5.1 Emerging Messages from the Regional Process

Africa is one region, with commonly shared challenges. And yet, Africa is 54 countries, with varying degrees of economic and socio-political circumstances. The continent has some success stories to tell in its water security agenda. These are however not yet enough to have changed the picture of want in the midst of plenty.

In order to make better progress, Africa's political leadership has taken a number of commitments to address the water security and sanitation deficiencies drawing on an informed understanding of the challenges. The recommendations captured in this Regional Report are framed by those declarations.

All of the themes at Istanbul are relevant to Africa's challenges, to a greater or lesser degree. Whatever the many decisions that will be taken in Istanbul, these have to be in ways that help Africa to convert commitments to the reality of change for its citizens. Africa's current capacity to implement is small, and their actions over the coming years need to be focused on delivery. That delivery needs to be focused into areas where the needs of African citizens are greatest. The critical issues captured in this Regional Paper are those that are most affecting progress, and they need to be tackled head-on.

The 'matrix' accompanying this Position Paper brings detail of the African agenda to Istanbul, and is a valuable tracking tool for AMCOW. But the matrix needs to be better developed by the 'who' and the 'how'. It is hoped that dialogues throughout the Forum will support that process. In the weeks after Istanbul, AMCOW will refine the operationalisation matrix by including specific and costed actions arising from Istanbul, for follow-up implementation.

There are three over-riding messages that have emerged from the Regional Process:

1. The principal thrust now must be the delivering to achieve the MDGs and bring change for many millions of people through the instruments that have already been set in place. Improvements to the operational setting for more effective delivery over the coming years must be put in place based on the commitments already made at the highest political level to deliver results.

2. A major expansion of Africa's infrastructure must begin soon, in ways that deliver economic growth. Based on progress so far, Africa can deliver on its commitments if additional support is provided.

3. A major scaling up of finance is required, to US$50 billion per annum over the next twenty years, if the twin aims of accelerating progress on the MDGs and delivering double-digit economic growth are to be met. A notable up-scaling in water resource infrastructure is the most significant change.

5.2 Actions for immediate follow-up

Actions for which immediate follow-up is called for include, but are not be limited to the following:

I. launch during 2009 of the Annual Report on progress to Africa's Heads of State,
II. progress towards the meeting of African Water Ministers and Finance Ministers, together with development partners,
III. progress on the 2008 eThekwini Declaration and AfricaSan Action Plan, notably the schedule to have developed national sanitation and hygiene policies within 12 months of AfricaSan 2008,
IV. Increased commitment to the African Water Facility to scale up its operations in support of major programmes and projects,
V. a short-term African Water Finance Task Force to bring together the finance story, and to monitor impacts of the current financial crisis on investments in African water,
VI. the strengthening of AMCOW's Secretariat to play a stronger co-ordination role in Africa's water and sanitation development,
VII. scaled-up support to Country Sector Reviews, National MDG Investment Plans and National Finance Strategies
VIII. preparations for the 2nd RWSSI International Conference to review achievement and to mobilise resources for 2nd and 3rd phase implementation,
IX. practical steps towards a road-map to accelerating progress in drinking water and sanitation in Africa's fragile states, where the coverage gaps are greatest, under the aegis of AMCOW,
X. an urgent disbursement of implementation funds in small-scale water management in response to the Africa Food Price Crisis,
XI. launching of the pan-African M&E framework,
XII. plans for the Second and Third African Water Weeks as forums for high-level policy dialogue and knowledge dissemination,
XIII. ongoing engagement with the G8 over implementation of the Evian Action Plan,
XIV. practical steps that strengthen the connections between water infrastructure and economic growth,
XV. operational plan for implementing the high level political commitments.

This African position is brought through the Istanbul Forum to the attention of the world, and particularly Africa's traditional and emerging partners. It demonstrates the continent's commitment and urgency to deliver change. Whilst many of these actions will apply to many states - in particular Africa's post-conflict states - several others have been (or are being) addressed successfully at the regional and national levels. Africa looks to the world community for continuing partnership and support – financial, technological, political - as it pursues these actions to reach the Vision aspirations of "An Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment".

ANNEXES
ANNEX 1A

Sharm El Sheikh Commitments for Accelerating Achievement of Water and Sanitation Goals

WE, the Heads of State and Government of the African Union, meeting at the 11th Ordinary Session of our Assembly in Sharm El-Sheikh, Arab Republic of Egypt, from 30 June to 1 July 2008,

Recognizing the importance of water and sanitation for social, economic and environmental development of our countries and Continent;

Reaffirming our commitment to the principles and objectives, stipulated in the Constitutive Act of the African Union aimed at promoting cooperation and integration between our countries in all fields with a view to raising the living standards of our peoples and the wellbeing of future generations;

Recognizing that water is and must remain a key to sustainable development in Africa, and that water supply and sanitation are prerequisites for Africa's human capital development;

Concerned that there is an underutilization and uneven sharing of water resources in Africa, and that remains a growing challenge in the achievement of food and energy securities;

Reaffirming our commitment to the African Water Vision 2025, the Sirte Declaration on Agriculture and Water in Africa; the Declaration on Climate Change in Africa; and the Millennium Development Goal on water supply and sanitation;

Mindful that our Summit is taking place mid way to the 2015 water, sanitation and other MDGs targets and aware that not much progress has been made in Africa compared to the rest of the world to achieve the MDGs target, and that based on current trends, Africa needs to accelerate its efforts;

Welcoming the Declaration by the international community of 2008 as the year of action on the MDGs, and the Declaration by the United Nations of 2008 as the "International Year of Sanitation" which, for Africa, provides an opportunity for accelerating its regional action plans and implementation strategies by adopting concrete decisions at our Heads of State and Government Summit;

Aware of the need to make progress on the challenges of water and sanitation infrastructure financing, water conservation and equitable distribution, closing the sanitation gap, breaking the silence on sanitation and hygiene, adapting to climate change, integrated management of national and transboundary surface and ground water, investing in information, knowledge and monitoring and institutional development as well capacity building;

Aware also of the urgent need to develop our water and sanitation infrastructure and institutions in order to provide sufficient and sustainable quantity and quality for all types of services and provide acceptable level of protection from risks of water related disasters and impact of climate change as key for the transformation and socio-economic development, and for public health in Africa;

Recognizing the progress that the African Ministers' Council on Water (AMCOW) and other institutions and organizations and their development partners have made in the area of water resource management and in the provision of safe drinking water and adequate sanitation to the urban and rural populations of our countries albeit the inadequacies;

Welcoming the Ministerial Declaration and outcomes of the first Africa Water Week convened by AMCOW and hosted by the African Development Bank (AfDB) in Tunis, Tunisia from 26 to 28 March 2008; and further welcoming the eThekwini Declaration on Sanitation and its accompanying actions adopted in South Africa in February 2008, and the Africa-EU Statement on Sanitation of March 2008;

Acknowledging the work done by AMCOW in mobilizing action towards sustainable and integrated water resource management and in providing policy guidance for coordination of water resources management and for water supply and sanitation initiatives as well as the funding mechanisms put in place for these initiatives;

WE COMMIT OURSELVES TO:

(a) **Increase** our efforts to implement our past declarations related to water and sanitation.

(b) **Raise** the profile of sanitation by addressing the gaps in the context of the 2008 eThekwini Ministerial Declaration on sanitation in Africa adopted by AMCOW.

(c) **Address** issues pertaining to agricultural water use for food security as provided for in the Ministerial Declaration and outcomes of the first African Water Week. And particularly;

(d) **Develop** and/or update national water management policies, regulatory frameworks, and programmes, and prepare national strategies and action plans for achieving the MDG targets for water and sanitation over the next seven (7) years;

(e) **Create** conducive environment to enhance the effective engagement of local authorities and the private sector;

(f) **Ensure** the equitable and sustainable use, as well as promote integrated management and development, of national and shared water resources in Africa;

(g) **Build** institutional and human resources capacity at all levels including the decentralized local government level for programme implementation, enhance information and knowledge management as well as strengthen monitoring and evaluation;

(h) **Put in place** adaptation measures to improve the resilience of our countries to the increasing threat of climate change and variability to our water resources and our capacity to meet the water and sanitation targets;

(i) Significantly increase domestic financial resources allocated for implementing national and regional water and sanitation development activities and Call upon Ministers of water and finance to develop appropriate investment plans;

(j) **Develop** local financial instruments and markets for investments in the water and sanitation sectors;

(k) **Mobilize** increased donor and other financing for the water and sanitation initiatives including national projects and Rural Water and Sanitation Initiatives, the African Water Facility; Water for African Cities programme and the NEPAD Infrastructure Project Preparation Facility, as committed in the G8 Initiatives on water and sanitation;

(l) **Promote** effective engagement of African civil society and public participation in water and sanitation activities and programmes;

(m) **Promote** programming that addresses the role and interests of youth and women, given that the burden of poor water and sanitation falls disproportionately on women and children;

(n) **Strengthen** AMCOW as a key regional mechanism, and other regional stakeholders, as relevant, for promoting cooperation on water and sanitation;

(o) **Strengthen** AMCOW's initiative on sustainable management of water resources, to implement its roadmap for the African Groundwater Commission;

(p) **Strengthen** partnership at all levels in our countries and between Regional Economic Communities as well as with the international development agencies and promote public-private partnerships with the view to fast tracking actions towards meeting the MDG on water and sanitation in our continent;

(q) **Request** AMCOW to annually report on progress made in the implementation of our commitment on water and sanitation with support from regional partners, and to submit these reports for our consideration;

(r) **Call on** African Ministers in charge of water and finance in collaboration with the African Development Bank and development partners, to hold a meeting of Ministers of Water and Finance to develop appropriate financing policies;

(s) **Request** the Regional Economic Communities and the Rivers and Lake Basin Organizations to initiate regional dialogues on climate change and its impacts on the water sector with the aim of designing appropriate adaptation measures;

(t) **Call upon** the G8 to reaffirm at its next Summit in Japan its commitment to fully implement the G8 initiatives on water in Africa, notably the 2003 Evian Plan on Water, to step up their engagement in the sanitation sector and to enter into a strengthened partnership with the AU Member States, through AMCOW, for achieving the Water and Sanitation MDGs.

Done in Sharm El-Sheikh on 1 July, 2008

ANNEX 1B

The eThekwini Declaration and AfricaSan Action Plan

We, the Ministers and Heads of Delegations responsible for sanitation and hygiene from 32 African countries, together with senior civil servants, local government officials, professionals from sector institutions, academia, civil society, development partners, and the private sector under the auspices of the African Ministers' Council on Water and Sanitation (AMCOW), and the other co-hosts of AfricaSan at the Second African Conference on Hygiene and Sanitation in Durban, South Africa, February 18–20, 2008:

- Recognizing that approximately 589 million people, more than 60% of Africa's population currently do not have access to safe sanitation;
- Mindful that an estimated 1 million Africans die every year from sanitation, hygiene and drinking water-related diseases, and that improving sanitation reduces disease burden and improves household and national economic development;
- Welcoming the International Year of Sanitation, 2008 which seeks to boost the importance of sanitation and draw attention to the fact that sanitation is critical to economic development and poverty reduction;
- Noting that the associated human, social, health, environmental and infrastructural costs of inadequate sanitation are a major economic burden on African economies;
- that an investment in sanitation positively impacts related development targets;
- Recognizing that sustainable access to sanitation is one of the Millennium Development Goal targets, and that many Governments have set their own goals for both sanitation and hygiene;
- Recognizing that AMCOW has committed itself to lead Africa towards achievement of the water and sanitation MDGs;

Do hereby pledge ourselves to the following "eThekwini commitments on sanitation":

1. To **bring the messages, outcomes and commitments made at AfricaSan 2008 to the attention of the African Union** at its 2008 Heads of State and Government Summit to raise the profile of sanitation and hygiene on the continent;
2. To **support the leadership of AMCOW** to track the implementation of the eThekwini Declaration and prepare a detailed report on progress in mid 2010, when AMCOW will provisionally host a follow up AfricaSan event;
3. To **establish, review, update and adopt national sanitation and hygiene policies** within 12 months of AfricaSan 2008; **establish one national plan** for accelerating progress to meet national sanitation goals and the MDGs by 2015, and take the necessary steps to ensure national sanitation programs are on track to meet these goals;
4. To increase the profile of sanitation and hygiene in Poverty Reduction Strategy Papers and other relevant strategy related processes;
5. To ensure that one, principal, accountable institution takes clear leadership of the national sanitation portfolio; establish one coordinating body with specific responsibility for sanitation and hygiene, involving all stakeholders, including but not limited to those responsible for finance, health, water, education, gender, and local government;
6. To establish specific public sector budget allocations for sanitation and hygiene programs. Our aspiration is that these allocations should be a minimum of 0.5% of GDP for sanitation and hygiene;
7. To use effective and sustainable approaches, such as household and community led initiatives, marketing for behaviour change, educational programs, and caring for the environment, which make a specific impact upon the poor, women, children, youth and the unserved;
8. To develop and implement sanitation information, monitoring systems and tools to track progress at local and national levels and to work with global and regional bodies to produce a regular regional report on Africa's sanitation status, the first of which to be published by mid-2010;
9. To recognize the gender and youth aspects of sanitation and hygiene, and involve women in all decision making levels so that policy, strategy and practice reflect gender sensitive approaches to sanitation and hygiene;
10. To build and strengthen capacity for sanitation and hygiene implementation, including research and development, and support knowledge exchange and partnership development;
11. To give special attention to countries or areas which are emerging from conflict or natural disasters;

We further call on:

1. Development banks, external support agencies and the private sector to increase their support to our efforts provide financial and technical assistance for sanitation and hygiene promotion and improve aid co-ordination in Africa.
2. The African Union to support AfricaSan 2008 and its follow up process, to recognize this Declaration and to provide leadership as well as practical support in operationalizing these commitments;
3. Regional and national actors to make use of the opportunities provided by the UN International Year of Sanitation 2008 to scale up efforts in sanitation and hygiene.

ANNEX 1C

Tunis Ministerial Declaration on Accelerating Water Security for Africa's Socio-Economic Development

PART I: Water, A Key to Sustainable Development in Africa: Our Efforts and Achievements

1. We, the ministers responsible for water in Africa and present at the First African Water Week, are convinced that ensuring water security through the equitable and sustainable management of water is and must remain the top development challenge for the foreseeable future for our continent. For Africa, it is imperative that we achieve by 2015 the Millennium Development Goals on water and sanitation and the other crucial and water-dependent goals on reducing poverty, hunger, child mortality, maternal mortality, and major diseases. The African Water Vision 2025 continues to provide a basis for our actions.

2. Over the last five years, our African Heads of State and Government have demonstrated great political commitment and leadership, which have made it possible for Africa's water crisis and policy challenges to be brought from the margins to the centre-stage of the regional development agenda. We recall that the Pan-African Implementation and Partnership Conference (Dec. 2003) was followed shortly after by the AU Heads of State and Government adopting the Sirte Declaration in January 2004, on the integration of AMCOW' into the AU structures as a Specialized Technical Committee. At its summit in February 2008, the African Heads of State and Government decided that its July 2008 Summit should be devoted to Water and Sanitation.

3. At the sixth session of our Ministers Council on Water, AMCOW considered how best to accelerate action on the MDGs and targets on Water and Sanitation. We recognise that progress has been made but a lot needs to be done. We have also taken a number of enabling measures which include:

(a) Adopting a comprehensive work programme to support actions for meeting the MDG targets on water and sanitation, establishing the AMCOW Trust Fund to facilitate the financing of MDG-related actions, the establishment of African Water Facility and launching of the Rural Water Supply & Sanitation Initiative;
(b) Strengthening collaboration with civil society by formalizing relations with the African Civil Society Network on Water and Sanitation (ANEW);
(c) Strengthening collaboration with African River and Lake Basin Organizations (ANBO);

We have also forged close collaboration with the G-8, whose summits over the last five years have adopted initiatives on water for Africa. We are cooperating with the European Union to implement the EU Water Initiative for Africa;

4. We have made some progress in moving sanitation from the margins to the centre stage of our continental development agenda through the support of a number of international partners dealing with sanitation. This has enabled us to make a comprehensive assessment of the challenges with regard to the sanitation target. We have therefore recently adopted eThekwini (Durban) Declaration on Sanitation in February 2008. We also welcome the African EU statement on Sanitation which commits the International Community to support our effort on Sanitation in Africa

5. We instituted the African Water Week series to discuss opportunities and challenges of achieving water security for Africa's socio-economic development in furtherance of AMCOW's mission.

6. We have at the first African Water Week deliberated on the following key themes: infrastructure platform for achieving water security; meeting the water and sanitation MDGs; financing infrastructure for water security; climate change and adaptation; addressing the environmental and social challenges and the institutional development and capacity building.

Tunis Ministerial Declaration on Accelerating Water Security for Africa's Socio-Economic Development

PART II: Partnership for Regional and National Actions to Accelerate Water Security for Africa's Socio-Economic Development

7. Our Heads of State and Government join global leaders in reaffirming international commitments to the Global Partnership for Development set out in the Millennium Declaration, the Monterrey Consensus and the Johannesburg Plan of Implementation.

8. We highly appreciate the international support and solidarity extended to AMCOW and Africa for addressing the water and sanitation challenges. In order to meet the special needs of Africa, we call upon our governments, national and regional organisations, the international community, and development partners, to extend concrete, substantial and tangible support to the following quick impact actions:

a. Infrastructure platform for achieving water security

(a) mobilise investments to attain the necessary water infrastructure platform , in order to overcome poverty and achieve needed economic growth and social well-being;
(b) facilitate trans-boundary infrastructure development.
(c) develop national plans and strategies for achieving water security
(d) strengthen the information and knowledge base and monitoring capacity

b. Meeting the Water and Sanitation MDGs

(a) make best use of existing resources, and mobilizing financial and technical resources, from the public and private sectors, and users, for water and sanitation infrastructure as well as for building institutional, technical and managerial capacity at all levels;
(b) prioritize and increase water and sanitation expenditures in national budgets;
(c) increase, systematically, resources allocated to local governments for the implementation of water and sanitation projects;
(d) develop appropriate monitoring and evaluation mechanisms for water supply and sanitation at local, basin, national and regional levels;
(e) present development partners an "MDG Water and Sanitation Investment Plan for Africa" to reach the MDGs including the identification of the financial resources to be mobilised and gap expected of all development partners for endorsement by the G8 and MDG Summit;
(f) request the AfDB and the Water and Sanitation Programme (Africa) to continue to undertake Country Sector Reviews, within the context of the Pan African mechanism, to update AMCOW on progress and bottlenecks in achieving the MDG targets;
(g) establish peer review processes for monitoring water and sanitation performance for Members who ascribe to the idea.

c. Financing Infrastructure for Water Security Objectives

(a) place the development benefits of water use and sanitation infrastructure at the core of our finance strategies;
(b) strengthen the case for water use and sanitation infrastructure in National Development Plans and Public Expenditure, and directing an increasing proportion of multilateral finance into infrastructure;
(c) ensure the necessary African ownership, public control and legal frameworks to protect the public interests, particularly those of the poor and the vulnerable;
(d) deepen our regional partnerships over water use infrastructure, co-operating over shared water resources, and looking for opportunities to invest in infrastructure of regional importance;
(e) match our reporting on finance with the economic and social impacts that have been delivered.

d. Climate change and adaptation

(a) put in place adaptation measures to ensure sustainable water security for the social, economic and environmental needs;
(b) promote co-operation in the development of effective early warning systems for water-related disaster prevention and mitigation to reduce the negative impacts of climate change on economic development, food security and poverty eradication efforts;
(c) encourage water use efficiency through appropriate measures such as demand management, reuse and other technological options to optimize on limited water availability.

e. Agricultural Water Use

(a) Re-engage in agricultural water use in Africa, including irrigation, drainage and rainwater harvesting.
(b) support NEPAD in the implementation of a new Initiative for Agricultural Water in Africa (AgWA) that responds to pillar I of NEPAD's Comprehensive Africa Agricultural Development Program (CAADP)
(c) scale up investments to ensure a more reliable, broad based and sustained flow of funds, as well as supporting sectoral strategies and policies in the field of agricultural water.

f. Groundwater use

(a) harness local groundwater resources to improve livelihoods and managing risks associated with climate change;
(b) institutionalise dialogue on groundwater management in Africa and implementing the Roadmap for the African Groundwater Commission.

g. Rainwater harvesting and Reuse

(a) Support the water harvesting strategies to complement implementation of the water related MDGs and for climate change adaptation in Africa
(b) Support development and implementation of water reuse as part of water conservation strategy

h. Addressing the Environmental and Social Challenges

(a) balance social, environmental and economic components of water infrastructure development;
(b) operationalize IWRM principles of optimizing water resources development for economic, social and environmental needs;

i. Capacity building and institutional development

(a) build institutional and human resources capacity at all levels for all actors in the water and sanitation sector
(b) support the empowerment local government and build their capacity to implement decentralised programme implementation and management.

9. We appeal to the international community to meet their commitments to increase investment for water resources development.

PART III: Key Messages and Suggested Decisions to the African Union Summit

10. We humbly request the AU Heads of State and Government to:
(a) finalise the status of AMCOW as a Specialised Technical Committee of the Union
(b) make the African Water Facility and the Rural Water Supply and Sanitation Initiative constant agenda items in their deliberations and dialogue with international partners
(c) encourage member countries to urgently develop climate change adaptation strategies and mainstream in this in their water resources development
(d) endorse the eThekwini Declaration on Sanitation and its accompanying actions
(e) provide political support for the continued implementation of the Sirte Declaration on Agriculture and Water;
(f) prioritize and increase the allocation of resources, through national plans, to water and sanitation in national budgets;
(g) strengthen co-operation among riparian states for the mutual benefit of the parties.

PART IV: Key Messages to the G8 Summit 2008 in Japan

11. We recall that at its recent Summits, the G8 had adopted a number of initiatives on Africa's water situation and invite the G8 2008 Summit in Japan to:

(a) implement the respective G8 initiatives on water for Africa, notably the 2003 Evian Plan on Water, the G8-UK Initiative on Water (2006), the German G8 Initiative on Trans-boundary Waters (2007), the Kananaskis Action Plan;

(b) support the implementation of the Durban Declaration on Sanitation as well as the key outcomes of the First African Water Week in pursuit of the MDGs and socio-economic development of Africa;

(c) implementing measures for addressing the special needs of Africa on adaptation to climate change in view of the threats to Africa's water security;

(d) honour their commitments and assist in mobilising substantial resources for the African Water Facility

PART V: Other Matters
Second African Water Week 2009/2010

12. We reiterate our gratitude to the government of Kenya, UNEP, UN-HABITAT and UNESCO for having accepted to host the Second African Water Week 2009/10 which will take place in Nairobi Kenya.

Endorsement of Tunis Outcomes

13. We endorse the attached Tunis outcomes, conclusions and recommendations.

Appreciation

We extend our gratitude to the Government of the Republic of Tunisia for hosting the First African Water Week

We extend our profound appreciation to President Donald Kaberuka and Management of the African Development Bank for the firm commitment towards addressing Africa's critical water challenges and for continuous and substantial support to AMCOW. We highly appreciate the Bank's achievement in hosting and organising successfully the First Africa Water Week

We highly appreciate the solid support being given to AMCOW by the UN entities, particularly the United Nations Secretary General's Advisory Board on Water and its Chair, H.R.H Prince Willem-Alexander, Prince of Orange, and UN Water Africa;

- We applaud the support and contribution of our Development Co-operation Partners;
- We have benefited greatly from the continued co-operation with civil society groups and various international and regional water partnerships.

Tunis 28 March 2008

ANNEX 1D

Declaration of the Ministerial Conference on Water for Agriculture and Energy in Africa: The Challenges of Climate Change

WE, the Ministers and Heads of the African States Delegations, meeting at the Conference on "Water for Agriculture and Energy in Africa: the Challenges of Climate Change" in Sirte, Great Socialist People's Libyan Arab Jamahiriya, from 15 to 17 December 2008;

Inspired by the Leader of the Great Revolution's vision for a strong Africa capable of facing global challenges in a world of great aggregation;

Reaffirming our commitment to the principles and objectives stipulated in the Constitutive Act of the African Union and its programme NEPAD, aimed at promoting cooperation and integration between our countries in all fields with a view to raising the living standards of our peoples and guarantee the well being of our future generations;

Reaffirming our commitment to the African Water Vision 2025 and to the achievement of the Millennium Development Goals, specifically those related to water and to the eradication of poverty and hunger;

Recalling the commitment of Heads of State and government contained in the Maputo declaration of 2003 on Agriculture and Food Security in Africa, and in the Sirte declaration of 2004 on the challenges of implementing integrated and sustainable development on agriculture and water in Africa;

Recalling the African Union Declaration on Climate Change and Development in Africa of 2007;

Recalling the 2008 Ministerial Declaration and outcomes of the first Africa Water Week convened by the African Ministerial Council on Water (AMCOW) and hosted by the African Development Bank in Tunis;

Recalling the Paris Declaration of 2005 on International Aids;

Recalling the 2008 Declaration of the "High-Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy";

Recalling the 2008 11th African Union Summit on "Meeting the Millennium Development Goals on Water and Sanitation";

Recalling the African Development Bank's initiative to increase water storage in Africa by 1% over a six-year period in addition to reducing post-harvesting losses by 3% over the same period;

Recognizing that water is, and will remain, a key resource to economic, social and environmental development as well as to hunger and poverty eradication of Africa, and that water, sanitation and energy are prerequisites for the development of Africa's human capital;

Recognizing the vulnerability of African economies and agricultural production systems to climate variability and climate change, and the challenges caused by enviromental degradation;

Recognizing that the challenges faced by the continent concerning food security, achieving MDGs, increased energy demand, and combating climate change impact is greater than resources available to each individual country, and therefore require that the countries move jointly at sub-regional, regional and continental level;

Recognizing the important role played by family farms in agricultural production and natural resources management;

Concerned by the progressive decline of the continent's agricultural productivity, increased negative impact of food import on commercial trade balance, vulnerability to food price shocks and low response capacities;

Concerned by the level of food insecurity and the implications of high and volatile food prices on the situation of the poor in Africa;

Concerned by the low level of the use of water and land potential in Africa;

Concerned by the current situation in Lake Chad, the resulting negative implications, and urgent need to intervene in order to avert human and environmental disaster;

Aware that the African agriculture has been under-funded for several decades and that water control projects for agriculture and energy

have not been sufficiently developed;

Aware that accelerated investments in support to agricultural water development are needed to ensure agricultural growth, hunger and poverty eradication, foster socio-economic development, and increase employment;

Aware that enhanced agricultural productivity depends not only on improved water management, both in rainfed and irrigated agriculture, but also on the access and optimum use of other farm inputs, availability of services, access to markets and fair and stable prices for farm products;

Noting the progress made by the African Union and by establishment of its programme NEPAD, the on-going process of Africa's economic integration and the need for building mechanisms of cooperation and partnership in the agriculture and energy sectors in the struggle to free the Continent from the scourge of under-development and continued marginalization in a global world economy;

Acknowledging the continuous support of the regional and international partners to the water, agriculture and energy sectors in Africa, and urging development partners to engage further in supporting agricultural water development in Africa;

Recognising that further efforts need to be made to develop an enabling environment conducive to accelerated investments in the water sector;

Welcoming the proposal by FAO to convene a World Summit of Heads of State and Government on Food Security in 2009, with the objective to secure broad consensus on the rapid and definitive eradication of hunger from the planet by ensuring greater coherence in the governance of world food security and by finding USD 30 billion per year to invest in water and rural infrastructures and increase agricultural productivity in the developing world;

Determined to prioritize implementation of integrated water, agriculture and energy programmes to enhance sustainable development in Africa;

WE COMMIT OURSELVES TO:

1. **Adopt** sound policies and associated institutional reforms in support to water development at the national, sub-regional, regional and continental levels in order to fully exploit the potentialities of both the agriculture and energy sectors;
2. **Support** NEPAD in accelerating the implementation of pillar I of its Comprehensive Africa Agricultural Development Program (CAADP) and carry out the new Agriculture Water Partnership (Agwa) to expedite the attainment of CAADP objectives toward the expansion of the area under sustainable land management and reliable water control
3. **Call upon** states to accelerate the fulfilment of the commitments made in Maputo in 2003 on the allocation of 10% of our national budgets to boost agricultural production;
4. **Adop**t a comprehensive policy towards enhanced agricultural productivity that takes into account water, farm inputs, technical capacity, tenure, markets and a fair and conducive institutional environment in support to small farmers;
5. **Call upon** AMCOW to promote an integrated water resource management approach in the preparation of water resources policies and plans;
6. **Adopt** a pragmatic, demand-driven, participatory approach and stepwise framework for investment in water development in support to agriculture and energy which considers appropriate water control, improvement of existing water infrastructure and the development of large river basins;
7. **Sensitize** donors and development partners to support Africa in sustainable water development and management in agriculture and energy;
8. **Invite** development partners and institutions, like FAO, the African Development Bank, the Islamic Development Bank and others, to strengthen countries capacity in project development in order to accelerate investment in water for agriculture and energy;
9. **Call-on** the African Development Bank, Islamic Development Bank and the World Bank as well as the regional development banks in ensuring the financing of, inter alia, development projects in the field of water for agriculture and energy;
10. **Request** AMCOW, with the support of UN-Water Africa, to develop clear guidelines on the implementation on inter-basin water projects;
11. **Support** the Economic Commission for Africa and the African Regional Economic Organizations in their effort to enhance clean energy production in the continent, particularly in promoting the exploitation of the hydropower potential and in strengthening regional Power Pools;
12. **Encourage** bilateral and regional agreements on shared water resources and strengthen existing river and lake water basins organizations to promote sustainable water resources development and management in accordance with international law, including the agreements concluded among riparian States;

13. **Encourage** accelerated integration of the continent's power network, the development of water falls to provide electric power, and of small hydropower generation to speed up rural electrification;
14. **Develop** coherent policy framework for public-private partnerships that will attract increased private capital into agriculture, water and energy sectors;
15. **Call upon** the African Regional Economic Communities to develop and strengthen appropriate regional instruments on integrated water resources management and promote the strengthening of regional Centres of Excellence and networks for agriculture, hydropower generation, water management, climate change, desertification, drought, floods and environmental management;
16. **Establish,** with the support of FAO, an information system in the field of agricultural production for food security and the trading of commodities between markets and countries;
17. **Undertake** necessary national and regional capacity development efforts as an integral component of each national investment plan which should focus on the optimization of water resources use in support to enhanced food and energy security and poverty alleviation while underpinning the need to protect the environment;
18. **Create** high level executive bodies to address the integration of resources at the national and regional levels in Africa;
19. **Foster** and strengthen cooperation between National Meteorological and Hydrological Services, Regional Climate Centres, Regional Economic Organizations, the African Center of Meteorological Applications for Development, research centers and other institutions on matters of climate variability and climate change to develop aid decision tools;
20. **Enhance** Early Warning Systems at national and regional level and their establishment where they do not exist as well as their coordination at continental level in order to minimize the negative impact of drought, desertification, floods and pests;
21. **Foster** research and development in renewable energy and agriculture in Africa to increase resilience and adaptation to climate change;
22. **Harmonize** climate change adaptation strategies, national and regional development policies, programmes and activities, with the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification;
23. **Call upon** the Lake Chad Basin Committee member states to double their efforts and appeal to donors and development partners to provide immediate assistance toward saving Lake Chad and its basin from the looming human and environmental disaster;
24. **Call upon** the AU Commision to design a road map and a mechanism to monitor and evaluate the implementation of this declaration, in close collaboration with FAO, the African Development Bank, the Economic Commission for Africa, NEPAD and the Libyan Arab Jamahiriya.

December 2008

ANNEX 2A

Message from Lusaka

The Southern Africa Stakeholders Consultation Meeting towards Africa's participation at the 5th World Water Forum was held at the COMESA Conference Centre, Lusaka, Zambia on 10 - 13 December 2008. The Stakeholders Consultations were held back-to-back with the AU (SARO)-ECA (SRO-SA)-AfDB Seminar on "Water and Sanitation in Southern Africa Development Community (SADC): Innovative Approaches for Resource Mobilization and Policy Implementation". The event brought together sixty one delegates and participants from the water and sanitation sector in SADC, including representatives from Government departments responsible for water supply and sanitation in the fifteen SADC countries, the private sector, civil society and community based organizations, media representatives, representatives of inter-governmental organizations including SADC, the African Union Commission and the UN organizations.

Delegates at the seminar took note of the following situation of the region with respect to water and sanitation:

- Only 40% of the fifteen SADC countries are on track to meet the MDG target on water supply;
- 13% of the SADC countries are on track to meet the MDG target on sanitation;
- 33% of the SADC countries are not likely to meet any of the twin targets on improved water supply sources and safe sanitation;
- The participants took note of the SADC Regional Programme on Water Supply and Sanitation which outlines the measures for the attainment of the MDG targets on water and sanitation in Southern Africa.

In view of the foregoing, the following recommendations were adopted at the conclusion of the deliberations:

1. Financial assistance from the G8 countries is needed in the SADC Member States as well as the alignment of resources with existing gaps in national budget processes. Funding water and sanitation should receive higher priority because of the potential impact it has on food production, improved health and the attainment of other MDGs.
2. SADC Member States should place greater emphasis on sanitation by establishing water supply and sanitation departments where they do not exist and direct substantial resources to capacity building at all levels and infrastructure development.
3. There is need for Peer Learning and experience sharing on water and sanitation management among member countries and need to promote water and sanitation and hygiene (WASH) programmes in schools.
4. There is need for creation of a database for credible regional and national water and sanitation data in SADC and national situation analysis and reality checks to stimulate better planning, resources mobilization and to recommit efforts towards the achievement of the MDG targets.
5. There is need to promote water and sanitation as a basic human right to all citizens, and to ensure the sustainability of water and sanitation services delivery through mandatory budgetary allocations and innovative funding mechanisms
6. The strategic importance of water and sanitation as a development resource need to be recognized and adequate resources allocated to the management of this important resource.
7. Preparedness, information sharing skills and action plans on adaptation to climate change need to be promoted.
8. Put in place legislation and harmonize policies to enhance the smooth implementation of water and sanitation programmes.
9. Methodologies for more effective community participation and indigenous private sector participation and development need to be promoted
10. Promote partnerships for the mobilization of resources with commitment and accountability for actions among all stakeholders to accelerate the implementation of the Sharm El-Sheikh Declaration, the achievement of the MDGs on Water and Sanitation and the African Water Vision 2025.

Lusaka 13 December 2008

ANNEX 2B

Message from Accra

Fifty regional water and sanitation actors from East, Central, North and West Africa met in Accra from 12 – 14th January 2009 to provide input into the regional preparations towards Africa's participation in the 5th World Water Forum. The wide representation included public water-related agencies, regional economic commissions and water basin authorities, civil society and academia. After 3 days of useful interaction, and providing input into the Regional Paper, participants prepared the following message for AMCOW and the global water community that will assemble in Istanbul:

We participants in the Accra Regional Consultation for Stakeholder Input into Africa Regional Paper for the 5th World Water Forum:

- Aware that access to water and sanitation is a right for the people of Africa;
- Recognizing that putting into immediate action the provisions of the Africa Water Vision 2025 is a basic requirement for minimizing Africa's water crisis and for achieving water security towards socio-economic development;
- Recognizing that various political commitments made by the Heads of State and Ministers responsible for water resources need to be urgently translated into action in order to achieve the water and sanitation-related MDGs and also ensure sustainable management of water resources in Africa;
- Aware of initiatives and tools that have been developed, such as the African Water Facility and AMCOW, to accelerate the achievement of the goals of the Africa Water Vision 2025;
- Aware that the 5th World Water Forum provides a platform and an opportunity for Africa to present its concerns, challenges and plans on achieving water security to the attention of the world, especially to our partners and other interested stakeholders;

Recommend that for the continent to make progress with respect to the above, action need to be taken on the following:

(a) All efforts should be made to achieve the water and sanitation MDGs using among others partnership of public, private and donor institutions and advocacy to encourage our governments to give this issue the highest priority;

(b) Urgent attention is required to accurately predict the actual impacts of climate change and variation, which will serve as a basis to determine and strengthen sustainable adaptation strategies and early warning systems, including local actions

(c) New initiatives are urgently required to supplement ongoing efforts to bridge the financial gap in order to provide the relevant water and sanitation infrastructure and facilities in order to achieve the MDGs and respond to future requirements;

(d) To ensure sustainable management of Africa's transboundary waters, sub-regional economic institutions and other relevant bodies should implement action plans, to accelerate and expand the coverage of institutional arrangements for managing transboundary surface and ground waters in Africa;

(e) Capacity building at all levels should be accelerated to support the efficient and effective use of resources and generation of knowledge to provide solutions to the water problems of Africa;

(f) Urgent attention should be paid to the expansion and strengthening of monitoring and evaluation systems and processes to accurately assess performance related to achieving the water and sanitation MDGs and other targets based on the Africa Water Vision 2025;

We participants in the Regional Consultation for Stakeholder Input into Africa Regional Paper:

- Noting that in order for Africa to successfully participate in the WWF 5 and for AMCOW to effectively lead in the implementation of actions beyond the Forum, on the basis of the Africa Water Vision 2025;

Call on the Chairman of AMCOW to:

(a) Forward the report of the WWF 5 to all Ministers responsible for water resources in Africa requesting them to also inform their respective Council of Ministers/Cabinets as a way of soliciting and ensuring political support and commitment;

(b) As a matter of urgency, finalise the establishment of the AMCOW Secretariat as soon as possible.

Accra, 14 January 2009

ANNEX 3
Short Term Regional Actions to Operationalise Commitments[12]

ANNEX 3: Short Term Regional Actions to Operationalise Commitments

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
0 : Commitment to Action by political leadership				
0.1 Increase our efforts to implement our past declarations related to water and sanitation	- Identify outstanding past declarations related to water and sanitation and facilitate their implementation	AMCOW, national governments		
	Increase resources allocated for the implementation of water and sanitation projects			
	- Set up appropriate institutional structures at the appropriate level. - Translate political declaration into action plans with timelines - Identification and mobilisation of required resources	The Responsible Ministry	Human Financial	Declarations on Water and sanitation implemented Number of countries that have implemented the declarations.
0.2 Strengthen AMCOW as a key regional mechanism, and other regional stakeholders, as relevant, for promoting cooperation on water and sanitation	- Formalize the status of AMCOW as a Specialised Technical Committee of the African Union - Provide technical and financial support, to regional institutions dealing with water and sanitation.	African Union, national governments		
	- AMCOW secretariat and sub regional nodes should be fully operationalise with adequate resource allocation - Secretariat should facilitate the signing of the MOU by governments	AMCOW Secretariat	Funds	AMCOW fully operational Sub –regional co operations strengthened Member states making annual contributions
0.3 Call on African Ministers in charge of water and finance in collaboration with the ADB and development partners, to hold a meeting of to develop appropriate financing policies;	Organize meetings of African Ministers in charge of water and finance and development partners, to develop appropriate financing policies	AU, AMCOW, UNECA, development partners		
0.4 Call upon the G8 to reaffirm its commitment to fully implement the G8 initiatives on water in Africa, notably the 2003 Evian Plan on Water	- Appeal to partners to fulfil their commitment to International Agreements on Financial support. - Expansion of the G8 to include Africa representatives to participate in discussions and decisions at the G8 Fora. - Strengthening the use of existing mechanisms for donor pledges to be fulfilled.	National Partnership responsibility as a Regional Bloc.	Eminent African Personalities	Significant Increase of support from G8 countries. (Additional resources)
1 Global changes and risk management: Climate variability and Change				
1.1 Put in place adaptation measures to	- Ensure that an adequate assessment of water resources / risks / adaptation measures are	UNFCCC, World Bank,		

[13] This matrix is work-in-progress and will be refined in the weeks after Istanbul. It will serve as a useful tool to track the actions being taken by countries and regional bodies in delivering on the commitments. The full matrix shall capture actions in the short (up to 2010), medium (up to 2015) to long term (up to 2025).

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
improve the resilience of our countries to the increasing threat of climate change and variability to our water resources and our capacity to meet the water and sanitation targets;	duly included in NAPAs Carry out water resources assessment in the countries	Global Environmental facility, WMO, UNESCO		
	- Put in place mechanisms for efficient water use and water recycling - Use Drought Monitoring Centres to inform farmers with respect to onset of rainy season. - Provide seasonal to inter-annual climate forecasts, products and early warning advisories	National governments, UN agencies including WMO		
	Establish multi- stakeholder forum to regularly discuss climate change adaptation at local, national and regional levels	Member States, RECs, and DPs	Human Financial and TA	
	Water sector should collaborate with agencies responsible for climate change in various countries and incorporate climate change issues into our plans	Sector ministry responsible for water		
	- An audit to be made to put in place mitigation measures. - Strengthen or put in place early warning systems - Legal framework. Policies and laws on climate change at national level. - Review policies to integrate potential climate change impacts National Governments to climate proof infrastructure for development	National Governments and partners	Human resources, appropriate technologies, funding,	Africa policy on climate change accepted by AMCOW. National Government Policies ratified by ministers. Ministry of Finance facilitate a budget on climate change.
1.2 Request the Regional Economic Communities and the Rivers and Lake Basin Organizations to initiate regional dialogues on climate change and its impacts on the water sector with the aim of designing appropriate adaptation measures;	- SADC, ECOWAS, IGAD, UMA, ECCAS to organize regional conferences on climate change and variability impacts and adaptation measures - River and Lake Basin Organizations to organize workshops on climate change and its impacts on water resources and adaptation strategies	Regional Economic Communities, RBOs, with assistance from WMO, UNESCO, UNEP, World bank		
1.3 Promote co-operation in the development of effective early warning systems for water-related disaster prevention and mitigation	- Undertake or improve data collection and analysis through regional research and monitoring projects and partnerships - Undertake or improve information dissemination activities - Pilot new risk mitigation instruments (e.g. weather micro-insurance) - Undertake data and information exchange and sharing	National Governments, UN agencies including WMO		
1.4 Encourage water use efficiency through appropriate measures such as demand management, reuse and other technological options to optimize on limited water availability	- Carry out studies on water use efficiency and reuse	National Governments with support from Partners		
	- Development IWRM and water use efficiency plans at country levels - Exchange experiences and best practices	The Water Ministry		
2 Infrastructure Platform for achieving water security				
2.1 Give greater attention to investments in water infrastructure	- Undertake a regional diagnostic study and analysis to understand and quantify contribution to poverty reduction and socio-economic development	AWF to initiate and implement the study for completion by 2010.		

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
	- Develop a Regional Strategic Water Infrastructure Programme (RSWIP) and package into Bankability	RECs, with participating member state, and Development Partners	Financial resources for project development and implementation.	well packaged portfolio of Projects ready for implementation, Guidelines for financing the projects in the Programme and other tools
	- Development of water sector investment plans Advocate increased investment at national and international levels	The Water ministry		
2.2 Facilitate trans-boundary infrastructure development;	- Facilitate and pilot establishment and Strengthening of RBOs. -	RECs, with support from AMCOW and DPs	Financial and Technical assistance support	Well implemented Transboundary Water Infrastructure Projects and strong River basin institutions.
	- Existing river basin organizations (RBOs) to prepare long term infrastructure development programme and facilitate establishment of RBOs where they don't exist.	NEPAD (support RBOs to initiate and seek support). AWF (funding) UN agencies, including WMO (TA)		
2.3 Deepen our regional partnerships over water use infrastructure, co-operating over shared water resources, and looking for opportunities to invest in infrastructure of regional importance;	Organise donors conference to solicit support to water programmes and Projects.			
	Institute a comprehensive partnership coordination system at national and regional level	AMCOW		
2.4 Develop national plans for achieving water security	Countries to revise or prepare new strategies and plans for achieving water security	National Government / External support agencies		
2.5 Balance social, environmental and economic components of water infrastructure development	- Undertake an assessment of the impacts of dams and large reservoirs on the environment Integrate the costs of social and environmental mitigation measures and plans into water projects	National Governments		
	- Review existing policies for the various sectors Harmonise delivery approaches at various levels	The Water ministry		
2.6 Adopt a pragmatic, demand-driven, participatory approach and stepwise framework for investment in water development in support to agriculture and energy which considers appropriate water control, improvement of existing water infrastructure and the development of large river basins;	1.4.1 Initiate and implement national information and monitoring systems and mechanisms development programme for all countries.	AWF to enhance current effort to cover all countries. WMO to expand WHYCOS to cover more transboundary basins.		
	- Review national policy and strategy to incorporate appropriate framework for investment in agriculture and energy. (ST to MT) Empowering local communities to effectively participate in these activities (ST to MT)	The Water ministry		Revised national policy for investment Empowered local communities
3 : Advancing human development and MDGs				
3.1 Develop and/or update national	Prepare or update national water management policies, strategies and action plans for	National Governments		

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
water management policies, regulatory frameworks, and programmes, and prepare national strategies and action plans for achieving the MDG targets	achieving the MDG targets for water and sanitation			
3.2 Make best use of existing resources, and mobilize financial and technical resources, from the public and private sectors, and users, for WSS infrastructure as well as for building institutional, technical and managerial capacity at all levels; 3.3 Prioritize and increase WSS expenditures in national budgets	- Develop Country Sector Investment Plans – incorporating requirements, sources (public, private, users, NGOs) uses and financial sustainability	National Governments, in collaboration with donors, the private sector and NGOs.		
	Create incentives and create enabling environment for private sector participation,(ST)	- AMCOW - The Water Ministry - The Water Ministry		Consultations taking place Advocacy strategy in place Framework for PSP in place
	- Develop common standards and definitions for WS & S (urban, peri-urban and rural) - Conduct an inventory of water and sanitation services and infrastructure available in the member states - Conduct Regular Public Expenditure Review of the WSS sector - Establish yearly Joint Sector Review	National governments with support from RECs Local Governments, national governments		Harmonised regional standards for WSS Updated inventory of status and the gaps in WSS. MDG implementation plan developed. Increased funding in WSS
	- Increase budgetary actions for WSS Prioritise WSS in National Poverty Reduction Strategy papers and link with Medium Term Expenditure Framework	National Governments, AfDB, other ESAs		
	- Carry out water audits and implement WDM measures to reduce water loses - Set minimum budgetary limits from the national fiscus.	Local Governments, national governments, MoFinance/Econ., (MoW, MoH)/Local Govt National govt, SADC		Improved WSS system efficiency. Increased budget for WSS Increased PS participation Revised WSS policy Financing instruments
3.4 Increase, systematically, resources allocated to local governments for the implementation of WSS projects;	- Build capacity at the local Government level for WSS activities - Decentralize WSS activities to the local government level Provide WSS financing to local governments for implementing WSS	National Governments, with support from AfDB and ESAs		
	- Review water allocation and tariff systems for cost recovery and take water as a factor of production - Develop systems for water debt recovery Create an enabling environment for PS participation targeting also small water operators.	National govt (WSS Regulator) National govt??? National govt???		Tariff structure Debt recovery mechanisms Framework for PS participation.

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
	- Responsible Local Authority should develop a Water and sanitation plan. (ST). - Use plan as an advocacy tool to source for increased resources from central government. (ST –MT)	Local Authorities	Funds Advocacy	Plans Systematic increased resource allocation to local government
3.5 Develop appropriate monitoring and evaluation mechanisms for water supply and sanitation at local, basin, national and regional levels	- Develop monitoring and measurement standards and indicators for the sector - Develop M&E systems based on the agreed standards and commence implementation of the M&E systems - Build capacity for implementing the M&E systems - Introduce annual sector reviews	National Governments		M&E system in place M&E report (Coverage statistics, monitoring)
3.6 Present development partners with the outline of an "MDG Water and Sanitation Investment Plan for Africa" to reach the MDGs, SEE ABOVE	Develop MDG WSS Investment Plan which includes identification of the financial resources to be mobilised, and gap expected	National Government, AMCOW		
	- Assist African countries to develop or review national investment plans.(ST) - Collate and consolidate national plans into a comprehensive African Investment Plan - Present plan to G8 and MDG summit through the African Commission	AMCOW	Funds Expertise	MDG Water an Sanitation investment plan for Africa Increased funding from development partners to meet MDG targets
	- Develop a communication and marketing strategy for funds mobilisation. - Develop a tariff structure that incorporates capital investment costs.	National govts. National govt (MoFin./Econ.)		Communication strategy Proper tariff structure
3.7 Request the AfDB and the Water and Sanitation Programme (Africa) to continue to undertake Country Sector Reviews	Operationalise the framework for reviews from AFDB and WSP			
	Set-up regional standing committee for sector peer review including members from WSP and AfDB.	RECs National Governments		Standing committees established
	Undertake water sector reviews in 30 countries (Planned for 2010)	AfDB, WSP		
	- i. A-a1) increase collaboration between the AfDB and ADB to share lessons, a2) require Value for Money studies & track unit costs of urban & rural WSS, a3) roll out findings of water sector governance study to other partners, a4) include sanitation investments in education and health sector projects; - B) monitor resource flows to W+S from the principal institutions / agencies*; C+E) establish baseline, targets & measure increase in number of motivated and highly skilled water professionals; - D) increase the number of domestic private sector utility Operators; - iv. a) roll out proposed standards from M+E study , b) establish / finalize & disseminate Bank standards supporting a market oriented approach to utility water pricing, lowering levels of unaccounted-for water and increasing levels of user revenues. - v. a) organize & hold 2nd and 3rd Resources Mobilization Conferences, b) prepare Gaps Report; - vi. a) Establish schedule, strategy & milestones for bi-annual updates to CSR reports, holding AWW, holding Resource Mobilization Conferences, preparation of OWAS Annual			

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
	Report, b) publish & disseminate findings through AMCOW TAC; - vii. a) inform all MoF and sector ministries to report accordingly, &, b) feed into Resource Mobilization Conferences, AWW, CSR & RWSSI Annual Report; viii. a) identify broad based stakeholders to peer review CSR & RWSSI Annual report; b) identify 3 agencies to recognize and award well managed urban & rural WSS systems.			
3.8 Match reporting on finance with the economic and social impacts that have been delivered;	- Carry out assessments on what has been delivered and the socioeconomic costs.	National govt.		Recommendations (in Baseline reports)
SANITATION				
3.9 Raise the profile of sanitation	- Promote profile of Sanitation at WWF5 & UN meetings; - Initiate the establishment of Sanitation Depts/ ministries where not in existence; - Create enabling policy sanitation framework. - Build HR capacity	National Governments and other partners.	Human, financial, policy, legislative and technical resources	Buy in from UN, G8, G5, and Asia on New Africa initiative, Sanitation departments should be functioning, Financial services offered by Banks.
	- Provide resources for AMCOW and its regional nodes to track the implementation of the declaration	AMCOW	Funds	Progress/Mid-Term Report Number of countries submitting reports
3.10 Support the leadership of AMCOW to track the implementation of the eThekwini Declaration	- Provide resources for AMCOW and its regional nodes to track the implementation of the declaration	AMCOW	Funds	Progress/Mid-Term Report Number of countries submitting reports
3.12 Establish, review, update and adopt national sanitation and hygiene policies within 12 months of AfricaSan 2008; establish one national plan for accelerating progress to meet national sanitation goals and the MDGs by 2015	- Develop and/or update national sanitation and hygiene policies - Prepare an implementation plan for the policies - Hold Bi-annual meetings of the AfricaSan International Task Force - Prepare Bi-annual reports on the implementation commitments of the AfricaSan declaration and action plan - Hold Sub-regional conference for West and Central African countries on the follow-up of the implementation of the AfricaSan declaration and action plan scheduled in the first quarter of 2009 in Abuja, Nigeria - Institute First AfricaSan Awards ceremony to be held in South Africa back-to-back to the second Africa Water Week in 2009 - Hold 3rd AfricaSan conference in 2010 in Nairobi, Kenya - Provide Technical support to AMCOW Executive Secretariat for a complete transfer of the AfricaSan website completed by Sep 09	The Sector ministry for sanitation WSP AfricaSan Task Force	Funds	Policy Implementation plan Number of people with access to sanitation facilities.
3.11 Establish specific public sector budget allocations for sanitation and hygiene programs and allocate a minimum of 0.5% of GDP for sanitation	Lobby for budget to systematically increase to meet the 0.5% of GDP for sanitation			

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
and hygiene				
4				
4.1 **Re-engage** in agricultural water in Africa, including irrigation, drainage and rainwater harvesting;	- Increase water storage capacity for multipurpose use - Enhance water use productivity and efficiency through rehabilitation, upgrading and modernization of existing infrastructure - Develop community based and private small scale agricultural water infrastructure - Enhance rainfed farming improvement through water control and conservation and drainage - Strengthen research network programmes in water savings, efficiency and impact on environment - Enhance the capacity and skills of countries for planning and implementing Agricultural Water Use projects	Countries, Multilateral and Bilateral international financial institutions and emerging donors		
	- Assess and establish the existence of national and regional water policies as well as basin plans - Assist in updating and/or developing of policies and basin plans at national and regional levels - Assist in implementation	AMCOW		
	- Assist countries to assess the availability of ground water - Assess impact of climate change on the availability of the resource.(ST – MT)	- Country specific. - Regional Agricultural Institutions, - FAO.	Appropriate technologies, funding, agricultural inputs	Acceptable appropriate technology with joint venture partners from Asia and EU. Successful transfer of Human resource capacity in all regions.
4.2 Scale up investments to ensure a more reliable, broad-based and sustained flow of funds, as well as supporting sectoral strategies and policies in the field of agricultural water.	- Establish donor groups for aid harmonization at country level - Assistance in the development of a comprehensive water sector policy and strategy and legal framework - Assistance to countries to elaborate agricultural water use sector review and strategy	- Countries, Multilateral and Bilateral international financial institutions and emerging donors		
5 : Managing and protecting water resources and Trans-boundary activity				
5.1 Ensure the equitable and sustainable use, as well as promote integrated management and development, of national and shared water resources in Africa	- Prepare plan for integrated management of water resources in all national and transboundary water resources	National Governments, Partners		
	- Assess and establish the existence of national and regional water policies as well as basin plans.(ST) - Assist in updating and/or developing of policies and basin plans at national and regional levels	AMCOW		
5.2 Harness local groundwater resources to improve livelihoods and	- Prepare inventory of National Groundwater Management Capacity and Tools - Design a framework for monitoring groundwater levels on a basin level and transboundary	National governments, River Basin Organizations,		

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
manage risks associated with climate change;	aquifers	UN agencies including WMO		
	- Assist countries to assess the availability of ground water	Sector ministry foe water		
5.3 Institutionalise dialogue on groundwater management in Africa and implement the Roadmap for the African Groundwater Commission	- Establish a Ground Water Management Institute at sub-regional level as a centre of excellence in collaboration with an existing institution			
5.4 Deepen regional partnerships over water use infrastructure, co-operating over shared water resources, and looking for opportunities to invest in infrastructure	- Ensure protocols on shared water courses are ratified by all concerned states - Institute a comprehensive partnership coordination system at national and regional levels	AMCOW		
5.5 Support the water harvesting strategies to complement implementation of the water-related MDGs and for climate change adaptation in Africa;	- Mainstream rainwater harvesting into existing water, environmental and other development policies - Improve access to information on rainwater harvesting - Upscale best practices through new projects on rainwater harvesting	AMCOW TAC, UN Water, AWF, AfDB, FAO		
5.6 Support development and implementation of water reuse as part of water conservation Strategy.	- Designing a range of cost-effective solutions that addresses the technical, institutional, social, behavioural and cultural obstacles for the adoption of wastewater treatment methods	National Governments, with support from Partners		
6				
6.1 Create conducive environment to enhance the effective engagement of local authorities and the private sector	- Establish framework for private sector participation - Promote decentralisation. - Build local level capacity to enable local authority operate effectively			
6.2 Promote programming that addresses the role and interests of youth and women	- Mainstreaming of women and youth consideration in all aspects of water programming and implementation	Sector ministry and implementation agency		
6.3 Strengthen partnership at all levels in our countries and between Regional Economic Communities as well as with the international development agencies and promote public-private partnerships	- Implement existing declarations and commitments on partnerships. - Promote and strengthen PPP at all levels (national and regional). - Strengthen partnerships between National and Regional Economic Communities - Strengthen partnerships between Development Agencies and National Departments	National governments, regional bodies, International organizations, AU, ADB, ECA	Political champion, human resources, information exchange	- G8, G5, Asia endorses framework of Africa ODA
6.4 Promote programming that	- Develop water and sanitation projects for youth and women	National governments, Youth and women groups		

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
addresses the role and interests of youth and women, given that the burden of poor water and sanitation falls disproportionately on women and children;	- Organize national and regional workshops for youth and women in water and sanitation			
7 : Financing	-			
2.7 Place the development benefits of water use and sanitation infrastructure at the core of finance strategies;	- Quantify benefit in national strategy for priority allocation	National government		
2.8 Develop local financial instruments and markets for investments in the water and sanitation sectors	- develop National infrastructure plans to prioritise internal and external financing	National government		
	- Capture the investment opportunities (ST) - Create awareness of the investment opportunities (ST) - Create incentives and enabling environment for private sector participation,(ST)	Sector Ministry		
	- Develop or enforce / strengthen appropriate policy and legal framework - Create a formal friendlier system for making the regulatory process more easier.	National governments, local financial institutions.	Human resources, policies, M&E tools,	Cabinet ratifies policy and legal framework. Minister and end users endorse a friendly guideline for their intervention.
2.9 Significantly increase domestic financial resources allocated for implementing national and regional water and sanitation development activities	- Establish a Bank dedicated to water - Mobilize domestic savings - Bankable water and sanitation proposals both internal and external - Introduce and implement relevant taxation policy - Mobilize internal funding	National governments and appropriate partners.	Legislation, human resources, funding, Bank infrastructure	SADC presents an Official Development Assistance (ODA) policy to AMCOW
2.10 Mobilize increased donor and other financing for the water and sanitation initiatives including national projects and Rural Water and Sanitation Initiatives, the African Water Facility; Water for African Cities programme and the NEPAD Infrastructure Project Preparation Facility, as committed in the G8 Initiatives on water and sanitation	- Apportion a proportion of existing taxes to WASAT. Alternatively introduce new taxes. - Introduce investor friendly policies and other measures - Create a basket of projects to be forwarded to private sector for their participation and those to be submitted to the G8. - Draft external Donor Policies. Set up criteria on bankable projects - Market projects.	- National Governments, SADC, ECA, AFDB, AU, Donor agencies	- Information, HR, Technical input, champions.	- Acceptable basket of projects supported.
	- Develop sector investment plan to attract more donor funding - Use African Water Week to market SIP - Explore opportunities with other international for a market SIP - Identify Water Ambassador	AMCOW National Government		
8 : Education, Knowledge and Capacity Development				

Declaration/Commitment	Identified Actions	Responsibility (lead)	Required Resources	Output Monitoring Indicators
8.1 Build institutional and human resources capacity at all levels including the decentralized local government level for programme implementation	- Undertake country assessment of the human resources requirements to meet water security challenges - Organize regional training workshops on water governance - Establish network of African higher learning institutions in the water sector - Establish network / associations of African consulting firms in the water sector - Facilitate network of international water institutions in collaborative arrangements with African training centres - Conduct inventory and assessment of regional training centres of excellence to meet critical skills required for water security. Develop strategies to strengthen their programmes	AMCOW Water and sanitation programme AfDB AMCOW to facilitate UNESCO		
	- Conduct needs assessment for institutional and human capacity - Develop programmes for building institutional and human capacity - Identify centres of excellence for the capacity building - Incorporate strategies for sharing of best practices	AMCOW/NEPAD Regional Economic Commissions National Governments Local Governments		
8.2 Support the empowerment of local government and build their capacity to implement decentralised programme implementation and management.	Undertake country assessment of local government capacity needs to meet water security challenges	AMCOW, World bank, AfDB, UNESCO		
8.3 Promote effective engagement of African civil society and public participation in water and sanitation activities and programmes	- Effective implementation of MOU between AMCOW and ANEW Facilitate the acceptance of the MOU by national government			
8.4 Strengthen regional Centres of Excellence and networks for agriculture, hydropower generation, water management, climate change, desertification, drought, floods and environmental management;	- Identify and assess the needs of existing centres - Develop a framework for collaboration with AMCOW Support capacity building of these centre to make them responsible for meeting regional needs	NEPAD		
8.5 Strengthen the information and knowledge base and monitoring capacity.	- Strengthening capacity of centres of excellence or resource centres generate to and share information - Raise profile of Knowledge management - Support development of information systems - Nowledge sharing with other regional networks	National governments, Universities, UNESCO-IHE		

ANNEX 4

Human Development Index For Africa Region

HDI Rank	Country	Human poverty index (HPI-1)
High Human Development		
56	Libyan Arab Jamahiriya	0.818
65	Mauritius	0.804
Medium Human Development		
91	Tunisia	0.766
102	Cape Verde	0.736
104	Algeria	0.733
112	Egypt	0.708
119	Gabon	0.677
121	South Africa	0.674
123	Sao Tome and Principe	0.654
124	Botswana	0.654
125	Namibia	0.650
126	Morocco	0.646
127	Equatorial Guinea	0.642
134	Comoros	0.561
135	Ghana	0.553
137	Mauritania	0.550
138	Lesotho	0.549
139	Congo	0.548
141	Swaziland	0.547
143	Madagascar	0.533
144	Cameroon	0.532
147	Sudan	0.526
148	Kenya	0.521
149	Djibouti	0.516
151	Zimbabwe	0.513
152	Togo	0.512
154	Uganda	0.505
155	Gambia	0.502
Low Human Development		
156	Senegal	0.499
157	Eritrea	0.483
158	Nigeria	0.470
159	Tanzania (United Republic of)	0.467
160	Guinea	0.456
161	Rwanda	0.452
162	Angola	0.446
163	Benin	0.437
164	Malawi	0.437
165	Zambia	0.434
167	Burundi	0.413
168	Congo (Democratic Republic of the)	0.411
169	Ethiopia	0.406
170	Chad	0.388
171	Central African Republic	0.38
172	Mozambique	0.384
173	Mali	0.380
174	Niger	0.374
175	Guinea-Bissau	0.374
176	Burkina Faso	0.370
177	Sierra Leone	0.336

ABBREVIATIONS AND ACRONYMS

AfDB	-	African Development Bank
AICD	-	African Infrastructure Country Diagnostic
AMCOW	-	African Ministers Council on Water
AMMA	-	African Monsoon Multidisciplinary Analysis project
ANBO	-	African Network of Basin Organisations
ANEW	-	African Civil Society Network on Water and Sanitation
AU	-	African Union
AWF	-	African Water Facility
AWV	-	Africa Water Vision
CAADP	-	Comprehensive Africa Agriculture Development Program
CSO	-	Country Status Overviews
ECCAS	-	Economic Community of Central African States
ECOWAS	-	Economic Commission of West African States
EUWI	-	European Union Water Initiative
FAO	-	Food and Agriculture Organisation
FEWS NET	-	Famine Early Warning System Network
GWP	-	Global Water Partnership
ICA	-	Infrastructure Consortium for Africa
ICT	-	Information and Communication Technology
IFAD	-	International Fund for Agricultural Development
JMP	-	Joint Monitoring Program
LIFDCs	-	Low Income Food Deficient Countries
M&E	-	Monitoring and evaluation
MDGs	-	Millennium Development Goals
MFI	-	Multilateral Finance Initiatives
NBI	-	Nile Basin Initiative
NEPAD	-	New Partnership for Africa's Development
NGOs	-	Non-Governmental Organisations
O&M	-	Operation and Maintenance
ODA	-	Overseas Development Assistance
OMVS	-	Organization pour la Mise en Valeur du Fleuve Senegal
PPPs	-	Public Private Partnerships
PRSPs	-	Poverty Reduction Strategy Papers
RBOs	-	River Basin Organisations
RECs	-	Regional Economic Commissions
RLBOs	-	River and Lake Basin Organisations
RWSSI	-	Rural Water and Sanitation Initiative
SADC	-	Southern Africa Development Commission
SSA	-	Sub-Saharan Africa
SWAp	-	Sector-Wide Approach
UNDP	-	United Nations development Programme
UNEP	-	United Nations Environment Programme
UNESCO	-	United Nations Educational Scientific and Cultural Organisation
WANI	-	Water and Nature Initiative
WASH	-	Water Sanitation and Hygiene
WHYCOS	-	World Hydrological Cycle Observing System
WMO	-	World Meteorological Organisation
WSP Africa	-	Water and Sanitation Program Africa

Notes