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## Developing Angola's Infrastructure: What is SADC's role?

Elling N. Tjønneland

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# 1. Introduction<sup>1</sup>

Development of Angola's infrastructure is a key priority for the government in the country's reconstruction. There is also a strong interest from Angola's neighbours, SADC and other regional and continental organisations in the regional dimension of Angola's infrastructure. However, the links between regional and national approaches to infrastructure development in Angola have received little attention in public debate or in the scholarly literature. This report takes stock of these relations, summarises main policies and efforts in Southern Africa to promote regional infrastructure development, identifies key projects involving Angola and highlights future challenges.<sup>2</sup>

Infrastructure has remained a major focus for the main regional organisation in Southern Africa – the Southern Africa Development Community (SADC). Since its establishment in 1980, the organisation has emphasised the need for developing cross-border projects in energy, water and transport. Cooperation in such areas has been judged to be crucial both for facilitating development in member states and for fostering regional cooperation. SADC's emphasis in recent years on promoting economic integration and poverty reduction has reinforced this focus on infrastructure.

Historically, Angola has been a key player in the development of SADC's policies on infrastructure. In the 1980s and 1990s, Angola co-ordinated SADC's work in the energy sector. SADC's current Deputy Executive Secretary for regional integration is from Angola, and was the former head of SADC's Energy Commission, which was based in Luanda before it moved to the Secretariat in Gaborone. Several Angolans are working in the Secretariat. In Angola, a high-level SADC National Committee is in place to manage the country's relations with SADC. It is coordinated by the SADC focal point in the Ministry of Foreign Affairs. Angola has signed nearly all of SADC's Protocols – the legally binding policies and instruments for inter-governmental cooperation within SADC – but has not ratified all. Some important exceptions are the Protocol regulating the management of Zambezi river basin, the Mutual Defence Pact, and the Protocol on Politics, Defence and Security Cooperation. Angola has also decided not to join the SADC Free Trade Zone.

Angola is also a member of the Economic Community of Central African States (ECCAS), which includes another SADC member – DRC (in addition to Burundi, Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon and Sao Tome and Principe). ECCAS has so far not been a player in relation to infrastructure development in Angola and will not be considered further in this paper.

Before analysing relations between national and regional approaches, the paper will first look at some recent trends in infrastructure development in Africa.

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<sup>1</sup> This paper has benefitted from comments and inputs provided by José Oliveira, and is an output of the CEIC-CMI Cooperation Programme.

<sup>2</sup> Some of the issues covered in this paper were addressed in an early paper by Elling N. Tjønneland & Louis Bonfin, *SADC and Angola, The Case of Infrastructure Development*, paper prepared for the CEIC-CMI Annual Conference Luanda, 2 July 2009.

## 2. Africa and Infrastructure - The Issues

Public infrastructure in most African countries increasingly lags behind that of other developing countries. Infrastructure sectors – power, transport, water, information and technology – suffer from insufficient investment and poor maintenance. A recent major review – *Africa's Infrastructure: A Time for Transformation* – concludes that Africa has the weakest infrastructure in the world. Africa's infrastructure networks are characterised by missing regional links and stagnant levels of household access. The study argues that well-functioning infrastructure is essential to Africa's economic performance and that improving inefficiencies and reducing waste could result in major improvements in Africans' lives.<sup>3</sup>

*Power* is Africa's largest infrastructure challenge. Chronic power shortages affect 30 African countries; the entire installed power generation capacity of 48 Sub-Saharan African countries is 68 gigawatts, not more than Spain's, and 25% of that capacity is unavailable because of aging plants and poor maintenance. Studies have also found Africa's power to be expensive to produce by global standards. Regional trade can significantly lower costs.

The *water* sector in Africa is undermined by high hydro-climatic variability, inadequate storage, rising demand and lack of transboundary cooperation. Less than 60% of Africa's population has access to drinking water. With more than 60 transboundary rivers on the continent, developing large-scale infrastructure to manage water use and avoid conflicts is a huge challenge.

The *transport* sector is also characterised by inefficiencies and ineffectiveness. Linkages between different transport modes (air, road and rail) are weak. Poorly equipped ports, ageing rail networks and inadequate access to all-season roads are key problems facing Africa's transport system. Only 40% of rural Africans live within 2 kilometres of an all-season road, compared to some 65% in other developing regions. Improving road accessibility in rural areas is critical to raising agricultural productivity across Africa. Limited co-operation in the trucking industry keeps road freight tariffs unnecessarily high, while red tape along international trade corridors keeps movement of freight slow, increases costs and restricts intra-regional trade.

There has been a dramatic push for infrastructure investment and development in Africa over the past few years. We have seen a strong focus on national and domestic projects, but we have also witnessed increased emphasis on the development of regional infrastructure.<sup>4</sup> At the strategic and political level, one of the early and most important expressions of these new priorities was the NEPAD founding statement from 2001. This statement identified infrastructure as a key sectoral priority and called for increased investment both in maintenance and in new infrastructure, new regulatory frameworks, and the promotion of public-private partnerships. This was followed by various pan-African initiatives and plans, such as the NEPAD Short Term Action Plan. At the global level, the donor countries and partners in the South also agreed to a number of steps to strengthen infrastructure development. The Monterrey conference on Financing for Development agreed *inter alia* that improved infrastructure was essential for sustained economic growth, poverty reduction and employment creation. An

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<sup>3</sup> This study was conducted by a partnership of institutions, including the African Union Commission, NEPAD, the African Development Bank, the Development Bank of Southern Africa, the Infrastructure Consortium for Africa, and the World Bank. It is available from <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:22386904~pagePK:146736~piPK:146830~theSitePK:258644,00.html>

<sup>4</sup> There is large body of literature available on infrastructure development support in Africa. See e.g., the chapter on infrastructure in Economic Commission for Africa and OECD, *The Mutual Review of Development Effectiveness in Africa: Promise and Performance*, Addis Ababa and Paris: UNECA and OECD 2009 (available from [www.oecd.org](http://www.oecd.org)). The chapter also contains a list of key literature.



Infrastructure Consortium for Africa, hosted by the African Development Bank, was also established in 2005 to facilitate the mobilisation of investment in African infrastructure.

The *African Infrastructure Report* (see above) estimates that USD 93 billion is needed annually over the next decade to provide Africa with adequate infrastructure. Current spending is about USD 45 billion (most of this from domestic resource mobilisation in African countries). Some additional USD 17 billion could be made available through efficiency improvements and reduction of waste. This leaves, according to the report, a funding gap of USD 31 billion every year, and most of this can only be mobilised from external sources – as development finance from aid agencies or investments from the private sector and public/private partnerships.

The new political objectives and agreements to invest more in infrastructure have also led to some action. Investments have risen significantly in certain areas. The African Development Bank, the European Commission and the World Bank – which together account for around 70% of all external donor money to the infrastructure sector on the continent – have agreed to improve collaboration during their interventions in the various infrastructure sectors and to give priority to *inter alia* support to regional projects and to AU/NEPAD “flagship” projects. In November 2010, the G20 Summit in Seoul identified nine key areas where action and reform are most critical. Increased financing for infrastructure projects is highlighted in their recommendations.

Significantly, the expanding role of China and other emerging powers has also helped strengthen the focus on infrastructure. China, in particular, has strongly pursued transport and hydropower projects in its engagement with African countries. Chinese construction companies were also important in implementing infrastructure projects, including projects funded by others. However, China has never had a strong focus on regional projects in their Africa engagement. The Chinese have concentrated their operations in a few countries, including Angola, and Chinese finance deals have been linked to the supply of oil and other raw materials to Chinese markets. Chinese policies to facilitate this trade have revolved around aggressive marketing coupled with substantive finance through mechanisms such as the Chinese Export-Import Bank and the China Development Bank.<sup>5</sup>

Commitments from investors and donor agencies have increased, but actual delivery is lagging behind. The global financial crisis has further weakened the delivery of promises. In fact, actual flows of development aid to Africa, excluding debt relief, have basically remained flat in recent years. China has increased its provision of development finance – mostly through credits and loans –, but it is far less than what is required to compensate for failed delivery from Western countries. Significantly, it is also noted that African capacities – or willingness – to make use of the Chinese facilities is far less than perhaps originally envisaged. This is perhaps most strongly illustrated with Chinese credit lines in Angola, where significant amounts available credit lines have not yet been used.

A recent joint Africa-OECD review of progress in infrastructure development and poverty reduction concludes with a series of recommended actions.<sup>6</sup> African governments need to:

- make further progress in developing strategic frameworks;
- improve project preparation, development of business plans and implementation;
- give increasing priority to regional projects, including better co-ordination between regional bodies; and
- intensify efforts to ensure more equitable provision of basic services to rural areas.

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<sup>5</sup> There is a rapidly expanding literature on China and other emerging powers' role in Africa. See especially the principal study from Deborah Brautigam, *The Dragon's Gift. The Real Story of China in Africa*, Oxford: Oxford University Press 2009.

<sup>6</sup> See the reference to the report above (note 3).

Recommendations to northern development partners (OECD) include:

- Sustaining the current expanded investment in infrastructure, including regional projects;
- Providing adequate resources for upstream project preparation to help accelerate implementation of projects and programmes;
- Providing capacity support for RECS, regional sectoral bodies and infrastructure agencies at country level;
- Accounting for the impact of climate change in programmes of support for regional infrastructure; and
- Increasing the number of joint-financing opportunities by playing a greater role in bringing China and other partners and the private sector into regional infrastructure projects.

Southern Africa has a long track record of working for regional co-operation in developing infrastructure. What is the state of regional infrastructure, and what are current regional priorities?

### 3. SADC - Regional Cooperation for Development

The Southern African Development Community (SADC) has been the main instrument and regional body advancing co-operation in infrastructure development in Southern Africa. In the organisation's early years – the 1980s –, reducing dependence on South Africa was a major objective for SADC's predecessor, the Southern African Development Coordination Conference (SADCC). This included strong efforts to build regional infrastructure outside South Africa. The other leg of the current SADC, the Frontline States, focused on political issues and support to the liberation struggle. With the liberation of Namibia and the end of apartheid in South Africa, the conditions for accelerating development changed dramatically. South Africa joined SADC, and SADC's objectives were redefined with an action programme focusing on economic integration.

Still, SADC struggled with transforming its programme of action into a clearly defined programme for economic integration. This led to a number of measures, beginning with the major decision in 2001 to centralise the coordination and implementation of SADC's programmes under a strengthened SADC Secretariat in Gaborone. This involved closing down all sector co-ordinating units and commissions in member countries, including the Energy Commission in Luanda. Energy issues, together with water, transport and related sectors, were now to be dealt with by a small directorate on Infrastructure and Services in the Secretariat. Furthermore, SADC also adopted new strategic frameworks and priorities for action through the 2004 *Regional Indicative Strategic Development Plan* (RISDP) and the *Strategic Indicative Plan for the Organ on Politics, Defence and Security Cooperation* (SIPO).<sup>7</sup>

However, it became increasingly clear that neither restructuring nor new priorities were sufficient to improve SADC's course. SADC's "engine room" – the Secretariat – remained particularly weak in human and financial management capacity and in its ability to facilitate strategy development and policy harmonization. Furthermore, the RISDP and SIPO, as blueprints for development, were far too broad in their list of strategies, priority interventions and activities. Finally, there was a growing mismatch between SADC's institutional structures, financial resources and priorities. Most importantly, the Secretariat was primarily an administrative body with decision-making powers vested in the hands of Member States that tended to show little inclination to devolve national sovereignty to an intergovernmental organisation.

Over the last two years, a number of steps have been taken to address these shortcomings and failures.<sup>8</sup> One important milestone was the adoption of the *Windhoek Declaration* in 2006, which sought to improve the partnership between SADC and its international cooperating partners. This led to the establishment of thematic groups between SADC and partners in priority areas. These groups were expected to facilitate resource mobilisation and improved effectiveness of external financial support, *inter alia*, by providing support to a joint work plan. Later SADC also decided to establish ministerial clusters in priority sectors and to make further efforts to strengthen the role of national

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<sup>7</sup> For background and further discussion, see E. N. Tjønneland & G. le Pere, *Which Way SADC? Advancing co-operation and integration in southern Africa*, Johannesburg: Institute for Global Dialogue (*Occasional Paper No 50*, October)

<sup>8</sup> See three previous reports by the E. N. Tjønneland: *SADC and Donors – Ideals and Practices. From Gaborone to Paris and Back* (*Foprisa Research Report No 1*, Gaborone: Botswana Institute for Development Policy Analysis 2006); *From Aid Effectiveness to Poverty Reduction. Is foreign donor support to SADC improving?* (*Foprisa Research Report no 4*, Gaborone: Botswana Institute for Development Policy Analysis 2008), and (with Munetsi Madakufamba), "A Development Road Show? From Monterrey and Paris to Doha and Accra: Is the Windhoek Declaration improving relations between SADC and its international cooperating partners?", pp. 173-191 in C. Harvey (ed.), *Proceedings of the 2009 FOPRISA Annual Conference*, Gaborone: Botswana Institute for Development Policy Analysis 2010, and an informative article by Leda Giuffrida & Helmut Müller-Glodde, "Strengthening SADC institutional structures – capacity development is the key to the SADC Secretariat's effectiveness", pp 120 -148 in A. Bösl et al. (eds.), *Monitoring Regional Integration in Southern Africa Yearbook*, Volume 8, Stellenbosch: Trade Law Centre for Southern Africa 2008.

focal points and committees in order to help facilitate stronger ownership and participation by SADC member states.

At SADC's Consultative Conference and Summit on Poverty in Mauritius in April 2008, a number of initiatives were launched to help strengthen SADC's poverty focus. One important outcome was the *Declaration on Poverty Eradication and Sustainable Development* signed by the SADC Heads of States and Governments. In this declaration, SADC resolved to work towards the establishment of a regional *Poverty Observatory*. The Secretariat's background paper on the Poverty Observatory calls for the establishment of a regional mechanism to monitor the implementation of RISDP's poverty reduction objectives. It seeks to supplement SADC's monitoring through the regional statistics programme and macro economic convergence programme. The Observatory is intended as a multi-stakeholder consultative forum to monitor objectives, targets and actions.

Another background paper outlined a proposed *Regional Poverty Reduction Framework*. This was essentially an effort to operationalise RISDP's poverty reduction interventions by identifying activities that would have an impact on poverty in the short to medium term. Such activities have not been sufficiently addressed in the current implementation of SADC's strategies and policies. The new framework seeks to translate RISDP's poverty intervention objectives into an implementation framework. It intends to do this by identifying the bridge between national poverty reduction strategies and regional interventions, and focuses on high impact areas where a regional approach is expected to complement and bolster national interventions. To this effect, the draft framework also pays more attention to cross-border issues in order to improve consistency between national strategies and programmes on the one hand, and regional strategies and programmes on the other. This is expected to enhance the visibility and relevance of regional interventions to country policy makers.

The poverty reduction framework also identifies intervention areas where SADC can have high impact with poverty focused interventions.<sup>9</sup> However, SADC's progress and its implementation ability have not seen major improvements since 2008. The Consultative Conference scheduled for 2010 in Maseru, which was expected to take stock of achievements made since the adoption of the 2006 Windhoek Declaration and the 2008 Mauritius conference, had to be cancelled following disagreements between SADC and its main donors. Political conflicts within member states – especially in Zimbabwe and Madagascar – also forced SADC to concentrate its efforts on mediation and facilitation of conflict resolution in member states and provided fewer opportunities for its work on economic integration.

Much of SADC's work on economic cooperation has focused on achieving a tripartite free trade zone between the regions covered by SADC, COMESA and the East African Community. The COMESA-EAC-SADC Tripartite was established in 2005 with the main objective of strengthening and deepening economic integration of the southern and eastern Africa region. This is being achieved through various initiatives aimed at harmonising the three regional economic communities' policies and programmes in the areas of trade, customs and infrastructure development, as well as implementing these in a coordinated manner, and, wherever possible, jointly.<sup>10</sup>

The Tripartite agenda is focused and underpinned by a vision and strategy which are operationalised through a work programme whose main pillars include:

- i. harmonisation and improvement of functionality of regional trading arrangements and programmes, including establishing a Tripartite Free Trade Area encompassing its 26 member countries;
- ii. enhancement of trade facilitation to improve the flow of goods along transport corridors by lowering transit times and the cost of trading. Significant progress is already being achieved on the North-South Corridor which has been implemented as a pilot since 2007;

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<sup>9</sup> See more on this in the SADC Secretariat's *The Regional Poverty Reduction Framework: Background document*, SADC International Conference on Poverty & Development, 18 – 20 April, Port Louis, Mauritius.

<sup>10</sup> See also the website for this initiative – [www.rectripartite.org](http://www.rectripartite.org).

- iii. joint planning and implementation of infrastructure programmes which are mainly comprised of surface (road, rail, border posts, seaports) and air transport, ICT and energy. Enhancing physical interconnectivity through infrastructure development and improving operational efficiencies of border crossings and seaports are important factors in speeding up economic development, in addition to facilitating and expanding inter-regional and international trade; and
- iv. free movement of business persons within the Tripartite region to facilitate business activities.

### 3.1 Infrastructure priorities

The role of infrastructure in SADC's programme of action has shifted over the years. While other objectives and priorities emerged during the 1990s, in recent years the role of infrastructure has again been emphasised. The RISDP argues strongly that infrastructure development is a key driver of regional development and integration. Four thematic intervention areas are identified and highlighted in the RISDP:

- Ensuring the availability of reliable and cost-effective energy supplies;
- Provision of efficient, cost-effective and safe transport, communications and meteorology systems;
- Improving access to water and sanitation; and
- Using tourism to achieve sustainable development.

The Infrastructure and Services directorate is in charge but has a number of regional subsidiary organisations (such as the Southern African Power Pool) and project management units (e.g., - until its recent closure - Westcor - the Western Corridor Project). A separate Project Preparation and Planning Unit is to be established and hosted by the Development Bank in South Africa.<sup>11</sup>

Significantly, there is also a renewed emphasis in SADC on development corridors which seeks to integrate trade, transport and cross-border cooperation. Several such corridors are being developed in the eastern part of Southern Africa. These trade-related infrastructure projects have been given a further boost with the cooperation between three regional economic communities – COMESA, the East African Community and SADC. Following the April 2009 conference between the three, they launched the North-South Corridor Programme in an effort to implement an economic corridor approach to reducing costs of cross-border trade.<sup>12</sup>

Three thematic groups between SADC and international cooperating partners (donors) have been established. These groups are intended to facilitate resource mobilisation and a more effective delivery of development finance for infrastructure development. These groups specialize in energy (with Norway as lead donor), water (Germany/GTZ) and transport (UK/DFID).

By mid-2010, SADC had a range of regional infrastructure projects in various stages of preparation, resource mobilisation and implementation. We shall briefly summarise each of them.

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<sup>11</sup> This discussion is based on data from *SADC Action on Infrastructure. Strategic Intervention on Accelerating Provision of Priority Regional Infrastructure*, Gaborone: SADC 2007 (prepared for the SADC Summit in 2007 by SARDC); the SADC Secretariat's *Infrastructure support for regional integration, poverty reduction and development (thematic background document) comprising the following sectors: energy, transport, water, communications/ICT and tourism*, background paper prepared for the *SADC International Conference on Poverty and Development*, 18-20 April 2008, Mauritius; and *SADC Infrastructure Development Status Report for Council and Summit, August 2010, Windhoek, Namibia*, Gaborone: SADC 2010.

<sup>12</sup> See also the communiqué from COMESA, ECA and SADC, "North South Corridor Pilot Aid for Trade Conference. Outcomes, Conclusions and Way forward", Lusaka, 7 April 2009.

## Energy

SADC's chief aim is to increase power generation capacity within the region and to reduce the power shortfall. This is to be achieved through rehabilitation of existing generation plants, improved transmission grids, and an enabling environment for new power projects, along with a resource mobilisation and financing mechanism. Furthermore, SADC seeks to develop an effective institutional framework for accelerated project implementation. The underlying principle is to interconnect the power systems of SADC member states to facilitate energy trading and to move power from generating centres to demand centres across the region. SADC's target is to create a power generation surplus by 2013.

Two SADC institutions are crucial in this process (in addition to the Energy Division in the Infrastructure and Services Directorate in the SADC Secretariat). The *Southern African Power Pool* (SAPP) brings together the power utilities in the member states. SAPP was established so that energy could be developed regionally according to the most effective use of natural resources and traded over a regional grid. SAPP has developed a regional generation and transmission expansion plan which focuses on driving benefits for member states from coordination of individual country power expansion plants. The *Regional Electricity Regulators Association* (RERA) has worked to facilitate an enabling environment for regional trade in energy.<sup>13</sup>

Current priority projects include 4 transmission projects and 3 power plants. They are:

- the Mozambique Transmission Backbone, which seeks to transfer power from the Zambezi Valley to the markets in the south of Mozambique and in South Africa;
- the Central Transmission Corridor Network, which involves upgrading of the transmission networks in Zambia, Zimbabwe and Botswana to enable transfer of power from the North to countries in the South and vice versa. It seeks to alleviate transmission congestion in Zimbabwe to benefit other countries in the region;
- the Zambia-Tanzania-Kenya interconnector. This is a power line to link the two SADC countries, Zambia and Tanzania, with Kenya in East Africa. It provides hydropower from Zambia to Tanzania and Kenya and intends to link SAPP with the East African Power Pool;
- the Zizabona Transmission, which is aimed at developing new transmission lines to link Zimbabwe, Zambia, Botswana and Namibia;
- the Itezhi Teszhi Project, a hydropower station that will be installed on an existing dam located on the Kafue river in Zambia as a base load operation and a transmission using the existing Zambian grid;
- the Kariba North Bank Extension, a hydro power station to be developed at the the Kariba North Bank station on the Zambezi river in Zambia. It aims at expanding the existing power generation and strengthen the transmission line; and
- the Mphanda Nkuwa Hydro Power Project, a new power plant on the Zambezi river in Mozambique targeting the regional market.

The projects above are in various stages of preparation and development as “bankable” projects. They are all expected to reach financial closure within the next 2-3 years and some may also reach completion in this period.

However, transmission grid projects (and other cross-border projects) have generally not been moving at the desired pace and rates. This has also affected previous priority projects, which have now been put on hold. This includes the interconnection project between Mozambique and Malawi. Most

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<sup>13</sup> Both SAPP and RERA have websites with more information, see [www.sapp.co.zw](http://www.sapp.co.zw) and [www.rerasadc.com](http://www.rerasadc.com). See also the sections on energy in *SADC Infrastructure Development Status Report for Council and Summit, August 2010, Windhoek, Namibia*, Gaborone: SADC 2010, and *SADC 2010, Towards a Common Future for Sustainable Investment in Transport Corridors, Water, Energy, ICT and Trans-Frontier Conservation Areas*, Gaborone: SADC, n.d. (2010). These reports list and present SADC priority projects and their status.

significant was the abortion of the Western Corridor (Westcor) project in 2009. Power companies in DRC, Angola, Botswana, Namibia and South Africa participated in the preparation of this giant project, which included the construction of a major Inga III dam and power plant in DRC and a transmission network linking DRC with the western part of the rest of Southern Africa. In 2009, DRC decided to develop the Inga III power plant in co-operation with BHP Billiton with the aim of servicing the company's planned aluminium smelter in the country. The Westcor project was officially closed in 2010, but DRC's government has stated that it may offer an alternative site for a new hydropower plant to service the region and the Westcor country partners.

## Transport

The primary SADC objectives in this sector are:

- integration of regional networks (surface and air);
- corridor infrastructure development and removal of non-tariff barriers; and
- harmonisation of transport policy, regulation and legislation.

Seamless transport infrastructure is seen as a key driver of SADC's economic integration and trade agenda. With six of its members landlocked, SADC has identified 14 spatial development initiatives and transport corridors linking the major ports of the region to mining areas and agricultural and commercial production in the hinterland. SADC focuses on achieving

- legal instruments for joint governance of transport corridors;
- institutional frameworks for joint and coordinated management of transport corridors; and the
- development of critical transport and logistics infrastructure.

Legal instruments for corridor governance have been signed for 8 of the 14 corridors (Trans-Kalahari, Trans Caprivi, Maputo, Beira, Ncala, Mtwara, Dar es Salaam and the Central Transport Corridor); Memorandums of Understanding (MoUs) are under development for the North-South corridor; and instruments still need to be developed for the Trans-Cunene, Lobito (Benguela), Malange, Namibe, Trans-Orange, and Maseru-Durban corridors.<sup>14</sup>

Only 4 of these 14 corridors have established and functional corridor management institutions – Trans-Kalahari (which connects Namibia, Botswana and South Africa); Maputo (Mozambique, South Africa and Swaziland); Dar es Salaam (Tanzania, Mozambique, Malawi, Zambia, DRC); and Central Transport Corridors (Tanzania, DRC, Uganda, Rwanda, Burundi). There are some transitional and interim arrangements in place in the Trans-Cunene (Namibia, Angola) and Trans-Caprivi (Namibia, Zambia, DRC) corridors. In the others, there are no operational institutions.

The North-South Corridor is a major and complex corridor involving seven countries and was developed through cooperation between SADC and two other regional organisations (COMESA and the East African Community).<sup>15</sup> It links the copper belts in DRC and Zambia with ports in South Africa and Tanzania. A MoU for the development of a management system has been prepared but not implemented. Some investments in road and rail networks along the corridor have been made. A one-stop border post at Chirundu between Zambia and Zimbabwe has opened, and it is expected to cut the

<sup>14</sup> A good source of updated information on the status of the various corridors can be found on TradeMark Southern Africa's website [www.trademarksa.org](http://www.trademarksa.org). TradeMark Southern Africa is a 5-year programme funded wholly by the UK's DFID. It focuses *inter alia* on corridors, infrastructure and border posts. It is hosted by COMESA with COMESA, SADC and EAC as the main beneficiaries. See also the transport sections in *SADC Infrastructure Development Status Report for Council and Summit, August 2010, Windhoek, Namibia*, Gaborone: SADC 2010, and *SADC 2010, Towards a Common Future for Sustainable Investment in Transport Corridors, Water, Energy, ICT and Trans-Frontier Conservation Areas*, Gaborone: SADC, n.d. (2010).

<sup>15</sup> See also the *North-South Corridor. Infrastructure Progress Report. November 2010*, TradeMark Southern Africa (available from [www.trademarksa.org](http://www.trademarksa.org)).

time it takes to cross this border from three days to three hours. Four more one-stop border posts are expected to be established in this corridor by 2012.

SADC has identified six priority projects in the transport sector for foreign aid and investors. Two involve the North-South Corridor. This includes construction of a road and rail bridge across the Zambezi River at Kazangula on the Botswana/Zambia border, as well as a one-stop border facility. The second is the dualisation of the Beitbridge-Harare-Chirundu road in Zimbabwe.

In the Trans-Cunene corridor, the priorities are the construction of a one stop border post on the Namibian/Angolan border at Oshikango-Santa Clara and the extension of the rail line from Santa Clara. On the Dar es Salaam corridor, the SADC priority is the construction of a one-stop border post at Nakonde/Tunduma on the Zambian and Tanzanian border.

Another project is the extension of the Walvis Bay port in Namibia. The final priority project is the construction and management of an inland container depot at Maseru in Lesotho.

Most of these projects are at the feasibility or early design stage.

## Water

Integrated water resources management and related infrastructure development are also major SADC priorities. Two specific targets have been mentioned: to develop by 2015 the infrastructure needed to double land under irrigation, and to halve the proportion of people without access to drinking water and sanitation. SADC's work is guided by three key documents:

- the 2000 *Revised Protocol on Shared Water Courses*. This creates an overarching framework for transboundary management of shared water courses in the SADC region;
- the *Regional Strategic Action Plan* for Integrated Water Resource Management and Development is the framework for implementing the SADC water protocol. In the second phase (2005-2010), there are some 14 projects belonging to four strategic interventions areas: regional water resources planning and implementation, infrastructure development support, water governance and capacity building; and
- the 2006 *Regional Water Policy* is a comprehensive SADC policy document which is aimed at providing a framework for sustainable, integrated and co-ordinated development, utilisation, protection and control of national and transboundary water resources in the SADC region for the promotion of socio-economic development and regional integration and improvement of the quality of life.

Management of transboundary river basins has been the main focus in the implementation of SADC's water objectives. Shared watercourse institutions, or river basin organisations, for the 15 transboundary basins are considered the main vehicle for implementation at the basin level.<sup>16</sup> The main role of these institutions is to

- facilitate co-ordinated, judicious and sustainable utilisation of shared water courses;
- act as advisory bodies and joint programme implementation on behalf of member states;

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<sup>16</sup> The *SADC water sector ICP collaboration portal* provides a good presentation of SADC water issues and the status of the river basin organisations. See <http://www.icp-confluence-sadc.org/>. See also background information in B. Hollingworth & T. Chiramba (eds.), *Implementing the SADC Regional Strategic Action for Integrated Water Resource Management (1999-2004): Lessons and best practice*, Gaborone, Bonn: SADC Water Division, GTZ, inWent and UNDP 2005; SADC, *Regional Water Policy*, Gaborone: Infrastructure and Services Directorate, SADC Secretariat 2006; and P. Widmoser & H. Krugmann, *SADC Water Resources Management Project (April 2003 – March 2007), External Review 2007*, unpublished report prepared for the Swiss Development Cooperation 2007.



- develop joint strategic action plans/programmes and projects for implementation along shared water courses; and
- offer a platform for discussions, information sharing and conflict prevention at river basin level.

There are currently three river basin organisations with fulltime Secretariats in the SADC region. These are the *Orange-Senqu River Commission* (Lesotho, South Africa, Botswana and Namibia); the *Permanent Okavango River Basin Commission* (Angola, Namibia, Zimbabwe and Botswana); and the *Limpopo Water Course Commission* (Botswana, South Africa, Zimbabwe and Mozambique). Interim Secretariats (Zambezi) and technical committees are in place in 7 of the other basins.

SADC has also identified a series of priority infrastructure projects in the water sector. Some are small and can be implemented over a 3-5 year period. Others are strategic and can only be implemented in the long-term.

### **Bumpy roads: From policies to implementation**

SADC's development of regional infrastructure is moving much slower than originally expected. This is evident both in the planning and preparation of projects, in resource mobilisation and in implementation of projects, as well as in policy harmonisation and facilitation. In June 2010, the ministers in SADC countries responsible for infrastructure development met in Zimbabwe and reviewed the slow pace of implementation. They listed several reasons for the state of affairs linked to the political will and capacity of member states as well as the capacity of regional institutions.<sup>17</sup> These included:

- Failure of member states to implement several provisions in SADC protocols guiding development of regional infrastructure;
- Lack of capacity at the level of member states;
- Slow pace of development and signing of cross-border MoUs among member states;
- Weak structures at the level of member states and at transboundary levels;
- Shifting of public sector financing to other pressing domestic socio-economic priorities;
- Slow pace of private sector participation in some areas of infrastructure; and
- Lack of capacity at the SADC Secretariat, including the capacity to assist development of bankable projects for investors and donors.

The SADC Secretariat's limited capacity is illustrated by the Water Division (WD) within the Infrastructure and Services directorate. This division has been severely constrained by a gradual reduction of professional staff since 2003. Currently (mid-2010), it has one core staff (funded through the regular budget) and 2 technical advisors (funded by donor agencies).

The international donors (or international cooperating partners – ICPs) have provided crucial technical and financial support to SADC's work in this area, but have had limited impact in strengthening SADC's capacity. In 1999, donors providing support to the water sector, together with what later became the Water Division, organised themselves into the *Water Strategy Reference Group* (WSRG). Following the 2006 Windhoek Declaration and the decision to launch a thematic group, the WSRG was reconstituted. In 2007, Germany, through GTZ, was appointed the lead donor in this group. Meetings of the group are co-chaired by the WD and the lead ICP. The WD is responsible for preparing minutes of meetings and to distribute them. It meets regularly twice a year, with extraordinary meetings if and when required. Typically the meeting has two elements, namely a pre-meeting in the afternoon prior to the main WSRG meeting, where donors coordinate through the lead

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<sup>17</sup> See pp. 71-72 in *SADC Infrastructure Development Status Report for Council and Summit, August 2010, Windhoek, Namibia*, Gaborone: SADC 2010.

donor, and the main WSRG meeting during which the WD reports back on progress in implementing the action plan and problem areas.<sup>18</sup>

The WSRG is intended to be a strategic advisory group to the SADC Secretariat and the WD, and acts as an interface for policy and technical dialogue between the WD and ICPs. It also provides input to specific strategic documents and processes. The task of the WSRG is to reduce transaction costs for SADC, as well as for donors, and to improve the quality and coherence of dialogue and support.

In mid-2008, the WSRG, through the lead ICP (GTZ) in co-operation with the SADC WD, carried out a survey of donor support to SADC's water programme. It identified 58 donor-funded programmes and projects in transboundary waters in the SADC region with a focus on river basins. 9 bilateral and 6 multilateral agencies provide funding in four major areas: water governance; water wisdom; urgent water and sanitation needs; and water resources financing.<sup>19</sup>

The SADC action plan provides the framework for mobilising external development finance in the water sector. The main donors also appear to adhere to this framework and seek to provide support to advance the implementation of this plan. Harmonisation beyond this and beyond information sharing remains limited. There is limited joint funding. The main exception is DFID support, which is now channelled through GTZ. Within the significant capacity building support – crucial because of the limited capacity of the WD – donors have failed to agree on a common approach. Currently GTZ is providing funding to the directorate for the hiring of technical advisors, while Danish support for technical assistance is provided on different terms. Despite the political will to do so, donors have so far found that the transaction costs of harmonising such support have been too high.

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<sup>18</sup> See also *Terms of Reference – Water Strategy Reference Group (WSRG)*, unpublished, 7 pages, adopted 6 May 2008.

<sup>19</sup> The first report from consultants was available as *Activities of International Cooperating Partners in transboundary water cooperation in the SADC Region – Results of a mid 2008 survey, Technical Report*, September 2008, commissioned by the SADC Water Division and implemented by GTZ. A short draft executive summary is also available as a separate document. It has since been updated at regular intervals (available from the portal on SADC water, see above).

## 4. Angola, SADC and Infrastructure

How have SADC's infrastructure policies and priorities impacted Angola's reconstruction? Reconstruction in Angola has obviously focused on domestic priorities, but how and to what extent have the regional dimensions played a role? We shall review the status of each of the three sectors discussed above – energy, transport and water.

### 4.1 Energy

Angola is not connected to the Southern African Power Pool or any cross-border or regional transmission grid. It is also a special case in the sense that its own domestic power systems are not interconnected. It has three stand alone domestic power systems and grids – North, Central and South. Plans for transmission lines and interconnectors are in various stages of planning and preparation, with some being commissioned. Once an integrated network has been created, the intention is that it may be connected with the DRC and Namibia in order to facilitate power transfers within the framework of the regional power pool.

Angola's Ministry of Energy and the energy utility company, *Empresa Nacional Electricidade (ENE)*, for a long time considered the Western Corridor project (see above) as the primary vehicle for regional integration. The Westcor-project was, however, terminated in 2009 and officially closed in 2010.

In the South – in the Cunene River basin shared with Namibia – rehabilitation work is being undertaken on all the major dams and associated hydropower structures.<sup>20</sup> Much of the existing infrastructure was damaged or was only partially functional during the war, but work has started in recent years to rehabilitate and/or update it, with almost all the work occurring in the Angolan section of the basin. Three major structures located directly on the river in Angola are expected to be renovated and improved by the end of 2011. The Gove Dam in Upper Cunene and the Calueque Dam in Middle Cunene regulate the flow along the entire Cunene throughout the year to enable optimal power generation downstream at the Ruacana power station. Whilst the weir and inlet structures for the Ruacana plant are in Angola, the power plant itself is in Namibia. The plant has a capacity of 240 MW, with three 80 MW turbines installed, and is Namibia's main source of power generation. NamPower is planning to increase production capacity by adding a fourth turbine.

The Gove Dam is also intended to generate hydroelectric power for local consumption, particularly for the provinces of Huambo and Bié.

The third structure to be completed in 2011 is the Matala Dam, also in Upper Cunene but 225 km downstream from Gove. It was completed in 1954 and renovated in 2001, with further work now being carried out that aims to expand the power plant's production capacity to 40 MW. The hydroelectric plant at Matala is the main source of electricity in southwest Angola. It supplies electricity to the cities of Lubango, Namibe and Tombwa.

There are also plans to increase hydroelectricity generation by building dams in the Upper Cunene between the Gove dam and Matala (Jamba Ia Mina and Jamba Ia Oma). There is additionally potential for a number of smaller hydropower installations along the Cunene basin. Also there is ongoing preparation for the proposed Baynes Hydropower Project, which will comprise a major hydropower plant on the Kunene River downstream of the Epupa Falls and Ruacana with an installed capacity of about 465 MW and an average energy production of 171 MW.

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<sup>20</sup> An informative overview of hydropower development along the Cunene basin is provided by the Kunene River Awareness Kit, available from [www.kunenerak.org/en/default.aspx](http://www.kunenerak.org/en/default.aspx).

Angola is a member of the two important SADC institutions on energy - Southern Africa Power Pool (through ENE), and the Regional Electricity Regulators Association of Southern Africa (RERA) through the Institute for Electricity Sector Regulation in Angola. Angola also participates in the Ministerial Committee that oversees SADC's energy work.

## 4.2 Transport

Angola has developed ambitious plans for the rebuilding and development of surface transport (roads and rail). How is this connected to regional plans and ambitions? A main focus of SADC's work in this sector revolves around 14 transport corridors. Three of these corridors run through Angola. What is the status of these three corridors? We shall briefly review each of them.

### **Trans - Cunene Corridor**

This corridor links the Port of Walvis Bay with southern Angola up to Lubango, a distance of 1600 km. Eventually it will also be linked to the Port of Namibe. There is a railway line from Walvis Bay which extends via Tsumeb to Odangwa in northern Namibia and a container depot there. The construction of the line from Odangwa to the border (Oshikango-Namibia/Santa Clara-Angola) is expected to be completed – after several delays – in 2011. On the Angolan side there are preparations and on-going road rehabilitation of the Lubango–Santa Clara leg with funding from the Angolan Government and the EU.<sup>21</sup>

The Oshikango/Santa Clara border is the main route for road transport of imports from Namibia and South Africa into Angola. There are also some imports from outside the region that come through Walvis Bay and into Lubango and Southern Angola.

There is as yet no one-stop border post development, a corridor MoU transport transit facilitation agreement, or a joint corridor management committee as envisaged by SADC. A study of the feasibility of a one-stop border post was completed in 2007 (funded by Japan), but implementation is pending, due to issues with funding and the establishment of institutional structure. The SADC Secretariat co-ordinated an initial meeting between the two countries in 2009, but there does not appear to have been any moves beyond this. SADC has identified the one-stop border post at Oshikango/Santa Clara and a railway line from Santa Clara as one of its top priorities, but progress has been slow. One may expect that the domestic priorities in Angola – in particular development of the Namib-Lubango corridor may reduce the volume of goods coming through Walvis Bay. However, imports from Namibia and South Africa may increase.

The Walvis Bay Corridor Group – a Namibian private-public partnership – acts as a management committee to facilitate the use of Trans-Cunene and the other corridors from Walvis Bay (Trans-Orange between Namibia and South Africa; Trans-Kalahari between Namibia, Botswana and South Africa; and Trans-Capriivi between Namibia, Zambia and DRC). The main focus and achievements have been related to the other corridors.

### **Lobito – Benguela Corridor**

The port of Lobito is linked with DRC and Zambia and with SADC's flagship corridor – the North-South Corridor (jointly developed with COMESA and the East African Community). It is also the closest sea port for the western part of the DR Congo Copperbelt, including the Kolwezi.<sup>22</sup>

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<sup>21</sup>The status and progress of the Trans-Cunene can also be monitored on the website of the Walvis Bay Corridor Group, [www.wbcg.com.na](http://www.wbcg.com.na).

<sup>22</sup> See also *North-South Corridor. Infrastructure Progress Report. November 2010*, TradeMark Southern Africa (available from [www.trademarksa.org](http://www.trademarksa.org)) and V. Foster & D. A. Benitez, *The Democratic Republic of Congo's Infrastructure. A Continental Perspective*, The World Bank, Africa Department, Sustainable Development Programme, March 2011 (*Policy Research Working Paper* 5602) (available from

The main priority is the rehabilitation of the railway on the Lobito Corridor, the Benguela railway. The railway has been closed since 1975. It is currently being rehabilitated with Angolan and Chinese funding. Officially, the railway from Lobito to the Angolan border with DR Congo is scheduled for opening in 2012. The programme for the rehabilitation of the DR Congo section of the railway remains uncertain, and is likely to be linked to the level of mining activity. There is, however, strong interest in developing the rail line from Zambia to connect with the Lobito-Benguela railway. The African Development Bank has also recently provided funding for the Zambian leg – mainly to facilitate the export of copper and other bulk cargo from Zambia.

### **Malange Corridor**

The programme shall entail mainly rehabilitation of the corridor (rail and road) between Luanda and Malanje and onward to the DRC and ultimately Cabinda for road transportation. The railway from Luanda to Malanje has been completed (2010).

## **4.3 Water**

SADC's main focus and activities revolves around the management of transboundary river basins. Five river basins include Angola: Zambezi, Congo, Okavango, Kunene and Cuvelai. Only one of the basins has a permanent commission (Okavango).

### **Okavango River Basin**

One of the last free flowing rivers in the world, the Okavango River drops from its headwater in the Angolan highlands down to the wide flat plains of the delta in Botswana, crossing Namibia on its 1,100km journey south to the Kalahari Desert. The three Okavango Basin states Angola, Botswana and Namibia signed an agreement in 1994 that formed the *Permanent Okavango River Basin Commission* (OKACOM). OKACOM is a regional, high-level committee that aims, according to its mandate, at managing the water resources of the Okavango River system in appropriate and sustainable ways and that fosters co-operation and co-ordination between the three basin states. Its role is to anticipate and reduce unintended, unacceptable and often unnecessary consequences that occur due to uncoordinated resources development. To do so it has developed a coherent approach to managing the river basin. That approach is based on equitable allocation, sustainable utilisation, sound environmental management and the sharing of benefits.

The commission was not really able to make much progress in its first decade. Southern Angola, and the Okavango basin in particular, was fundamentally a war zone. With peace in Angola, they were able to establish a Secretariat in Botswana (Maun) in 2007.<sup>23</sup>

There are no major Angolan regional projects on the Okavango. The World Bank is providing funding to a major Water Sector Institutional Development Project implemented by the Ministry of Energy and Water. This is mainly focused on provision of water and sanitation to major cities, but it also has major components on institutional strengthening and management. This includes management of the Okavango river.<sup>24</sup>

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[http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166093&entityID=000158349\\_20110317160020](http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166093&entityID=000158349_20110317160020)

<sup>23</sup> More information about the Okavango commission and its projects can be found at the SADC-ICP website on water <http://www.icp-confluence-sadc.org/>. See also the website of the Okavango commission (in English and Portuguese) <http://www.okacom.org/>

<sup>24</sup> See more on the World Bank's water programme, including the project document at <http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=322490&menuPK=322522&Projectid=P096360>

## **Zambezi River Basin**

The Zambezi is the largest river in Southern Africa and its basin is shared by eight states. SADC has played a pivotal role coordinating and harmonising the policies and actions of member states with regard to Zambezi. The regional organisation was also instrumental in efforts to facilitate joint coordination of member states on their water management in the Zambezi basin. In 2004, the negotiations for a multilateral agreement establishing the Zambezi Watercourse Commission (ZAMCOM) were concluded.<sup>25</sup>

The Commission will only come into force when six out of eight countries ratify the Agreement. As of now four countries have ratified it. Angola has signed, but not ratified, the Protocol establishing the Commission. Zambia is the only riparian country not to have signed the agreement. Zambia argues that since most of the basin is in Zambia, and since they contribute more to the Zambezi water than any other country, this natural advantage should be factored in when it comes to water abstraction from the Zambezi River, something not currently considered in the agreement. Meanwhile, an interim Secretariat was established in Gaborone in 2011, and a draft document was prepared to guide the process of operation. The main objective of the Commission is to promote the equitable and reasonable utilization of the water resources of the Zambezi watercourse, and their efficient management and sustainable development.

ZAMCOM seeks to advise member states on the planning, management, utilization, development, protection and conservation of the Zambezi River Basin. The Commission would also advise on measures necessary to prevent disputes between the member states, assist in the resolution of conflicts and will collect, evaluate and disseminate information and data relevant to the implementation of the agreements. The Commission would additionally foster greater awareness for the efficient and sustainable management and development of the Zambezi among the population.

## **Cunene River Basin**

The Cunene River originates in the Huambo Province in the Sierra Encoco Mountains in southwestern Angola. The river flows in a southerly direction to the Ruacana Falls where it turns to the west and proceeds for another 1,050 km to the Atlantic Ocean. The lower section of the river cuts through a deep gorge that starts at the Ruacana Falls. In the 340 km between Ruacana and the Atlantic Ocean, the river falls more than 1100 m, and this important feature provides the Cunene River Basin with a hydroelectric power potential of some 2400 MW.

The two riparian countries, Angola and Namibia, have not established any joint management structure for this basin, but a Permanent Joint Technical Commission bringing together officials from both countries is in place. It builds on the three previous water usage agreements between South Africa and Portugal entered into between 1926 and 1969.

The agreement of 1969 initiated the construction of the proposed Cunene River Scheme. This agreement established a Permanent Joint Technical Commission and made provisions for Namibia to abstract water at Calueque for diversion to the Cuvelai basin in Northern Namibia. The project comprised the Gove Dam to regulate the flow of the Cunene, the Calueque Dam and pump station for the diversion of water into Namibia, the Ruacana weir for the diversion of water into Ruacana Power Station, and the power station itself. Of these infrastructure projects, the Calueque Dam was never completed due to the war in Angola at the time. The total development of the Cunene River includes the multipurpose hydropower and irrigation scheme at Matala in Angola. Namibia can divert water from the Cunene River at Calueque across the catchment to the Cuvelai drainage basin for domestic water supply the domestic and irrigation water demand in northern Namibia.

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<sup>25</sup> Key documents and more information on the Zambezi basin can be found at the SADC-ICP website on water <http://www.icp-confluence-sadc.org/>.

In September 1990, some 6 months after the independence of Namibia, the governments of the Republic of Angola and the Republic of Namibia endorsed and affirmed the previous agreements reached between Portugal and South Africa. The Permanent Technical Commission was reinstated.

Several projects are under way based on the resources from the Cunene basin. This includes several hydropower projects (see the section on energy above) and also several water and sanitation projects.<sup>26</sup> At the regional level, this includes a three-year programme to provide a potable water supply and a proper sanitation system in north-central Namibia and southern Angola's Kunene province. This programme is underway under the auspices of the Commission. The project has two main components: water abstraction in Angola from the Calueque Dam, and a conveyance system in Angola and Namibia. Implementation is expected to commence in 2011 with funding from Germany, Angola and Namibia.<sup>27</sup>

### **Cuvelai River Basin**

The Cuvelai basin is located in the north-central part of Namibia. It forms a delta that drains southern Angola and brings water to Namibia, and gradually converges into the Etosha Pan. There are no agreements or joint management structures between Angola and Namibia related to this basin.

### **Congo River Basin**

The Congo, with its catchment area of 3,800,100 square kilometres, is the principal river of Africa and the second largest in the world. Nine countries, including Angola, are in possession of significant portions of its territory. The basin consists of the Congo river itself, its tributaries of Oubangui, Kasai, Sangha, Kuilu, Kwango, Ruki, Lamami, Lulonga, Amwini and smaller rivers.

In 2003, four countries (Democratic Republic of the Congo, Cameroon, Republic of the Congo, and the Central African Republic) ratified an accord setting up the International Commission of the Congo-Oubangui-Sangha Basin. This was the first step in strengthening cooperation in the areas of shipping and water pollution control. Also in 2008, the Lake Tanganyika Authority was established by the governments of Burundi, Democratic Republic of Congo, Tanzania and Zambia.

Angola is not yet taking part in the emerging and evolving co-operation around the Congo river basin.

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<sup>26</sup> For a full review of ongoing projects in water and sanitation see the Kunene River Awareness Kit, available from [www.kunenerak.org/en/default.aspx](http://www.kunenerak.org/en/default.aspx).

<sup>27</sup> See the report on pp 66-69 in *Namibia Engineering 2011/201*. It is also available from the SADC-ICP website on water at [www.icp-confluence-sadc.org/](http://www.icp-confluence-sadc.org/).

## 5. Findings and Challenges

A main observation from this review is that the actual cooperation between SADC and Angola in infrastructure development is very limited. Cross-border projects between Angola and neighbouring states are few (and mainly confined to Angola and Namibia and the trans-Kunene corridor and the Kunene River basin). There is no significant resource mobilisation for these projects from the SADC side. SADC may have a stronger influence in contributing to policies and planning within Angola on the role of regional co-operation, but this is more difficult to assess. In particular, SADC provides the institutional framework for policy harmonisation and defines the parameters for approaching regional co-operation.

There are some obvious explanations for this situation. On the SADC side there is *de facto* limited focus and attention on post-conflict reconstruction. A main focus for SADC has therefore been on the southern and eastern part of the SADC region, with much less attention paid to Angola, DRC and the north-western part. Nor are these two countries part of the SADC free trade zone – the main priority of the organisation. Furthermore, SADC itself has limited and decreasing capacity to take the lead in project planning, preparation and implementation. This is left to subsidiarity organisations (such as the Power Pool or river basin organisations) or member states. SADC's primary objective is to facilitate policy harmonisation and development in the region, and to provide assistance to member states.

On the Angola side, the main focus and priority is – and has to be – domestic reconstruction and development. There is still a long way before Angola can fully benefit from and contribute to regional co-operation and integration. However, the benefits from closer co-operation with its neighbours and SADC may quickly become evident. This is especially the case in relation to some of the infrastructure challenges discussed above.

Shared management of transboundary river basins is also becoming increasingly important in order to defuse tensions, resolve conflicts and maximise benefits in a water-scarce region. With several of the major basins originating in Angola, the country has to participate and play an active role in the continued development of river basin organisations.

Likewise, increased mining in DRC and Zambia will also increase the demand for transport between the SADC North-South corridor and corridors through Angola. This has already been indicated with the growing interest from Zambia in using the Lobito-Benguela corridor for export of its copper.

SADC's greatest impacts and achievements in the region may have been to help defuse tensions between member countries, to promote joint approaches to common problems and to facilitate sharing of experiences and harmonisation of policies. This, in turn, may pave the way for deeper economic co-operation. The increasing economic strength of Angola suggests that the country will increasingly be in a position to more actively contribute to and benefit from membership in the organisation.



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**INDEXING TERMS**

Angola

SADC

Infrastructure

Energy

Infrastructure has remained a main focus for SADC in its efforts to advance regional cooperation in Southern Africa. Development of Angola's infrastructure is also a key priority for the Angolan government in the reconstruction and rebuilding of the country. Angola is a member of SADC, but what are the links between national and regional approaches to infrastructure development? The paper takes stock of this, summarises main policies and efforts to promote infrastructure, identifies key projects involving Angola and highlights future challenges. The focus of the paper is on energy, transport and water.