CHALLENGES TO REGIONAL INFRASTRUCTURE DEVELOPMENT

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Introduction

This report is a survey of the on-going challenges to the development and implementation of regional infrastructure projects in Southern Africa with a specific focus on the North-South Corridor. The report incorporates both information and analysis based on consultations with approximately 50 stakeholders working on or associated with regional infrastructure development in Southern Africa as well as with individuals and organisations that can provide further analysis and perspective to the context under which infrastructure is being developed in the region and on the continent.¹

The report also aims to incorporate relevant findings and recommendations stemming from a review of recent literature and initiatives that seek to identify and propose recommendations of ways to address the challenges and barriers to infrastructure development. There has been a proliferation of studies and investigations of the challenges to infrastructure development both generally and specifically to Africa. This report will not attempt to summarise or critique the enormous body of work about infrastructure development in Africa. Instead it will focus on the findings from the interviews and literature review that are relevant to the context in Southern Africa. The report does not undertake a specific examination of the individual infrastructure sectors. Instead it uses examples from sectors such as transport and power to highlight and put forward general issues and recommendations.

This being said, some important initiatives worth mentioning include the work of the Infrastructure Consortium for Africa (ICA) and the African Infrastructure Country Diagnostic (AICD) both of which have already undertaken extensive analysis on the situation and challenges of infrastructure in Africa both generally and at the regional level. The G20 identification of regional infrastructure as an area of focus for the most recent meeting in November 2011 has meant that countries and regions around the globe have come together to share best practices, to identify on-going impasses and to put forward recommendations. The consultant studies for the Program for Infrastructure Development in Africa (PIDA) are in draft format and are seeking to prioritise regional and continental infrastructure projects in Africa based on an analysis of expected changes in Africa's demographic and economic structure over the next 30 years. Within all of these studies, there are countless recommendations some of which have already been taken up and are at the concept stage or are at some phase of implementation. A number of interviewees have also shared their experiences and concerns with the current state of infrastructure development on the continent and have, in some cases, recommended areas for improvement or areas in need of further investigation. It is hoped that those recommendations noted in this report represent additional points worthy of further exploration.

The report begins by providing an overview of some of the key initiatives that have been undertaken in Africa. It also includes an analysis of the political and economic context under which infrastructure development is taking place along the continent and within Southern Africa with a view to establishing the argument, relevance and challenges to promoting regional infrastructure development. The context includes the relevant reference to Africa's on-going drive for regional

¹ A number of these people asked that their comments not be specifically referenced so the majority of references will be generalised rather than directly attributed to a person.

integration both at the continental and sub-regional level, the implications of the emergence of the Tripartite Agreement and its focus on corridor development. It also includes an examination of the specific nature and challenges for regional integration in Southern Africa with a view to understanding how challenges with the negotiation and confirmation of regional integration writ large have equal relevance in understanding why and where there may be resistance or challenges to making progress on regional infrastructure development. The purpose is to connect this political and economic context to the on-the-ground efforts and challenges to initiate and implement regional infrastructure programming in southern Africa.

For regional programming in Southern Africa, in particular, the report includes an examination of the corridor approach to regional infrastructure development since corridors are perhaps a more realistic way of understanding how incrementally addressing the bottlenecks causing infrastructure gaps between neighbouring countries represents essential steps in knitting the entire region together as a physically-connected whole. The report highlights the North-South Corridor in part because of the significant progress it has made thus far in addressing the challenges at both the soft and hard infrastructure level, and because it is considered the central corridor for commerce and the movement of people in Southern Africa

Since the High-Level Panel (HLP) on Infrastructure has looked at and put forward recommendations to improving progress on the development of bankable projects including Project Preparation Facilities (PPFs), the report also looks at some of the on-going concerns and challenges at the planning or preparatory stage. In particular, the second part of the paper aims to drill down into the specific challenges related to preparing infrastructure projects for bankability and for submission to the tender process. It also investigates why there continue to be challenges with PPFs as a principal means of supporting the preparatory phase.

The report also includes an examination of some of the challenges to financing infrastructure such as securing and coordinating the multiple sources of funding both for project preparation and for infrastructure implementation as well as selecting the appropriate financing instruments. The HLP has put forward a recommendation to improve the enabling environment for the private sector so an examination of their role will also be included. The paper acknowledges the findings of the AICD that there continue to be financing gaps but also notes that the challenges in securing financing are also related to the terms and conditions for financing, the availability of financing mechanisms as well as the overall challenges with developing bankable projects that are capable of engaging the interest of potential financiers as well as making it through a legitimate and viable tendering process.

An examination of the role of emerging powers as financiers of infrastructure is of relevance to understanding how their presence is influencing and changing the nature of infrastructure development on the continent. It is also changing the environment for traditional players including bilateral and multilateral donors and development finance institutions in areas such as financing, project preparation as well as the conditions put forward for preparing and implementing projects such as environmental and social considerations. Whereas emerging economies are presently focusing principally on national infrastructure development through bilateral negotiations with individual countries, their activities are also having an impact on expediting the interconnectedness of infrastructure among countries in the region. There have also been some discussions and activities that are demonstrating that emerging partners are interested in playing a greater role both in terms of regional infrastructure development as well as the building of infrastructure that goes beyond the objective of expediting the access of natural resources towards making a contribution to economic and social development. The DBSA has also signed a Memorandum of Understanding (MOU) with China and is South Africa's representative in the BRICS Banking Mechanism. As such, having some additional understanding of the dynamics and role of the BRICS countries on infrastructure development may assist with determining their approach to forging relationships through these new international partnerships.

Given the regional theme, the report will also examine the specific challenges related to financing for regional infrastructure. The HLP has demonstrated an interest in tackling support to regional infrastructure as has the Tripartite process through proposals such as the creation of a regional bond market. Regional development banks also have an important role to play and are strategically positioned to do so because of being based in the region where they are able to develop the kind of relationships needed to tackle some of the hardest issues related to regional infrastructure, namely coordination and fostering regional buy-in.

The final part of the report will look at the role of Development Finance Institution (DFI) operating in South Africa and Southern Africa. Interviewees put forward recommendations, some of which were conflicting and contradictory, about the role that organizations such as the DBSA should play and the activities that they should undertake. The contradictions or conflicting perspectives seemed to be shaped in part by a lack of understanding of the role of a DFI as well as expectations of the gaps and complementary role that some believed a DFI should play.

Part I Overview of Infrastructure Development

Global Context

Following a period of focus and investment on softer issues such as health and HIV/AIDS that have been principally championed under the rubric of the Millennium Development Goals (MDGs), infrastructure is now re-emerging as a key area of focus. There is a renewed recognition that implementation and achievement of the MDG targets depends upon economic growth linked to the existence of sound and efficient infrastructure that is properly maintained. To implement Africa's vision of an integrated continent free of poverty, the development and delivery of goods and services across borders in the form of intra-regional and international trade is inextricably linked to the existence of infrastructure that flows smoothly from North to South and East to West of the continent.

Globally, the November 2011 G20 High-Level Panel presented a draft report that calls for an increased focus on implementing measures to overcome the challenges of developing bankable projects as well as proposing ways to promote greater investment in regional infrastructure programs. Whereas external financial commitments to African infrastructure projects rose by 40% to \$55 billion in 2010, the AICD has noted that financial gaps continue to exist and cannot be filled by public sector financing alone. As a result, the High-Level Panel is also aiming to renew interest in finding ways to engage the private sector as a potential funder, most notably through creating an enabling environment as well as addressing capacity gaps and bureaucratic bottlenecks linked to the development and implementation of Public Private Partnerships (PPPs). Of equal relevance is the recognition that the global political and economic stage is in the process of transformation. Events such as the crisis within the Eurozone as well as the emergence of new and strengthened players such as China, Brazil and India are changing both the financial terms and the overall conditions, purpose and rate at which infrastructure is being developed in Africa.

The identification of Africa as the last frontier for accessing raw materials and agricultural land has also been a driving force for infrastructure development. Principally aimed at building roads, rail and power stations needed to drive the extraction and delivery of raw materials to external markets, infrastructure development for this purpose has tended to target countries that are identified as sources of raw materials or land. Countries that offer routes along the way to reaching the coastal ports or represent steps along the way for power or pipe lines are also targeted for infrastructure development since many of the resources are located in land-locked countries. Within this context, the roads and rails linked to resource extraction are generally located along the main trunk routes meaning that the benefits do not always accrue to the larger population. In some cases, too, their usage is exclusively linked to the industry that has financed their construction.

African Context

On the continent, a number of initiatives have jump started the increased focus on infrastructure. These include the Presidential Infrastructure Champion Initiative (PICI), the World Bank African Infrastructure Country Diagnostic (AICD) Study and the Program for Infrastructure Development in Africa (PIDA). By undertaking an in-depth analysis in the areas of water, energy, transport and communications, the AICD study, in particular, has played an important role in drawing attention to the challenges of inadequate infrastructure as well as the potential impacts and economic losses of failing to develop and maintain infrastructure in the short, medium and long term. The provision of

numerical descriptions of the annual needs and gaps of \$93 billion and \$31 billion respectively has played an essential role in raising alarm bells about the urgent need to engage relevant stakeholders within government and the private sector in order to address the issues raised and to identify ways to meet the funding gaps. For government, in particular, the study has identified the potential to institute cost-saving measures of approximately \$16 billion per year by addressing a number of inefficiencies linked to the development and delivery of infrastructure in Africa.

As a continent united under the African Union (AU), South Africa is seen to be leading the continental charge on infrastructure development with President Zuma stepping forward as the Champion of the Presidential Infrastructure Champion Initiative. As the sole interlocutor for Africa at the G20, government engagement on the High-Level Panel on Infrastructure represents another way for South Africa to promote an increased focus on infrastructure development on the continent as well as to enlist the support of other G20 countries in supporting infrastructure development in Africa through financing and through the transfer of capacity and know-how. With South Africa's recent announcement that it will take the lead on trade and infrastructure through the IBSA (India-Brazil-South Africa) platform for emerging partners, it will no doubt be looking for ways to engage with and learn from India and Brazil's model of infrastructure development as fellow members of the platform. South Africa's recent ascension to the BRIC platform will also increase its access to and relationship with China which is now seen as the key driver of infrastructure on the continent.

For regional integration to progress, soft and hard infrastructure represents an essential element to ensuring that goods and services, including the transport of labour, is able to travel smoothly and efficiently across borders. In 2010, the 16th African Union Heads of State and Government Summit served as the launching pad for the preparation phase of the Program for Infrastructure Development (PIDA). Led by the African Union Commission (AUC), the African Development Bank (AFDB) and NEPAD's Planning and Coordination Committee (NPCA) and building on the findings of the AICD, this continent-wide initiative aims to develop priority regional and continental-integrated infrastructure networks and services in four key sectors: transport, energy, Information and Communication Technology (ICT) and trans-boundary water. Scheduled to be released early in 2012, PIDA aims to bring together or merge various infrastructure initiatives such as the NEPAD Short-Term Action Plan (STAP), the AU Infrastructure Action Plans and the various REC-level initiatives into one coherent plan for Africa.

Sub-Regional Context

For most of Sub-Saharan Africa, the Tripartite Agreement which brings together and aims to rationalize the three Regional Economic Communities (RECs) covering eastern and southern Africa through the promotion of trade and infrastructure development offers a new opportunity to advance the regional integration process. By uniting 26 countries or approximately two-thirds of the continent under one agreement, it is hoped that the Tripartite Agreement will reinvigorate political engagement for regional infrastructure development. The expectation is that the Tripartite process will mobilize politicians and their technocrats to allocate additional financial and institutional support for the three RECs such that they can effectively play their roles. This includes the need to move beyond the signatures of protocols and treaties to the implementation of political obligations as well as ensuring that the necessary financial resources and capacity are provided or, where necessary, developed at the national level.

For southern Africa, the growing focus and support for addressing both the soft and hard infrastructure challenges along corridors such as the North-South Corridor is producing concrete results through the introduction of One-Stop Border Posts (OSBPs), the GIS mapping of the status of transport corridors as well as the identification of financing both for the preparation and implementation of road, rail and power projects. The lessons learned from these preliminary initiatives have the potential to form the basis for best practices for future project development and implementation along the North-South Corridor (NSC) and other corridors in the region and beyond. While the NSC is being addressed incrementally through addressing the hard and soft infrastructure barriers between two or three countries, one of the key findings is the necessity for all the countries to view the NSC as one entity that will link the seven countries within the region, namely to view this is an integrated regional initiative which will also involve a role for SADC as a coordinating body.

Micro Level Context

While the good news is that there is a renewed interest in infrastructure development in Africa, perhaps the greatest challenge and most important asset emerging from the analysis of interviews and literature is located at the micro or what is more appropriately referred to as the human level. A number of banks and private sector representatives have repeatedly confirmed that there is funding available for infrastructure development in Africa. A principal challenge remains, however, in marshalling and gaining long-term assurances that the politicians who have signed the regional protocols or have conveyed their commitment to engage with a neighbouring country to develop a regional or corridor infrastructure project, will stand by and demonstrate their commitment . As the president of the African Development Bank recently noted at the 18th African Union Summit: "Lack of political will is slowing down implementation of vital regional infrastructure projects in Africa." Of outmost importance is sending the necessary signals both to public and private sector stakeholders, building the capacity and, where necessary, managing the process through an identified champion. Of equal importance is instilling power in the hands of relevant technocrats within and among the ministries involved in a particular infrastructure project to actually be able to take a decision. One interviewee cited a two-year delay in moving forward on a project due to the inability of the identified government representatives to give the go-ahead on the project.

The Maputo Corridor has been repeatedly heralded as the success story corridor for infrastructure development on the continent. The key success factors identified include political will with former President Mbeki personally shepherding the initiative to its fruition, a competent and committed set of bureaucrats and engagement of the private sector based on terms that conveyed a level of trust and commitment to understanding the terms under which the private sector needs to operate. The Walvis Bay Corridor is based on the Spatial Development Initiative that aims to link economic growth to transport development and is also emerging as a success story both in terms of being able to forge the kind of cross-border relationships with countries that is needed to move forward on complex regional projects as well as fostering positive relationships with the private sector in the building of PPPs.

The failure to effectively coordinate whether at the regional level or within and among relevant government departments can also be linked to human issues such as self-interest, distrust or concerns about ceding power or developing a level of dependence to a broader external constituency. Other human challenges include the inevitable resistance to change that initiatives such as a One-Stop Border can instill in both the truckers travelling across the borders, the people

working at the borders as well as the countless formal and informal industries that have established themselves based on an expected speed and level of efficiency that the OSBP is seeking to improve. Rent seeking along the border or within the private or public sector also represents a human vice that is difficult to overcome.

PART II Infrastructure Development in Africa

Continental Perspective

Since the establishment of the Organization of African Unity in 1963, Africa has been promoting the notion of an integrated continent to address the fact that many of its countries are simply too small and land-locked to operate as individual economies. Within the SADC region, countries such as Malawi, Mozambique and Lesotho encompass less than 4% of the region's overall revenue. As such, integrating markets under one regional configuration has the potential to provide new opportunities for growth. Regional integration through the delegation of coordinating powers to the African Union and its sub-regional equivalents, the Regional Economic Communities (RECs), represents an essential way to marshal its physical, financial and political resources as a united continent. The AU has been gradually building momentum around this vision in tandem with the RECs. In particular, the African Union Commission, as the organ responsible for coordinating, harmonizing and providing leadership for the continent's economic and social development and physical integration, has committed itself to addressing the gaps in infrastructure throughout the continent.

The lack of sufficient infrastructure in Africa is widely recognized. While the AICD study is not the first effort to draw attention to the infrastructure deficit in Africa and its implications for economic growth, it and the NEPAD Short-Term Action Plan (STAP) have both played an important role in raising awareness about the deficiencies and their impacts on economic development. The NEPAD Short-term Action Plan was meant to regain the momentum by preparing a short-term plan for the prioritization of projects on the continent. To date, however, limited progress has been made on implementing STAP projects and in closing the infrastructure gap.

Indeed, one of the main concerns about infrastructure development in Africa is the slow pace of progress. As the AICD study has noted, on just about every area that relates to the coverage of infrastructure, African countries have fallen behind their peers in other parts of the developing world. Whereas Africa started out with an infrastructure situation that was similar to countries in South and East Asia, by 2000 Sub-Saharan Africa had failed to keep up with the progress made by its fellow post-colonial Asian countries. (Foster, V. (2008) p. 3)

Presidential Infrastructure Champion Initiative

The lack of progress from awareness raising to action created the impetus for the Heads of State to take a decision at the July AU Summit in Kampala 2010 to fast track the regional infrastructure development process by proposing that projects be championed by Heads of State. Known as the Presidential Infrastructure Champion Initiative (PICI), a concept note was put together and selection criteria were identified for seven champion projects². The identified projects must be aligned to

² The seven projects include: 1. The Missing Link of the Trans-Sahara Highway project and the Optical Fibre Project -Algeria; 2. The Kinshasa-Brazzaville Road Rail Bridge Project – DRC; 3. Water management, River, Rail and Transport Infrastructure projects – Egypt; 4. The Nigeria-Algeria gas pipeline project – Nigeria; 5. ICT

other initiatives as well as to PIDA and to the NPCA. To mitigate concerns about potential delays, the PICI has also imposed a tight timeline of five years for all projects to be implemented.

As the Champion of the overall initiative, President Jacob Zuma is expected to report to the African Union every six months on progress made on the initiative. The most advanced is the Trans-Sahara Highway and the fibre optic cable project where financial commitment has been secured. South Africa has agreed to champion a road and rail project along the North-South Corridor. Whereas other countries have moved forward to the design or implementation stage, South Africa and Egypt are still at the identification stage. Although some of the people interviewed see PICI as a landmark initiative, until concrete outcomes are observed, there continues to be some measure of scepticism as to the potential of this initiative to achieve its expected outcome of fast tracking regional infrastructure development in Africa.

Program for Infrastructure Development in Africa

The Program for Infrastructure Development in Africa (PIDA) represents the latest attempt to marshal the physical and financial resources by mapping out a short, medium and long-term vision of Africa's regional infrastructure needs and priorities. PIDA is specifically aiming to facilitate increased regional integration in Africa through improved regional and continental infrastructure. In particular, PIDA will establish a framework for the development of regional and continental infrastructure in four sectors (Energy, Transport, Information and Communication and Water Resource Management) based on a development vision for Africa. It will establish an infrastructure development programme over a time horizon of up to 2030 using the strategic framework and sector policies. It will also prepare an implementation strategy and processes including a priority action plan. (PIDA TORs, p. 4)

PIDA came about in part due to disappointment at the lack of implementation of the STAP projects. What makes PIDA different is that it offers a priority action plan, an implementation strategy and a funding strategy. PIDA is based on an assumption that Africa will experience an average GDP growth of 6.5% over the next thirty years and is based on modelling of an anticipated population growth and movement over the same time period. According to some people interviewed, where PIDA falls short is in moving beyond existing projects that were identified through STAP and other prioritization exercises to the identification of new and equally viable projects. Indeed, on the issue of viability, there was also some level of scepticism expressed as to whether PIDA has effectively prioritized projects to take into account many of the other challenges and externalities that have been identified through other exercises, some of which are analysed below.

Tri-Partite Perspective – Linking Southern and Eastern Africa

Overlapping memberships of the Regional Economic Communities has long been seen as a barrier to effective regional integration on the continent. In order to deal with some of the contradictory and duplicative implementation decisions linked to the overlapping memberships in southern and eastern Africa, Member States of the three principal Regional Economic Communities based in southern and eastern Africa (the East African Community (EAC), the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA)) agreed to

Broadband and Link to Fibre Optic Network into neighbouring states – Rwanda; 6. Dakar-Ndjamena-Djibouti Rail and Road Project – Senegal; 7. The North-South Corridor Rail and Road Projects – South Africa

collaborate on the establishment of a Tripartite process. The formalisation of this process in 2006 represented an important step forward in uniting the RECs under one roof.

In 2010, the three RECs endorsed a landmark roadmap for the establishment of the Grand Free Trade Area (GFTA) among 26 member states of southern and eastern Africa. Worth \$1 trillion, implementation is expected to begin in 2012. More specifically, the movement of goods is expected to be duty and quota free by 2014. If all goes well, services and business people will move freely beginning in 2016 culminating in an Africa-wide economic and monetary area by 2025. According to a recent article in the *Mail and Guardian*, supporters such as Rob Davies, South African Minister of Trade and Industry, are hopeful that the Grand FTA will dramatically increase intra-regional trade. At the same time, Minister Davies is realistic about the formidable challenges including "undiversified and underdeveloped production structures, inadequate infrastructure, on-going challenges with non-tariff barriers and a lack of trade governance structures."(*Mail and Guardian*, Nov 25 to December 1, 2011. p. 42)

While the Tripartite initially concentrated on coordinating and harmonizing programs in trade and infrastructure, measures are already in place to integrate other relevant regional issues such as food security and agricultural development. The merger has provided positive results in terms of marshalling the energies and collaborative leadership of three RECs which, at this stage, are demonstrating a strong commitment to working together towards the integration of two-thirds of the continent under one Free Trade Area. At the infrastructure level, interviewees have reported that the need to coordinate at the inter-REC level has resulted in a renewed interest and motivation to ensure that each of the RECs is at similar stages of development in terms of the planning and implementation of regional infrastructure projects. Indeed, the Concept Note for the SADC Infrastructure Master Plan specifically acknowledges the benefits of the Tripartite in injecting new energy into the development of SADC's own infrastructure plan.

Southern African Perspective – SADC Engagement on Infrastructure Development

Within southern Africa, the SADC Secretariat has determined that approximately US\$20 billion is required to support trade facilitation measures and to upgrade regional infrastructure, especially roads, rails and ports.³ There is also a growing realization that instituting trade liberalisation measures is not the only answer to ensuring that a solid foundation is built to facilitate much higher levels of intra-regional trade. To date, Africa accounts for less than 3% of global trade. A mere 10% of Africa's trade is with other African countries. In the same vein, only 11% of SADC's trade is with other SADC countries whereas trade among European Union countries is 60%. Most agree that an essential element for stimulating regional integration is a vibrant and sustainable transport network. SADC's plans for regional economic integration, most notably through the harmonisation of Member State monetary and fiscal policies, are considered ambitious. Its aim of establishing a Customs Union by 2010 has been deferred to a later date in order to allow the full implementation of the Free Trade Area (FTA) suggesting that obstacles remain to be overcome including the completion of key regional infrastructure projects.

³ Targeted development corridors include the Limpopo Corridor, the Beira Corridor, the Trans-Kalahari Corridor; Dar es Salaam Corridor; Shire Zambezi Waterway; Nacala Development Corridor; Maputo Corridor; North-South Corridor; Walvis Bay Corridor; Mtwara Development Corridor; Western Power Corridor and Malanje Corridor.

SADC Heads of State flagged the absence of sufficient funding for regional infrastructure as a fundamental barrier to the advancement of regional integration. In response to directions given by SADC Heads of State and with a view to linking up with the fast tracking of the Tripartite process, SADC has therefore embarked on a rapid process to produce a Regional Master Plan for Infrastructure Development aimed at mapping out and assessing the conditions for the development and implementation of priority regional infrastructure projects in southern Africa. The decision to develop a Regional Master Plan was therefore viewed as a means to enable the coordination and harmonisation of all regional infrastructure development within the SADC region. The fact that it is being driven by Heads of State also sends a potentially strong signal that political commitment for this important initiative is also present.

The priority sectors within the Master Plan include: 1) transport; 2) energy; 3) telecommunications; 4) water infrastructure; 5) metrology; and 6) tourism. At the same time, attention is being redirected to the countless non-tariff barriers (NTBs) that are presently impeding trade within southern Africa. Within the SADC region, NTBs represent one of the principal barriers to the smooth movement of goods and services such as poor infrastructure at border posts as well as a number of people-related barriers including rent seeking and resistance to change. To deal with these barriers, one of the principal activities currently being funded is the development and implementation of One-Stop Border Post (OSBP) Projects. Funded principally by Trademark Southern Africa (TMSA), a UK-funded program, pilot projects such as the OSBP at Chirundu offer an excellent opportunity to institute incremental changes as well as to learn about and deal with unanticipated challenges on an iterative basis. Key elements for OSBPs include: 1) a legal and regulatory framework; 2) an ICT program; 3) the institution of procedures; 4) hard infrastructure; and 5) political commitment.

The final element, namely political commitment, represents the greatest on-going hurdle to addressing the micro issues at the borders as well as to ensuring the fast tracking of regional integration. With a combined population of approximately 260 million people and a regional market worth US\$430 billion, the potential to expand the economy of southern Africa is significant. To achieve this objective, however, the Member States must work towards the development of an efficient, seamless and cost-effective cross-border transport network. Donald Kaberuka, the President of the AfDB has noted in his recent speech to the AU in February 2012 that a lack of intercountry cooperation rather than funding was often the main barrier to the launch and completion of critical regional infrastructure projects. At the same time, Member States are beginning to communicate their commitment to regional integration by instituting measures at the national level. Further steps are, however, still needed such as empowering the relevant people within their respective countries to address the measures that cause delays at border posts as well as facilitating the construction of cross-border infrastructure in order to facilitate the free movement of goods and services from one border to the next as well as between borders.

Member States continue to send mixed signals in terms of their interest and commitment to regional integration. SADC Member States signed the Protocol on Transport, Communications, Meteorology and Trade Protocol in 1996. However, since that time, limited progress has been made in terms of implementing the kinds of activities and projects that would enable citizens within the SADC region to reap the benefits of regional integration. Whereas the Protocol represents the first step in defining areas where Member States can co-operate, Member States will also need to ensure that the appropriate institutions are in place at the national and regional level. To achieve the objectives

of regional integration, it will also be necessary to provide support such that these institutions are strong enough to facilitate the rationalisation and harmonisation of macroeconomic policies as well as to institute concrete measures within each country

As an institution, SADC deserves credit for achieving some level of progress in integrating its economic area and improving its international competitiveness. As an institution that has traditionally been viewed as weak, a recent achievement has been the passing of a rigorous four pillar due diligence assessment that means that it can now qualify for direct funding from the European Union. On some fronts, Member States have made progress in moving beyond protocols and treaties towards the implementation of their commitments. Inevitably, there are pressing and competing issues such as peace and security that can also side track a focus on the broader regional integration agenda.

To date, however, on the trade facilitation front, very few measures have yielded results. As TMSA has learned through its analysis and experience working on addressing challenges along the North-South Corridor, key challenges that still exist include: high transaction costs in areas of transport and communications; high charges and delays at border posts; as well as long customs and administrative delays at border posts. On the institutional level, there continue to be challenges with SADC in areas such as absorptive capacity that are potentially linked to human resource shortcomings such as the quota approach to recruitment. This can, in some instances, make it more challenging to recruit staff on timely basis as well as to ensure that the necessary qualifications are met for particular positions. Because of the regional mandate, staff are also under pressure to undertake frequent travel to meetings in other countries of the region thereby making it more difficult for them to meet all of their internal commitments.

At the national level, commitments to regional issues can sometimes be hampered by competing national priorities and the need to manage and prioritise limited financial budgets resulting in varying degrees of commitment depending, in part, upon the country context. In cases where Heads of State are properly prepared by representatives from their relevant ministries to engage and discuss the substantive issues associated with regional integration, significant progress can be made.

PART III Regional Dynamics in Southern Africa

Understanding dynamics within a region can be important to identifying and overcoming some of the fundamental barriers to regional integration. In the case of SADC, the region is composed of 15 countries with varying degrees of economic development. Member countries include Angola, Botswana, the Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa and the Seychelles. A number of countries such as Malawi and Zambia are small and land-locked. Others, such as Mauritius and Seychelles, are considered Middle Income Countries (MICs), but face their own geographic interests and challenges related to being Small Island Developing States (SIDS). For the Least-Developed Countries (LDCs), challenges exist both in terms of securing the necessary financing and capacity to move forward on the regional integration agenda as well as having the capacity to diversify their economies such that intra-regional trade has the potential to be truly viable. Industrialisation within the context of LDCs is equally elusive.

These shortcomings can inevitably promote a sense of insecurity when interacting and seeking opportunities to engage with the Middle Income Countries within the SADC region that are more advanced economically, industrially and in terms of overall capacity to institute regional integration programming. SADC is technically composed of a number of MICs (Botswana, Namibia, Mauritius, Seychelles and South Africa). However, it is also important to note that South Africa's presence as the only emerging power as well as being a major base for industrialisation with strong financial and physical infrastructure as well as a thriving private sector operating in the region makes it difficult to downplay its regional dominance as well as to assuage the insecurities of the smaller economies. Its role as the African interlocutor on the G20 and as one of two African representatives on the United Nations Security Council further reinforces this position.

Formerly known as the Southern African Development Coordination Conference (SADCC), the institution's historical foundation also shapes the specific nature and interaction of its member countries. Formed in 1980, SADCC's original mandate was to oppose the actions and impacts of the pre-1994 apartheid regime in South Africa. Known as frontline states, SADCC's foundational members first came together for political and ideological reasons in contrast to the economic and trade foundations of a REC like COMESA. With this historical origin in mind, one interviewee who was involved in the newly-constituted SADC recalled that following the end of apartheid, South Africa, as the new member, made a concerted effort to engage its fellow Member States as a common friend working towards the objective of regional integration. As a new country it also sought to show its commitment to SADC by sending professional resources and by actively participating at meetings in the early post-apartheid days. South Africa joined at a time when the SADC Secretariat was centralised and agreed to host the Finance and Investment portfolio putting its effort into representing and advancing this sector. On the trade side, they also made a significant contribution to progress on the Trade Protocol.

Despite these efforts, representing 65% of Africa's GDP and being frequently seen as the key interlocutor for the continent, South Africa continues to face particular challenges in terms of unlocking the shackles of a perception that it is the "big brother" both within the SADC region and, to some degree, on the continent writ large. One perception of neighbouring countries is that South Africa, both its government and the private sector, chooses to move forward on a particular project in the region because they clearly perceive it will be of direct benefit to them. Some representatives from neighbouring countries who have observed South African nationals in their own countries have noted that the behaviour of some political and private sector representatives can at times demonstrate a haughty and intractable attitude that further reinforces this perception.

Some interviewees also reported that South Africa is either absent or not engaging in SADC meetings thereby communicating that SADC and the regional integration agenda is no longer important or is competing with more pressing national issues. Ironically, others reported the exact opposite perception, namely that South Africa is perceived to be pushing the regional integration agenda in the form of a neo-imperialist that is seeking to dominate the region both politically and commercially. It is clearly unfair to paint all South Africans with the same brush. However, some people hypothesise that all of these perceptions combined with the acute imbalances between the SADC countries may have contributed to making it more challenging for South Africa as a Member State to enter into negotiations both at the regional and cross-border level as well as to play a key role in advancing the regional integration agenda.

Indeed, no matter how hard South Africa tries to down play its position in the region and on the continent, it will inevitably be judged because of its economic and industrial might. A representative of the South African government who sits on the Committee for the SADC Project Preparation Fund has noted that South Africa is often caught between a rock and a hard place when it comes to negotiating or seeking to collaborate with other countries. If it downplays its presence on a committee, it can be accused of inaction. Whereas if a South African representative puts in a lot of energy, he or she may be judged as someone who is seeking to drive the process. Given this dilemma, his approach is to remain low key by allowing the process to unfold and awaiting the appropriate opportunities to be consulted or to provide input.

Whatever the reason for these persistent viewpoints, it may be worthwhile for South Africa to undertake further study and interviews with relevant stakeholders in the SADC region to determine sources, causes and possible solutions to dealing with these ongoing perceptions. Another recommendation is for the South African government and private sector to look for opportunities to develop possible programming aimed at capacitating and strengthening their weaker neighbours in a bid to foster more positive and collaborative relationships with neighbouring countries. Programming through trilateral (South-South) cooperation and the formation of a development agency represent important first steps for South Africa in addressing the capacity and development challenges of its neighbouring countries. In a recent statement from the Department of International Relations and Cooperation, Minister Maite Nkoana-Mashabane also sent a positive signal about South Africa's interest in engaging on a regional and continental level by urging enhanced cooperation between the UN Security Council and sub-regional bodies in Africa. However, some are of the view that more may still need to be done to forge a stronger bond with other African countries. In the case of the private sector, the identification and implementation of programming that would build the capacity of local suppliers to be able to sell their goods to South African firms that have set up in their respective countries offers one way to send a positive signal.⁴ For the public sector, one interviewee recommended that the South African government ensure that there are representatives at embassies or their equivalent in each of the SADC countries who can assist other SADC countries to understand how to engage with and seek opportunities for collaboration with the South African government and private sector.

Providing support to regional infrastructure may also offer an important avenue both to signal a willingness to help less developed neighbours as well to ensure that countries within the SADC region are able to move and trade more easily. However, with so many pressing needs within their own country as well as the potential misperception that tax-payer's money is being misused to fund external projects, the government of South Africa would understandably argue that providing support to other less developed countries can be a challenge in terms of financing, capacity as well as managing the public perception. For example, there are legitimate concerns about using South Africa's State-Owned Enterprises (SOEs) to own railways in Botswana or for South African taxpayer money to fund a bridge between Zimbabwe and Botswana. Indeed, some hold the view that this should be the role of the private sector and that it should be driven by market incentives.

⁴ The South African government has already begun to play a role in capacitating neighbouring countries in the form of trilateral or South-South Cooperation. Proposals have also been put forward for South African supermarkets to look at ways to facilitate the possible sourcing of agricultural products that are grown and produced in the country hosting the supermarket.

Favouring the nationalist perspective, however, may make it difficult to see the greater benefits that can be accrued to the South African population if it is located in a region with strong economies that are able to freely and smoothly trade amongst each other. Providing support for the building of a bridge in two neighbouring countries can mean that South African goods scheduled for export can move more smoothly along to their destination in a further-reaching country. Opening up the routes can also provide spill-over benefits into South Africa. For example, if one of the LDC economies in Southern Africa becomes more developed, there will be a larger consumer base for South African goods and citizens. Furthermore, economic prosperity can result in citizens from a poorer country being less inclined to come to South Africa seeking better economic and employment opportunities.

South Africa also faces the challenge of managing its role as the gateway or what some have called the "gatekeeper" for the continent through its role as interlocutor in the G20 as well as its position on the United Nations Security Council. Sceptics see South Africa as a gatekeeper whereas others, including the private sector, see the vast potential of playing an important role, particularly in relation to the recent influence of emerging partners, as the gateway to the continent. In response to a Business Times article on October 23, 2011 which suggests that South Africa could lose its gateway status because of issues such as slow economic growth and policy uncertainty, Trade and Industry Minister Rob Davies clarified that "South Africa is not a gatekeeper but still retains the gateway status because of its acknowledgement that its own development is linked to that of the continent as a whole". (*Business Live*, November 7, 2011)

As Minister Davies noted: "this is linked to the fact that it has been one of the largest sources of FDI for the African continent and because South Africa is the biggest economy on the continent and the most developed in terms of industrial economy, regulatory framework and financial sectors not to mention its strong economic infrastructure. At the same time, South Africa's foreign policy agenda is to see every African country developing and being in a position to attract investment." (ibid) A number of interviewees emphasised the importance of South Africa promoting its strengths in terms of its excellent physical and financial infrastructure and believed that South Africa should continue to support and capitalise on these strengths as it negotiates relationships with emerging economies as well as traditional partners. In terms of the perception of external audiences from countries in the SADC region and on the continent, the challenge South Africa faces, however, is that the "commitment to regional integration" message acknowledging the interconnectedness of South Africa may sometimes be overshadowed by the competing "national interest" and regional dominance messages, namely that South Africa is the biggest economy with the best physical and financial infrastructure on the continent.

In an article in the *Mail and Guardian* that examines Africa's economic integration, Liepollo Pheko, an international trade expert, asserts that there is still a question as to whether the economic powerhouses such as South Africa and Kenya will place greater priority on regional or national interests. As she notes: "The elephants in the room all have hegemonic tendencies." While South Africa continues to make adjustment payments as part of its membership in the Southern African Customs Union (SACU) and is clearly seen playing a role in SADC through, for example, leading negotiations on Zimbabwe, as a country it faces a difficult challenge in overcoming inevitable perceptions. This is particularly the case with LDCs in the region who continue to believe that the dominant countries should pay their fair share or more. According to Pheko a failure to address

these perceptions risks "further aggravating the perception that regional integration is bad news for smaller, lower income countries." (*Mail and Guardian*, November 25 to December 2011, p. 42)

Recognising that SADC is a larger and more complex Regional Economic Community than the EAC, South Africa's experience is not unlike that of Kenya prior to the collapse of the EAC in 1978. The collapse of the EAC is, at least in part, attributed to the perception by Uganda and Tanzania that Kenya, as the major industrialised power within the regional configuration, was dominating the EAC as well as reaping most of the benefits from the move towards regional integration. With the reconstitution of the EAC, Sheila Karaitu, who is responsible for SAIIA's Tripartite Work, observed through her recent interactions with EAC countries, that Kenya is going out of its way not to be seen or to behave as the dominant power in the region. She noted, in particular, that any time a reference is made to Kenya's lead role in the EAC, Kenyan representatives overextend themselves to reinforce the message to fellow Member States that "we are brothers and must move together."

The perception of regional hegemony is prevalent in most regional economic blocs such as the United States in the North American Free Trade Agreement (NAFTA), Brazil in MERCOSUR and Germany and France within the European Union (EU). These perceptions can often result in stalemates in terms of making progress on regional integration as well as limiting the possibility to generate the will to collaborate on a regional basis including on regional infrastructure. To deal with the economic asymmetries, the European Union has created structural funds for infrastructure development aimed at dealing with these imbalances by providing funds to countries of the EU that are less developed with a view to building their economies, establishing a stronger consumer base and reducing the potential interest in migration to other regions.

With the objective of sharing their experiences with other regions, the EU has developed a programme *The Dialogue Facility*⁵ to support political dialogue and cooperation in bilateral, regional, African and global matters between the Government of South Africa and the European Union. In particular, the EU and South Africa organised a regional policy seminar where the EU explained to the South African government how regional policy and infrastructure funds are being used to deal with these asymmetries. While each region is unique, it may be of merit to undertake further investigation of the Kenyan model, the European model as well as approaches adopted in other regional blocs to gather lessons and best practices for overcoming some of the regional integration impasses of the SADC region, in particular with a view to finding ways to make progress on regional and corridor infrastructure development.

Challenges to Working Regionally

As a continent composed of a number of small, land-locked countries, developing a rationale for the promotion of regional integration in Africa is simple. Where the challenge lies is in the implementation of the regional integration agenda. In order to ensure that there is the necessary awareness and buy-in to move forward on a regional project, this usually begins with bringing together or coordinating countries that are frequently under pressure to prioritise issues on their respective national agendas. As the European Union will attest, uniting a series of disparate and sometimes divided countries can be a daunting task. Countless hours can be spent simply in sorting out individual interests and concerns as well as assuaging countries that are fearful of conceding any

⁵ For further information on the Dialogue Facility, go to: http://www.dialoguefacility.org/

rights to their sovereign rule or territory. In a continent full of small, land-locked countries, it is impossible to divorce the national from the regional. The challenge remains, however, in moving out of the political domain where resistance is often linked to a reluctance to hand over sovereign control.

Countries in a region need to develop the understanding of the importance of being connected in order to be able to access natural resources , to collaborate on the production of a particular product or service or to move goods across a region in a more cost-effective manner. At this point, at least 30% of the cost of goods in Africa goes to transport both for import and export. If the transport costs were co-shared with other countries, it could be a lot cheaper. For richer countries such as South Africa that may need to get raw materials externally to develop their industrial base, gaining an appreciation of the merits of investing in a port or transport corridor outside of its border represents an essential first step to ensuring the efficient access of natural resources in a distant country such as Madagascar. As a small, land-locked country that is keen to reduce its reliance on external support, it is perhaps easier for a country like Rwanda to understand and feel the urgency of connecting with neighbouring countries. Rwanda belongs to the EAC and, as the High Commissioner to South Africa has noted, it understands that it needs a railway that links it to the port of Dar Salaam and therefore needs to involve Tanzania. Tanzania is closer to Burundi, and Burundi faces the same problem. To move the project forward, Burundi and Rwanda have therefore joined forces to work with and interact with the Tanzanian government and with the relevant developers and financiers.

To smooth the path for political engagement, there is a fundamental need to secure public buy-in by raising awareness among the population both locally and regionally about the wealth potential for the region of engaging cooperatively. For the richer countries, wealth creation throughout the region can lead to a larger consumer base, a greater potential for intra-regional trade and more job creation. The outcome of job creation in neighbouring countries can also result in a reduction in motivation by citizens of poorer countries to cross the borders to live and work in the wealthier countries. For poorer countries, regional infrastructure can open markets to export excess goods as well as to import cheaper goods. Because most regions have imbalances in terms of income and GDP, there will nonetheless be a need to introduce measures aimed at quelling fears about unequal benefits derived when jointly investing in regional infrastructure projects or collaborating on a regional initiative.

Even when countries agree to come together out of a recognition of the need or merit in collaborating, most often through meetings of their respective Regional Economic Communities, there is frequently a disconnect between the ceremonial signatory events and the concrete action that must occur far away from the festivities of the signing day. In speaking to the 18th African Union Summit meeting, the President of the AfDB cited countless regional infrastructure projects that have been delayed as a result of a lack of political commitment. Heads of State have demonstrated a strong commitment to attending meetings and signing documents. However, for regional integration to yield concrete results, the more challenging next step is to ensure and enable the follow through, such as empowering and capacitating relevant people, most notably bureaucrats, both at the regional and national institutional level to implement the mandates articulated in the protocols or treaties that have been signed and, to ensure that good inter-country cooperation is in place to move forward on the implementation of identified projects . It is also important for Member States

to ensure that the objectives and outcomes of the regional agreements are equally reflected in national legislation and in the policies as well as the enabling environment needed to move the regional agenda forward.

Trademark Southern Africa maintains that the implementation of regional infrastructure requires strong political drivers at the highest level. Having these political champions can prove essential to facilitating cooperation between governments as well as between private and public organizations. As was demonstrated by the Maputo Corridor and most recently by the Presidential Infrastructure Champion Initiative, these champions must not only be able to rally enthusiasm within their own borders, but must also have the capacity, openness and willingness to forge and maintain relationships with the Heads of State and relevant ministers of the countries with which they wish to co-operate.

Forging relationships can also require the development of a high level of trust to deal with the fear and resistance linked to relinquishing dependence on internal resources in favour of resources that are often cheaper, easier to access and, in some instances such as the movement from coal to hydroelectricity, more environmentally friendly. This can include having the source country verbally offer assurances or in written form through the signature of legally-binding contracts. Both of these should be done within the spirit of assuring a beneficiary country that there is a commitment to the long-term supply of power or water as per the negotiated agreement. In order to maintain confidence in the regional integration agenda, countries also need to honour their commitments to neighbouring countries. When shortages in power emerge, for example, the source country must also try not to allow national interests to trump regional obligations.

For power projects, in particular, the challenge remains that the investment level often has to be borne by the country on whose soil the project would exist. Being the source country often requires the ability to generate the necessary capital to build a project that will have benefits to neighbouring countries. The capital-raising exercise is frequently a burden for the country sponsoring the project resulting in the development of initiatives aimed at sharing the burden. Westcorp has been cited as a case where benefiting countries agreed to support the Democratic Republic of Congo (DRC) as the source country for a major hydroelectric project through contributions to a Special Purpose Vehicle. The deal went sour, however, when benefiting countries failed to make the agreed-upon contributions needed to ensure the viability of the project. As one person also noted, the problem with Westcorp was also a consequence of regional versus national interests. It may also have been too early for the DRC and for SADC as a region. The time may now be ripe as South Africa has recently signed another MOU with the DRC to renew exploration of the Grand Inga thereby instilling hope that a project that has the potential to supply power to the entire continent may finally move forward.

Too often insufficient time is allocated to consensus-building dialogue. The CEO of Walvis Bay recounted the extensive amount of time he invested at the preliminary stage in establishing a relationship with relevant representatives of the DRC government. Once these relationships were established, he felt confident in moving forward to introduce the DRC representatives to their Zambian counterparts who were also interested in collaborating in the cross-border project. In his view, the time was well invested as the foundation was built for overcoming the inevitable challenges that can emerge through the process of implementing a regional project. The Maputo

Corridor Logistics Initiative (MCLI) has also highlighted the importance of building strong relationships. As the CEO of MCLI has noted, their approach to dealing with constraints is to ring fence specific issues and to facilitate dialogue among all the members of its working groups.

Lack of coordination among departments of one country and among departments of neighbouring countries can further compound efforts to work towards a common regional objective. TMSA has observed that addressing the challenges associated with border posts can be complex owing to the fact that the interests of governments at the border are multi-faceted and range from security enforcement, immigration, health regulations and export controls to customs collection. All of these activities are undertaken by different government departments thereby requiring a certain level of coordination as well as a willingness to collaborate and assume collective responsibility for addressing problems that will inevitably arise. For processes to be successful, a commitment to cooperation and consultation represent essential building blocks to achieving the overall objective of regional cooperation and coordination. The formation of a principal coordinating committee that brings together all of the relevant players is another approach to overcoming the coordination challenge.

Beyond a lack of capacity and coordination is a general failure to prioritise regional projects due to concerns about the preservation of sovereignty or the potential backlash from taxpayers who have identified numerous competing challenges at the national level. The result is that regional infrastructure is often not properly planned and not given adequate attention including the soft side skills for building and maintenance of the project. Using some kind of Regional Economic Forum or institution, a region may go through the exercise of prioritising projects generally in the form of the development of a Regional Infrastructure Master Plan in order to identify the priority regional projects. However, getting beyond the preliminary planning stage to securing buy-in including the commitment to provide the necessary financing can be one of the biggest hurdles to completing regional infrastructure projects.

Despite passing through what is often a cumbersome and time-consuming planning exercise, what can often happen is that when it comes to the point of securing financial commitments, countries may decide to prioritise differently, usually in favour of a domestic mandate. Too often the result is that the regional project is left with insufficient funds to move forward on the regional mandate. For example, land-locked countries tend to understand the importance of being connected to coastal countries and will therefore place a high priority on roads as a means of stimulating economic growth through intra-regional trade. However, when concrete discussions ensue related to burden sharing, some will argue or rationalise that their need or potential to benefit is not as great as urgencies at the national level. The result can be an unwillingness to allocate the necessary and agreed-upon funding thereby rendering it impossible to move forward on the regional project. For financial institutions that often provide grant funding for the preparatory phase, taking a decision at this late phase can prove to be enormously frustrating and discouraging as the allocated funding is usually permanently lost.

Maintaining the commitment to regional projects can also be onerous due to the extensive time required to get to the stage of a coordinated buy-in. Depending upon the number of countries involved, coordination and consensus building can sometimes take upwards of two years. One person recounted how the extensive time required to develop the relationships resulted in the

preliminary countries consulted changing their minds or finding more favourable alternatives thereby deciding to opt out of the regional project to which they had previously committed. The time delays and the loss of key partners resulted in the overall demise of the project.

The challenge of translating vision to reality is also marred by the on-going weaknesses of the existing regional institutions which tend to include the AU and the RECs both of which have the potential to play an important role in formulating interest as well as coordinating regional initiatives at the inception phase and, where needed and appropriate, through the course of the project. While donor countries have provided extensive support to address identified weaknesses, most often in the form of technical assistance and capacity building, there continue to be gaps in terms of a REC's capacity to implement the regional integration agenda. The gap is sometimes aggravated by the quota-based approach to recruitment that continues to exist in the case of a number of the RECs. This can result in either vacant positions or the recruitment of people who may not be the best suited or the most competent to fulfill the responsibilities related to the position. Regional institutions such as ECOWAS and l'Autorite du Bassin de Niger have made a move towards merit-based hiring and have begun to reap the benefits.

Ideally, regional integration should be embraced by Member States who demonstrate their support in the form of political support for strong regional and national institutions as well as for the creation and implementation of a sound and robust policy framework. The eastern and southern African regional integration process has traditionally been politically driven adding another challenge to the role of RECs as the overall coordinators of the process. At a time when financial resources from public sources are limited, Regional Economic Communities have also adopted an additional mandate, namely to push for the more active participation of the private sector. Achieving this objective will require added human resources with the skills and competency to understand the particular needs of the private sector including how to prepare and implement Public-Private Partnerships at the regional level. Manifesting support for the SADC Development Finance Resource Centre (DFRC)to play a role in capacitating people within SADC and nationally to manage PPPs represents an important preliminary step in reaching the objective of private sector engagement in regional infrastructure development.⁶

The challenges at the political level also inevitably trickle down to the concrete implementation level when countries are expected to make joint contributions towards the development of a physicallyconnected sub-region or continent. This can include dealing with differences in procurement rules as well as balancing the different financing options when countries with different categories of GDP are involved. As one person noted in the case of a project involving an LDC and a middle-income country (MIC), challenges can emerge in terms of negotiating and accessing financing. Whereas grant money can usually be accessed by both an LDC and a MIC at the preparatory phase, the nature of the lending options can be markedly different at the implementation phase. In the case of an LDC where there is a limited ceiling in terms of access to debt, there may be a reluctance to prioritise a regional project over a national project because of considerations such as the potential to win votes through the prioritisation of funding a project within one's own territory. For the MIC, access to

⁶ SADC DFRC has received funding from GIZ for the development and delivery of the Public-Private Partnership Capacity Development Programme. The programme is based on a five pillar strategy: 1) policy and regulation;
2) networking and collaboration;
3) external institutional development;
4) awareness raising and marketing institutional development;
5) innovative products and services.

lending can also be challenging as options are more limited such as accessing the available lending instruments.

Adopting a Corridor-Approach to Regional Infrastructure Development

In the past, thinking about infrastructure has been predominantly undertaken along border lines. However, in addition to promoting regional infrastructure within the configuration of Regional Economic Communities, on a practical scale, infrastructure is often best seen as an incremental phenomenon that extends beyond the borders of two or more countries, most often through the prism of the corridor model. Using the corridor approach is usually considered the best way to reduce the time and cost of shipping freight on a regional as well as an international level. It has also been recognised as the most efficient way to tackle the need to reduce the costs of cross-border trade as well as to increase the speed at which goods travel across the border.

With an average speed of 4.5 kilometres per hour, African consumers are paying higher prices in large part because of the inefficiencies of their soft and hard infrastructure. Decreasing transport costs as well as overcoming obstacles at the border posts shared between two countries is therefore seen as fundamental to achieving the objective of having goods flow more rapidly across borders thereby contributing to regional integration and economic growth. (Case Study, North-South Corridor Roads, p. 5) As the Case Study on the North-South Corridor has noted, the economic consequences of failing to introduce effective trade facilitation measures can be more drastic resulting in industries being uncompetitive, the closure of industries as well as job losses resulting in increased levels of poverty. (ibid, p. 9)

A key initiative driving the increased focus on corridors is The North-South Corridor (NSC) Programme, a Pilot Aid for Trade Programme that has enabled the Regional Economic Communities of COMESA, EAC and SADC, their Member States and the International Community to implement an economic corridor-based approach which aims to reduce the costs of cross-border trade in Sub-Saharan Africa. Coordinated through TradeMark Southern Africa and with principal funding from the United Kingdom Development Aid Agency (DfID), the project seeks to enable producers and traders to be more competitive with the expectation that this will result in higher levels of economic growth, employment creation and poverty reduction. (ibid, p. 4)

The Tripartite selected the North-South Corridor (NSC) as the pilot program because it represents a key set of corridors for the Tripartite FTA and is seen as the principal trading artery that connects South Africa with landlocked countries of Botswana, the DRC, Malawi, Zambia and Zimbabwe. It was also chosen because its infrastructure was already in relatively good shape meaning that less money would be required to achieve a significant level of improvement to the overall infrastructure thereby expediting the connection among key countries in the Tripartite region. For landlocked countries, in particular, it is seen as an initiative that is essential to expand their economic potential. For countries such as South Africa, it also offers the potential to generate additional revenue both through the expansion of the Durban ports as well as improving the ability for its own industries to send their goods more smoothly up and down the corridor. Through a network of road and rail systems, it links the copper belt in the Democratic Republic of Congo and Zambia with the port at Dar Salaam and ports in southern Africa. (Gajewski, p. 4)

Within this framework program, TMSA is seeking to coordinate efforts aimed at tackling both the hard and soft infrastructure problems that impede the smooth flow of traffic across the borders which it covers. Addressing obstacles at the borders themselves requires not just improving the hard infrastructure. Given that the principal cause of the slow movement of traffic along the North-South Corridor is linked to impediments at the borders, it is aiming to establish One-Stop Border Posts that will tackle the softer issues. This includes activities such as support for the institution of an electronic system to record goods prior to departure such that truckers are not required to unload their goods at each border. It is even seeking to address softer issues such as introducing change management measures and programmes aimed at encouraging people who are used to benefiting from the slow movement of goods and people to embrace and appreciate the positive side that comes from improved speed in processing people and goods across a border. The Maputo Corridor Logistics Initiative (MCLI) was also set up by major investors as a non-profit organization to deal with the major issues facing private sector users. For MCLI, NTBs such as customs clearance has emerged as the major challenge the private sector faces in terms of getting goods across the border.

TMSA has also noted that the softer side of infrastructure such as border posts also need to be seen as part of an integrated whole. They should also be examined through the lens of multi-modal transport corridors that extend across multiple borders and involve a number of elements including road, rail, ports and border posts. In practical terms, adopting a holistic approach means that African countries located along a corridor must work together and must ideally adopt some kind of temporary or permanent mechanism for coordination. The emergence of MCLI and the Walvis Bay Corridor Group emanated in recognition of the need for some kind of structure to coordinate the different stakeholder groups.

Formalised institutions or structures may be appropriate in some instances, particularly for complex projects where multiple stakeholders such as the private sector are involved. However, in other cases that are simpler and more time-bound, a temporary configuration with minimal governance and administrative requirements may be a better option for offering the most expeditious and affordable approach. Some organisations may simply evolve as a result of changing needs or changes to the overall operating environment. In the early days, MCLI was able to identify and address quick wins to justify its existence. However, according to the current CEO of MCLI, donor fatigue is setting in resulting in the need to assess and define a long- term strategy including whether there is a need for a Corridor Management Unit.

Overall, the adoption of a corridor approach is becoming accepted as the more practical and realistic way to achieve regional integration. For example, the Southern African Railway Association (SARA) is advocating for the adoption of the corridor approach as a means of promoting greater investment in rail along the various lines that connect the continent. To do this, there is a need to adopt an approach that factors in all elements needed to enable the development of rail along the continent such as stronger rail economic regulatory mechanisms to ensure the development of infrastructure operations. In his keynote speech for SARA, George Mhlalela, Director General of the South African Department of Transport, called for improved coordination within the region of operating and technical practices of rail service providers across the continent as well as the development of benchmarks for service standards and maintenance of infrastructure and equipment. As a starting point, he has also noted that South Africa has also developed the National Corridor Platform

Measurement (NCPM) to measure the performance of various supply chains in the identified corridors. (SARA, Keynote Speech, 2011)

The nature of the infrastructure being constructed will also determine the level and type of regional engagement needed. Power is usually tackled completely differently from transport. For example, in the case of power, there are a number of cross-border benefits that have led to the creation of power pools in southern and eastern Africa. (PPIAF Investment Strategy for Eastern and Southern Africa, p. 11) However, as the Draft PIDA study on energy notes, challenges remain in terms of coordinating the planning and development of national and regional energy investment projects as well as allocating responsibilities between and among participating countries, RECs/Power Pools for the development of projects.

Lack of capacity at the regional level to develop large regional projects as well as challenges with developing joint mechanisms to plan energy, water and telecommunications investment programs are also major challenges. To deal with these institutional challenges, the PIDA study has therefore recommended that the Pools establish "a Project Development Special Purpose Entity (PSDPE) between the member countries of the Pool that have a stake in the development of the project." (Draft Phase II Energy Report, p. 14). Recognising the challenges of coordinating the views of too many stakeholders, the Report also recommends limiting the size of the membership to ensure that decision makers are able to engage as key stakeholders and to reduce the significant time lag between project identification and implementation. (ibid, p. 14)

In the case of riparian states and the use of water for hydroelectricity or transport, there is still no agreement on what constitutes trans-boundary. For SADC, whatever is located in one of their development corridors is considered trans-boundary. To date, all of the thirteen shared river basins located within the SADC region have adopted a cooperation framework in compliance with the SADC Protocol on Shared Watercourses. (SADC Regional Strategic Action Plan on Integrated Water Resources Management (2011-2015), p. 5) However, with transboundary water resources constituting close to 80% of Africa's freshwater resources, according to the PIDA study on Trans-Boundary Water Resource Management, it will be essential for countries to find ways to cooperate on the development of infrastructure to enable agricultural and industrial development, food and energy security as well as health improvement. (PIDA Draft Report on TWRM, p. 3) The Report clearly states that RECS have a role to play in coordinating the planning and promotion of investments as well as to promote the infrastructure project and solicit financing. (Ibid, p. 45) However, the more direct and fundamental players are the River Basin Organisations (RBOs). While their mandates can differ significantly, the report asserts that RBOs do not have the mandate to implement large hydraulic infrastructure projects. To deal with this need, the report therefore recommends considering a change of mandate of RBOs to include infrastructure development with the caveat that changing those linked to international treaties can be onerous and can involve long time delays. A way of overcoming this obstacle is through the designation of Special Purpose Vehicles (SPVs) to play the role in basin planning and early project identification as well as project preparation and implementation. (ibid, p. 46)

Transport projects tend to be more incremental and account for the most frequent adoption of the corridor approach in the development and implementation of infrastructure. As the PPIAF Investment Strategy for a Core Strategic Transport Network in Eastern and Southern Africa has

noted, many transport projects are developed to provide missing links in systems. The study also notes that one of the challenges with corridors becoming truly connected is that the missing link can often remain unfunded until a significant or sustainable use has been identified. The interconnectedness of roads, rails or bridges along a corridor is often confirmed when projects achieve their effectiveness as a result of improvements that have been undertaken somewhere else in the system. At the same time, the definition of relationships among projects can be an important building block before moving forward on the design and implementation of corridor projects. (ibid, p. 11)

The PPIAF strategy also notes that the sequencing of projects needs to also take these relationships into account as it can involve negotiating with transport systems that have not previously collaborated or are seen as competing for the same source of funding. (ibid, p. 11) Adopting a sequential approach has also been recognized by the Tripartite process as important since previous efforts to deal with only part of the problem or to only tackle one kind of transport source proved to be ineffective and inefficient. For example, the North-South Corridor programme is working on a number of projects that are inter-related but which also address road infrastructure, road transport facilitation, reduction of time to cross border posts, port infrastructure and, will in future, tackle energy and ICT infrastructure. (Case Study, North-South Corridor Roads, p. 5)

Donor support to corridors is showing signs of improvement and greater coordination. DFID, JICA, the European Union(EU) and the U.S. Agency for International Development (USAID) have become the major players engaged in support to corridor development in southern and eastern Africa. The Tripartite process has also identified DfID as the lead donor for the NSC development. With a contribution of 67 million pounds in addition to funds from the DBSA, DfID has also established a Tripartite Trust Account that is managed by the DBSA. The African Development Bank (AfDB) as well as the AU through the NPCA have also become active players with the AfDB using the corridor model as a means of defining its regional integration agenda. The Regional Economic Communities have also established funds linked to the corridor model including the COMESA Development Fund, COMESA Infrastructure Fund as well as the SADC Project Preparation Development Fund. (Gajewski, p. 5)

PART IV Planning and Preparation⁷

Benchmarking

As the Infrastructure Action Plan submitted by Multilateral Development Banks (MDBs)⁸ to the G20 HLP notes, gathering measured information about the situation of infrastructure is traditionally not done. (Infrastructure Action Plan, p. 7) Provision of quality information on the current status of infrastructure, namely a baseline demonstrating an understanding of the current context, is an essential first step to identification and prioritisation of projects as well as to securing short-term

⁷ During the interviews, in particular, people used different terms to speak to the different phases of the planning stage. In an effort to provide some consistency and clarity, I have chosen to use the ICA Guide on Project Preparation as the source for terminology.

⁸ The MDB Working Group on Infrastructure comprises the African Development Bank (AfDB), the Asian Development Bank (ADB), European Investment Bank (EIB), Inter-American Development Bank (IADB), Islamic Development Bank (IsDB) and World Bank Group (WBG).

global support. The HLP has manifested its full support for the launch of a Global Infrastructure Benchmarking Initiative which would mandate the Multilateral Development Banks to cooperatively expand their work to other developing regions. The World Bank has also recently completed a benchmarking exercise aimed at providing a baseline against which future improvements in the status of infrastructure by sector, by country and by region in sub-Saharan Africa can be measured. The benchmarking exercise will be especially relevant for the PIDA initiative by providing an improved empirical foundation for prioritising investments and designing policy reforms in Africa's infrastructure sectors. It will also provide a means of tracking progress on the development and completion of priority projects.

Preliminary Analysis

Even before an infrastructure project comes to the preparatory phase, the recommended and reemerging viewpoint is that the analysis and decision-making process to determine whether or not to proceed should be clearly linked to its potential to promote economic growth. Trade and industrial development should be integrated as part of the analysis and should be ideally linked to an industrial master plan or strategy. In many African countries, there is a lack of an industrial master plan and comprehensive vision for the region. For regional projects, in particular, a consideration of value chains as well as the linkages within and among a particular industry is essential information to incorporate into analysis. South Africa recently announced its interest in pursuing beneficiation or linkages as part of the overall mining industry's development. It will therefore be important to ensure that beneficiation measures are tied to analysis regarding the availability of sound infrastructure.

Spatial Development Initiative

The Spatial Development Initiative (SDI) is not a new approach to doing infrastructure planning. Indeed, SDI originated 15 years ago in South Africa and was a vision of Nelson Mandela that was first implemented for the Maputo Corridor (Gajewski, p. 4). As Darlene Miller of HSRC explains: "While the SDI program lost momentum in the latter days of the Mbeki administration, this initiative has been resuscitated by the DTI (Department of Trade and Industry) under President Zuma and Minister Rob Davies as part of the Industrial Policy Action Plan (IPAP) envisaged for the next phase of South and Southern Africa's growth and development." (Miller, p. 3) While originally referred to as Development Corridors to overcome the confusion about transport and logistics corridors, Miller has also observed that the existence of roads, ports, rails, etc.. represent an essential element in the first phase of SDI development and that the clear linkage and importance of transport to SDIs may explain why development corridors are incorrectly equated with transport corridors. (ibid, p. 3) Development corridors are also notably distinguishable from transit corridors. Whereas the former principally targets trade, the latter model aims to maximise the number of beneficiaries of increased trade. (Gajewski, p. 4)

Economic potential represents the main driver in determining what infrastructure is needed. SDI therefore aims to secure high-level support in areas where the socio-economic conditions require a significant degree of government assistance and where there is a clear potential for economic growth. Analysis is founded on the anticipated number of users needed to ensure its viability. According to the Regional Spatial Development Initiative Programme (RSDIP), SDI is much more interested in linking with an industrial strategy that will generate the kind of funding needed to

support transport. In terms of financial viability, the existence of natural resources is quite often the obvious and sometimes the only option when SDI analysis is applied.

SDI is experiencing a renaissance in the case of countries or regions in Africa that are seeing the value of linking infrastructure development to the potential resources and industries that are available within the area or region under investigation. The NEPAD Planning and Coordination Agency, for example, has highlighted the need to integrate SDI as a viable and integrated approach to planning that looks at ways to ensure the sustainability of the financing by linking it to existing or potential industries located along the corridor. As Gajewski explains in his analysis of the Tripartite FTA and the Role of Development Corridors, SDIs offer a methodology for identifying large projects that are known as anchor projects. These anchor projects tend to support the development of the transit infrastructure that becomes the basis for the trunk infrastructure. The construction of secondary or tertiary roads, most commonly known as feeder roads and most often far less accessible than trunk roads, then tend to follow suit in order to reach resource bases for economic development. (Gajewski, p. 4)

The expectation is that the establishment of linkages to isolated resources via rail or road will attract developers to remote areas to develop mining, manufacturing or the expansion of agricultural production. In keeping with the implications of the word "development", some believe that an attempt should also be made to ensure that consideration is systematically given to the benefits to society as part of the overall SDI analysis. (ibid, p. 5) The Walvis Bay Corridor (WBC) Group is one of the projects receiving funding from RSDIP and has adopted the SDI model as a means of transforming Namibia from a low-income developing country to a high income developed country by the year 2030. The expectation is that the economic growth will come from transforming Namibia's trade corridor from transport routes to economic development routes which will eventually lead to benefits to the broader society. (Brundige et al, p. ii) They are therefore using it as a way to determine where and what sort of infrastructure to prioritise. As the CEO of WBC noted, they use SDI to move into other sectors to ensure that there is value addition and always keep in mind the longer term potential for social development.

Pre-feasibility phase

In addition to incorporating a baseline and SDI type of analysis, some of the interviewees cited the need to ensure that sufficient funding is targeted to undertaking analysis at the pre-feasibility stage which represents the essential phase for determining the actual financial viability of a project. Pre-feasibility can be as basic as counting traffic to determine whether current and projected traffic flow will be sufficient to justify going forward to the next stage of planning. A World Bank representative cautioned, however, that estimating the flow of traffic can be extremely difficult. Citing the example of a World Bank study that looked at fifty rail projects in emerging countries, he explained that the study grossly overestimated the flow of traffic as well as the expected revenue.

Early rigor can also save money in the long run by eliminating projects that should not have gone beyond the pre-feasibility stage. RSDIP has recommended that it would be worth spending \$50,000 at the pre-feasibility stage to determine if a project is bankable and financially viable. They also recommended that soft market testing be done whereby solutions are put down by interested parties but no funding is committed thereby enabling the government to assess what capacity exists in terms of analysis. Unfortunately, as a number of interviewees have noted, the preliminary

analysis is not always undertaken. Cases have also been cited where the public sector has put forward projects to tender based on the supply-side perspective. This means that projects are not put forward through the incorporation of considerations of demand for the infrastructure based on an analysis of the market potential as well as the financial viability. At the same time, governments have also been accused of seeking to expedite the construction of visible infrastructure projects in order to please the electorate, particularly at times when an election is approaching.

In fairness to governments, it can be difficult to balance the competing needs and demands for infrastructure. In cases where traffic flow is clearly insufficient but there is a clear demand or social need, a key question that is specifically directed to government is whether they are willing and able to provide a subsidy as a means of advancing on a project that is unable to demonstrate economic and financial viability. Furthermore, where the project has been specifically identified to support a public benefit, the challenge remains that social infrastructure usually must be funded using its own fiscal resources particularly if it is not possible to demonstrate any immediate or long-term economic or financial benefits. Indeed, the private sector will only come in where there is a viable revenue stream available.

With limited budgets overall, governments are therefore expected to determine what are the best options to be funded usually requiring them to strike a balance between social and economic development. Feeder roads are often viewed as a capital expenditure since they usually offer benefits to the poorer and more marginalised located in remote rural areas. Since trunk roads are much more easily financed by the private sector, it was therefore recommended that governments consider moving away from funding trunk roads to allow the market to fund their construction. For infrastructure projects that are tied to resource extraction, it has also been recommended that governments should also develop the capacity to negotiate deals with the private sector that ensure social benefits to their citizens such as the inclusion of the construction of feeder roads as part of the overall package.

Identifying the best infrastructure options

Beyond the question of whether or not to proceed with the development of infrastructure along a corridor is the need to determine what type of infrastructure should be developed, particularly in the case of transport. Construction of roads has tended to be the default over the past decade or more, in part because of the subsidies it has received from the public purse. The result has been an over-proliferation of trucks that are often backlogged at border posts and at the ports where space for offloading has become a growing concern. Furthermore, roads are not always able to accommodate the same goods as rail, thereby limiting the options for industrial expansion.

The decline in funding for rail can be linked to inefficiencies regarding productivity and the lack of capacity for planning such that the SADC region now has 90% of its transport done by road and 10% by rail. One interviewee also explained that during the period of structural adjustment, countries were told to privatise making concessions for rail a requirement. However, the conditions for privatisation were not sufficiently in place resulting in a failure of rail to expand resulting in a movement of traffic to roads. Of equal importance is ensuring that the appropriate transport means is selected. For example, the choice of road to move a product that is rail-centric is neither a sustainable nor a wise approach to adopt. Intermodal traffic is dominated by road because it can

offer door-to-door service. However, this service needs to be balanced against the lower cost that rail is able to offer. (*PPIAF Investment Strategy for Eastern and Southern Africa*, p. 20)

Across the continent, there has been a renaissance of interest in using rail as an option. While there has been a resurgence in construction, particularly in South Africa and in areas such as Tete in Mozambique which represent the hub of natural resource extraction, challenges remain with roads being subsidised by the public purse as well as the recognition that the cost of either building or rebuilding existing rail is often prohibitively expensive. The PPIAF Investment Strategy for the Transport Sector in Eastern and Southern Africa also acknowledges that many of the regional railway systems are not functioning well "due to poor reliability, high accident and failure rates as well as high costs and low volume." (*ibid*, p. 20)

The strategy therefore asserts the need to undertake the necessary analysis to ensure that there is market demand, namely the need to determine if the project responds to the identified transport demand in the region. Analysis tends to focus on corridors or sub-corridors and aims to select the best options for the market. At the early stage, the PPIAF Strategy has also recommended seeking to assess whether there is an economic justification by conducting a cost-benefit analysis as a basis for pre-screening a potential project. (ibid, p. 52) If non-economic or long-term factors are considered, there are numerous arguments for the use of rail including reduction of carbon emissions and the likely tipping point of absorption capacity within the road sector. However, without a linkage to mineral extraction, for many countries the cost of rehabilitation or introduction of new rails is simply too expensive.

When it comes to environmental considerations, there is also a growing recognition that the prefeasibility stage should also incorporate considerations about the impact of climate change. The World Bank and South Africa's Council for Scientific and Industrial Research (CSIR) have each begun to look at the impact of climate change on the built environment. Whereas consideration of potential climate change impacts may seem like added costs and further sources of delays, countries such as Japan and New Zealand are certainly test cases for the rationale for planning ahead and instituting climate adaptation considerations at the planning stage of a project before construction moves forward.

Choosing the actual route for rail or road can also have implications for which regions stand to benefit in terms of access and overall economic development. A recent article in the *Mail and Guardian* by Roman Grynberg suggest that Botswana and its neighbours will be making a decision between two possible railway routes to the coast for the transport of a bumper supply of coal, and that this decision "will shape the economic future of the region." (Grynberg, p. 11) Political considerations will likely come into play in the case of weighing the options. While the Ponta Technobanine route through Mozambique may offer the shorter and more efficient route than the Trans-Kalahari through Namibia, as Grynberg has noted, the fact that the former route runs through politically-precarious country of Zimbabwe may result in choosing both a longer route as well as a route that leads to the wrong coast, namely the Atlantic ocean, as the best way to meet and deliver on the demand in Asia.

Planning Phase

Beyond the essential preliminary analysis, the concrete planning stages to get a project to bankability involves a lot of complex steps that require a number of areas of expertise, many of

which are lacking within the countries interested in developing the infrastructure. Often referred to as getting a project to bankability, the PPIAF Strategy defines bankability as "the ability of a project to attract: 1) private sector debt and/or equity financing; and 2) international financial institutions sovereign loans, or, in the case of a private borrower, project-specific finance." (*PPIAF Investment Strategy for Eastern and Southern Africa*, p. 13) Funding that is secured through one of these avenues is used for the design, construction, implementation and/or operations and maintenance of the projects.

Mastering all of the challenges of getting a project to bankability ideally requires the appropriate government representatives across all of the relevant ministries to have a complete awareness and comprehension of all of the steps and stakeholders involved in the planning process. According to the Guide on Project Preparation prepared for the Infrastructure Consortium for Africa (ICA), the six phases of project development include: 1) enabling environment; 2) project definition; 3) project feasibility; 4) project structuring; 5) transaction support; and 6) post-implementation support. (ICA Guide for Project Preparation, p. 5) A review of the guide and the number of elements and issues that must be accounted for certainly helps to confirm why infrastructure must be viewed as a longterm prospect and, more importantly, why bankability seems to be such an elusive outcome. Aside from securing the necessary financing both to prepare and implement the project, there are countless other elements at the planning stage that should ideally all be in place before moving forward on putting a project to tender. According to an article aimed at examining the determinants of success for Independent Power Projects in Sub-Saharan Africa, key preparatory activities that are essential to address include "taking steps to improve the investment climate, drawing up and implementing clear policy frameworks...building contingencies into the planning process, vesting planning in one agency and conducting timely and open bidding". (Eberhard and Nawaal Gratwick, p. 3)

Enabling Environment

The ICA Guide refers to the enabling environment as "the relevant policies, laws, regulations and institutions which allow and support the development of infrastructure projects." (ibid, p. 5) Activities within this phase include: 1) designing enabling legislation; 2) designing regulatory approaches; 3) project-related institutional reforms; 4) capacity building; and 5) consensus building. At this stage, a number of interviewees highlighted the importance of first determining what investors want before going to bidding. In terms of an enabling environment that will attract a quality developer, it was recommended to invest the time to gather a good understanding of investors' needs as well as to appreciate their decision-making criteria.

In the case of most developers, at a minimum, they are seeking a sovereign guarantee as well as assurances that there is a sound regulatory and institutional environment in place to move the project forward. A number of interviewees also emphasised the importance of being as rigorous as possible by tackling all issues at an early stage while also ensuring that all of the technical capacity is catered for before moving forward on the financing agreement. In the case of transport, the PPIAF Strategy also insists that at the technical level each project "must address clearly defined capacity constraints, produce potential performance benefits and meet the technical criteria aimed at improving the operation of the transport network. "(*PPIAF Investment Strategy for Southern and Eastern Africa*, p. 12) It can be as early as the pre-feasibility stage, however, that the PPIAF Strategy

recommends ensuring that alternative technical approaches are reviewed with a view to determining whether they are more effective than the proposed approach.

Capacity Building

Overall, lack of human capital represents one of the biggest problems to moving forward on an infrastructure project. A number of interviewees spoke to the challenges related to the lack of local capacity, often at the government level, both to manage the planning process and, as the process reaches the point of going to tender, to take decisions. Local capacity generally relates to the public sector and is specifically linked to the capacity to manage the design, construction, operation and maintenance of a project either using its own capacity or through having the private sector deliver the project. In some cases, the private sector may also be the main implementer and must therefore also have capacity at all of the previously mentioned levels. (ibid, p. 14) Where capacity is lacking, the result has often been the submission of tenders that are either not viable or have not received the necessary approval from all relevant ministries. Banks have indicated that they are able to readily secure expertise that can be accessed through consulting contracts. However, in the case of building the capacity locally, most often within government departments, such that they can engage in an informed and competent manner, addressing that capacity challenge continues to be elusive.

Determining the capacity needs and gaps as early as possible is the best way forward. It was also recommended that some kind of gap analysis or skills assessment be undertaken before moving forward on the development of a bankable project. One of the industry representatives specifically cited the approach of the US-funded Millennium Challenge Corporation (MCC) which undertakes an extensive skills analysis of relevant government departments with a view to addressing the fundamental capacity gaps early on before moving forward to commit any funding for the development and implementation of identified infrastructure projects. Certainly more investigation would need to be undertaken related to the pros and cons of the MCC and other similar models. However, the recommendation remains valid, namely to ensure that the necessary assessment of capacity is undertaken as early as possible.

Where capacity is lacking, it was recommended that the feasibility assessment should ideally be done in a partnership format whereby capacity building is incorporated as a learning-by-doing part of the process. By adopting a programmatic approach to an infrastructure project, the role and importance of building local capacity and using local capacity can be incorporated as part of the project or program design. Indeed, more and more donors are providing support on a programmatic basis as a means of facilitating the development and use of local capacity through operating on longer term time horizons that are often linked to strengthening the relevant ministries involved in the program or sector as a foundational activity.

The absence of engineers in a number of relevant departments is often a key indicator of the challenges governments face in terms of the provision of capacity to prepare and manage infrastructure projects both nationally and regionally. According to an article in the *Sunday Times* by Greg Mills, Africa's lack of engineering capacity represents one the major hurdles to its development. The facts speak for themselves with the "ratio of engineers-to-population in SA at under 500 per million, with the comparative figures in Chile nearly three times, Malaysia over three times, Japan almost seven times and the US more than ten times." (Mills, p. 34)

Furthermore, one of the main challenges of developing capacity for infrastructure development is the disconnect between the urgency with which infrastructure projects need to get up and running and the time it takes to build the capacity, particularly when it requires the development of skills that are acquired at the tertiary level. For infrastructure, there is a need to look at capacity building from the perspective of building long-term assets. To do so, there is a need for leadership not just in supporting a diversity of short and long term training activities. There is also the need to create the kind of working environment with the necessary incentives that will encourage those whose capacity has been built to remain rather than seek greener pastures, often in the private sector, where higher salaries often lure away those who have been offered no other incentive to stay.

In light of the pressing need for infrastructure development, a key question, therefore, is what are the options to overcome these sorts of capacity building complexities quickly? What is emerging is that there is a limited level of skills transfer within the current framework of infrastructure delivery. Some capacity building is short term and can be solved through the arrangement of training courses or study tours to other countries. However, in the case of skills that require a tertiary education such as engineering and accounting, governments will need to adopt a long-term vision that begins with engagement with the department of basic education or its equivalent to ensure that students acquire the necessary skills such as math and sciences to later be in a position to qualify for the requisite tertiary education programs. In terms of the development of local programs offered at the tertiary level, some progress is being made in some areas. For example, the Agence Francaise du Developpement (AFD) is working with governments in Southern Africa to deliver a joint Masters program on municipal water management.

A number of donors are also providing short- term capacity development programs, often based on study tours or short-term training courses. For example, the DBSA is providing capacity building through funding from AFD to the International Division. It also has its own internal Pan-African Capacity Building Program which includes coaching and mentorship in relevant infrastructure areas including water and sanitation as well as energy and waste management as well as capacity building offered through the Vulindlela Academy. While all of the available programs are no doubt playing an important role, the level of reach is insufficient to solve all of the capacity building challenges within the countries. The situation is more problematic in the case of the engagement of emerging partners in infrastructure since the dominant tendency continues to be the use of their own expertise in the development and delivery of infrastructure programs. In this case, governments need to systematically negotiate skills transfer as a condition for securing the tender.

According to GIZ representatives who are providing support to capacity building through SADC, people are too often looking for short cuts. Capacity building takes time as does building up institutions. GIZ is therefore adopting patience as a fundamental principle for moving forward on its capacity building programs. To move beyond the quick fix, short-term training programs, GIZ has also integrated the mentorship model whereby they have incorporated complementary training and accompaniment with relevant government representatives. Within SADC's Water Division, for example, they have a dedicated post for capacity, policy and Monitoring and Evaluation (M & E). They have also structured their relationship with SADC along the lines of a counterpart structure whereby they have an infrastructure specialist located at GIZ and another one at SADC so that work can be done together and that the local counterparts can learn by doing. An example of how this has

worked successfully was through the development of the SADC Regional Strategic Action Plan for Water (2011-2015).

In cases where capacity cannot be solved through short-term capacity building programs or through coaching or mentorship and where the tertiary education system is not yet adequately developed, it may be necessary to consider the appointment of one or more external agents with the necessary expertise. Where broad-based capacity is lacking across several departments, countries may have to consider forming a consortium of experts, most often external consultants. For the development of a viable set of financing scenarios to provide to government, for example, this would include a consortium composed of engineers, lawyers and financial advisors. Convincing a country to go this route, at least in the short term, is often most effective when governments are able to see that having the available capacity to undertake and make sense of financial analysis can translate into countries saving a significant amount of money, most often incurred in the form of sovereign debts.

The use of consultants as a short-term fix to expedite movement on a project is not without its shortcomings. High quality consultants can be extremely expensive thereby adding to the overall cost of the project. Even where skills transfer or mentorship is incorporated as one of the conditions contained in the contract, there are often challenges in achieving these objectives. This can include the urgency in completing the task and the cost of retaining the consultancy services for longer periods of time to accommodate the transfer of skills. Intercultural challenges and what can often be a huge divergence in terms of knowledge and skills between the international consultant and the local one can also make it difficult to achieve the objective of local capacity building. As well, not all consultants deliver quality products. Another approach is to work with local consultants that are linked to international organizations. For example, Built Environment Professionals Export Council (BEPEC), has chosen to work through the NEPAD Business Foundation because they work closely with local consulting engineers that are linked to world business bodies that support the professions and offer the opportunity for skills transfer.

Project Definition

Project definition refers to the early stage concept design work that is needed before the full feasibility phase since it serves as a basis for defining the project parameters. (*ICA Project Preparation Guide*, p. 5) Here again interviewees spoke with frustration about receiving a concept note that demonstrated little or no analysis in terms of defining the project parameters. As some noted, governments will submit an idea that they think is important or of top priority that includes no further technical or financial details and expect the funding to flow.

With governments always experiencing challenges of limited funding, this phase also represents the stage at which prioritisation must take place. As the ICA Guide suggests, there is a need to prioritise based on elements such as policies and plans that exist as well as considerations of the potential for economic growth and social impact. (ibid, p. 6) The absence of the preliminary analysis outlined above as well as the failure to develop plans that contain the necessary elements presents an on-going challenge in terms of achieving feasible prioritisation. Centralisation of planning and oversight of projects can help in addressing the prioritisation exercise, but coordination among the relevant departments remains essential since a number of departments such as the Ministry of Finance must inevitably be consulted to ensure their buy-in and support for the project.

The frequent lack of coordination or lack of consensus among the different national ministries or governments involved in trans-national or regional infrastructure projects can be a key contributing factor to tender failures. As is often the case in many government departments worldwide, many of the ministries within relevant government departments that should be involved in infrastructure development are often stove piped and are not effectively coordinated among themselves. Aside from being uncoordinated in the way that they operate, a simple lack of awareness about which government departments need to be consulted can mean the difference between a project that can successfully be put to tender and one that ends up being shelved, re-submitted or receives limited, poor quality bids. One person interviewed cited a case where the Ministry of Transport had neglected to get the approval of the Ministry of Finance with respect to assuming sovereign debt thereby rendering the bid unviable. It is therefore recommended that governments be encouraged to establish coordinating committees as a matter of course.

Overall, it was recommended that government departments need to get more comfortable with the notion and implications of liability and that they must liaise with the appropriate ministries, particularly the Ministry of Finance, before going to tender. It would also be worthwhile to quantify the financial losses, most notably through the provision of preparatory funding, in cases where tenders need to be re-opened or where the bid is not able to go to tender at all. Of equally critical importance is the identification of a project champion who can ensure that the project is effectively shepherded through the necessary departments. This is best done by having the champion present the project to senior government officials and other relevant stakeholders. Ideally, the champion should also assume the main responsibility for taking the project forward. As Peter Copley, one of the DBSA's transport experts noted in considering the success factors of the Maputo Corridor, a champion at the political level and the technocratic level are two of the main elements that led to the corridor's successful completion.

Conducting Feasibility Studies

It is understandable why the feasibility study can be so costly since feasibility studies tend to encompass a broad spectrum of analysis from economic, financial, technical, legal, environmental and social impact feasibility studies. Considering the costs and benefits of a potential project with a view to determining if the benefits outweigh the costs over a set period of time tends to be of particular interest and relevance to sovereign lenders who need to be reassured that a project is economically feasible. Financial viability is a critical element to attracting private sector investors as they are seeking to determine whether a project can generate sufficient revenue over an agreed period of time to ensure that they can recoup the costs of capital and debt financing with an acceptable rate of return. (*PPIAF Investment Strategy for Eastern and Southern Africa, p. 13*) Ideally, to foster a climate for the transfer of skills, feasibility studies should be done as proper partners and, where capacity is lacking, it should be done as capacity building exercise.

If the feasibility study confirms that the project should advance, then more studies need to be undertaken. As the ICA Guide on Project Preparation explains, these tend to include" an assessment of the organizational and administrative support required; support to dealing with what is usually complex financial modelling; support to assess the impact of the project on the local/national or regional economy. " (ICA Project Preparation Guide, p. 6) It is at this stage, too, where corporate social responsibility gets its focus by looking at the project's potential impact on things like employment as well as assessing whether the project will have negative environmental impacts. In

terms of costing at the preparatory phase, it is important to note that it is essential to allocate sufficient funds to conduct feasibility studies as well as to ensure that there is always sufficient expertise available to conduct the study both externally and within the public or private sector that is managing or overseeing the process.

Project Structuring and Transaction

According to the ICA Guide, the project structuring and transaction support stage both require support from lawyers, engineers and people with expertise on procurement. In the case of access to legal capacity both the AFDB and the World Bank have set up facilities to provide legal advice. The IFC also provides legal advice as part of their operations. However, some people interviewed said the services are insufficient to cover all of the needs. Lack of an effective regulatory environment can also make it difficult for legal advisors to provide the necessary advice at this stage in the process. Technical and engineering support is often also required at these phases. Points related to the need and challenges with capacity building targeted to tertiary education raised above are particularly relevant at this stage.

Monitoring and Follow through

While monitoring and follow-through are not directly linked to the planning phase, planning and budgeting for their incorporation can be very important to ensure the delivery of high quality and sustainable projects that meet the terms of the contract. The benchmarking exercise mentioned above can also be important to enable effective monitoring and evaluation, most notably for countries to track progress on the implementation of their infrastructure plans. The ICA Project Preparation Guide speaks to the importance of post-implementation support in the form of monitoring progress and evaluating emerging outcomes. (ICA Project Preparation Guide, p. 7) Ideally, monitoring and evaluation plans are produced during the structuring and transaction phases. Existence of appropriate skills is often a major shortcoming for governments making it difficult for governments to re-negotiate procurement agreements, financing terms and conditions as well as to be able to request that amendments be made based on the terms of the contract. Capacity to prepare and negotiate a viable and sustainable contract at the earlier stage is also often absent.

One of the complaints cited about projects being delivered by emerging economies is that there can be a trade-off between negotiating low costs and the delivery of quality infrastructure projects. Rent seeking can also come into play. One interviewee cited cases where one of the emerging partners would bring in low quality materials when the government representative was not on site to oversee the delivery of the project. Whereas it can be costly to include a budget for monitoring, inclusion of monitoring, even if capacity is lacking, is a good way to send a signal to the implementing partner that oversight is in place. Including a budget and building capacity to assess the quality of a project upon completion is important to plan for at the planning phase as well. The AICD study has also recommended that performance pay be linked to infrastructure project completion. Part of the criteria for assessing performance could be tied to assessing whether the relevant bureaucrats have ensured the delivery of high quality and sustainable infrastructure. Of equal importance is ensuring upfront that the signed contract allows for a country to request recourse in the event that the project does not meet the quality and sustainability standards which are ideally clearly articulated in the agreement.

PART V Financing the Preparatory Phase

Project Preparation Funds

In many cases, steps along the preparatory phase are covered through the funding available through Project Preparation Funds (PPFs). PPFs are often supported through contributions from donors and are usually provided in the form of grants that are managed through an organisation such as a Development Finance Institution. Through the experience of contributing to or operating PPFs, consensus has emerged that there is a need to re-think them. There are lots of facilities that help with the management of PPFs as well as a number of Trust Funds at the Multilateral Development Banks (MDBs). Donors such as the UK Development Aid Agency (DfID) have, over the years, supported dozens of PPFs. However, everyone seems to be reaching the conclusion that there are too many, they are too small and that funding can be misdirected due to a failure to factor in the numerous steps as well as the capacity needed to produce bankable projects.

Initiatives such as the Infrastructure Consortium for Africa (ICA) and the HLP draft report on infrastructure have both readily acknowledged that there are too many Project Preparation Funds. At least twenty-eight agencies have PPFs. Furthermore, each PPF has its own uniqueness and criteria. To deal with this issue, the HLP on Infrastructure is calling for a greater coordination among contributing partners to PPFs. The call builds on lessons learned from traditional donors about the need for greater coordination, a principle that is now enshrined in the Paris Declaration. This Declaration calls for donors to make every effort to coordinate and align their efforts, most often under one lead donor. In principle, the underlying assumption is that it includes abandoning the need to be directly recognised for the funding of a particular initiative.

The HLP is also recommending that MDBs and bilateral agencies closely coordinate their efforts to provide funding for the preparatory phase through the establishment of a "lead bank". Whereas a number of donor groups have already adopted the approach of lead donor, often formalised through Terms of Reference or a Memorandum of Understanding, some of the banks interviewed expressed scepticism over the proposed approach, in part out of the expectation that the size of contribution would too often determine which bank should lead.

Earlier efforts to coordinate funding for PPFs have already been undertaken including ICA's introduction of a formal process for coordination known as the Tunnel of Funds. Aimed at streamlining the suite of PPFs, some interviewees have reported that it has met with limited success. One person noted, in particular, that it is too theoretical. In some cases, informal coordination has also emerged. For example, the three European Development Banks – EIB, AFD and KFW - have formed a grouping called the Mutual Reliance Initiative (MRI), which seeks to adopt a more coordinated approach to their support. The MRI emerged out of a recognition that the three Banks shared so much in common in terms of their objectives and approach to providing support. Given this commonality, it did not make sense for each Bank to talk to partner countries individually or to undertake individual due diligence exercises. The three Banks therefore decided to pool their resources and to allow one Bank to lead on particular aspects of the project such as environmental assessments. Overall, representatives interviewed from this tripartite configuration have reported that the process has been working well and that they have received positive feedback from their partners.

DFIs are also responsible for managing a collection of PPFs with diverse and often disparate mandates.

The concept for the creation of multi-donor accounts is also emerging. However, the need to wave the individual donor country flag as well as other barriers to donor coordination continue to be obstacles to the complete institution of multi-donor initiatives. Furthermore, donors continue to ask that funding be ring fenced particularly when currency differences emerge. Differences in procurement rules also make it difficult even when there is a manifest interest to be truly coordinated.

In response, the HLP has called for a greater harmonisation of procurement rules. Although most of the international funders recognise that their procurement rules are not entirely harmonised and efforts have been made such as the joining together through initiatives such as the MRI, the Banks have indicated that they are still restricted in terms of their abilities to relax their individual procurement rules. This is in part because banks operate on the need to demonstrate that they are properly managing their limited resources thereby needing to exercise some level of direct control over the due diligence process.

Overall, any differences in donor criteria can create additional burdens for the managing agency. The administrative burden is compounded as a result of the uniqueness in criteria for each PPF. The over-proliferation of PPFs also causes an undue administrative burden on the organisations that are responsible for managing them. In many instances, PPF managers also have to cobble together a number of PPFs to meet both the technical and financial needs for project preparation for one project.

Indeed, interviewees reported there is rarely enough funding when an aggregate of PPFs is assembled to cover the overall preparation costs. In the case of regional project development, assembling adequate funding is even more onerous and challenging. In response, the authors of the Draft Energy Report for PIDA have recommended the establishment of a continental or regional project development financing facility. In their view, this kind of facility would allow for a faster preparation of projects for regional integration projects thereby resulting in fewer delays between the successive projects under preparation and would ensure that the full preparation of projects is adequately funded from the start (*PIDA Draft Phase II Energy Report*, p. 13).

Given the mounting costs of project preparation, even with one large fund, it may nonetheless be difficult to divide it up to cover the costs associated with the number of regional projects in need of preparatory support. According to the World Bank AICD report, the costs of feasibility studies are increasing exponentially. Whereas the estimated figure elsewhere in the world is 3 to 5%, in Africa it can range anywhere from 5 to 10% of the total cost. More money is needed and, as per the recommendations in the HLP, it needs to be bundled and/or include higher ceilings of access to reduce the overall transaction costs for the institution that has to manage the funds.

The HLP is specifically calling for the ceiling to be raised on limitations for individual PPFs. While the proposal is laudable, the reality is that International Cooperating Partners often have to think of their own taxpayer constituency as much as their recipient partners when negotiating the terms of a contribution to any program or project. Since donors are expected to report the outcomes of their investments, it becomes more of a challenge to report quantitative results if their contribution

covers the cost to prepare one or two projects since, like most people, taxpayers tend to be captivated by numbers and usually want to hear that their funds have supported a number of projects. ⁹ As such, maintaining lower ceilings tends to enable them to report that they have funded multiple projects, even if the funding may make a limited contribution to the overall cost of the project.

The expectation that PPFs will automatically ensure project bankability is also proving to be elusive and misleading. For agencies managing PPFs, expectations are often too high in terms of what an agency managing PPFs can realistically do in moving towards the development of a bankable project. As a DBSA representative noted, they are able to engage in dialogues with governments or regional bodies to identify problems or provide advice. However, in the end, the power and the potential needed to ensure that all measures are in place to reach project completion rests in the hands of the national or regional government body.

It would therefore be worth exploring how many of the projects funded through PPFs actually go to bankability. Since PPFs tend to be grant money, some interviewees have suggested that there can sometimes be less pressure to ensure that the PPF funding invested leads to a sure winner. One person recommended the need for some kind of instrument to ensure that the PPF money is spent as effectively as possible. Spending more money on the upfront analysis, what RSDIP has referred to as the "fatal flaw financial model" is something that may be worthy of further exploration. RSDIP has also recommended that no money should pass before a project passes the fatal flaw test. Another option proposed is to cap the grant equity at 20% as a basis for determining whether to go further in the preparatory and assessment stage. If the project does not show signs of advancing or does not demonstrative genuine feasibility or viability, no further funding would be released.

Coming out of the G20 High-Level Panel on Infrastructure, there has also been a recommendation that reviews of existing project development financing facilities be performed on a regional basis, and that they be done jointly by the Multilateral Development Banks and bilateral donors. The objective of the review is to identify ways to restructure them on a more sustainable basis including the possibility of providing more resources. It is hoped that this sort of review will lead to greater visibility for existing funds as well as instigating the generation of solutions to address some of the issues mentioned above. The review itself is expected to be carried out by ICA and by the Public-Private Infrastructure Advisory Facility and will be worth tracking in terms of its findings and recommendations.

PART VI Financing for Infrastructure

Sources of Financing

In terms of financial sources for infrastructure, the AICD study has noted that a limited number of financing sources are available. One of the main and most surprising findings of Chapter 2 of AICD's report entitled "Closing Africa's Funding Gap" is that public finance represents the largest source. Investment needs for infrastructure are generally in the area of 5 to 6 percent of a developing

⁹ In the same vein, taxpayers want to hear about concrete projects and less about funding for maintenance. Despite the fact that the AICD study has clearly sounded the alarms about deteriorating infrastructure that may reach the point of no return if repair or maintenance is not undertaken, donors find it easier to announce funding for "new" projects rather than for maintenance or repair.

country's GDP with the rate being higher in lower income countries where poverty tends to be acute. (Delman, p. 1) Official Development Assistance (ODA) also represents a sizeable and growing source with non-OECD finance and private sector investment also emerging as an important and significant player. (Foster, p. 76) Other options include the local debt market and commercial banks with the latter generally being seen to be more expensive then multilateral instruments.

Each project depends upon who will fund it, the potential rate of returns and the level of risk that is presented with the project. When it comes to risk, of equal importance is the capacity of the potential funder to manage risk. DFIs, for example, are often under pressure to take more risks than any other stakeholder because of the inherent characteristic of their objectives. (Ruiters and Giordano, p. 38) However, even in the case of DFIs, the level of risk presented by a particular country context can still determine the rate at which funding is provided in the form of loans. To manage risk, DFIs such as the DBSA have developed risk management tools and policies such as the DBSA's Country Risk Policy which is applied as a key tool to effectively control the risk associated with the Bank's SADC investments activities and exposure. (Country Risk Policy, p. 21) As the AICD has also noted, the situation in each individual country including, for example, whether a country is post-conflict such as the DRC can also have a significant impact on the cost of lending.

In almost all cases, accessing financial sources is currently in a precarious state. Depending upon the buoyancy of the crisis in the Eurozone and the US, access to funding through traditional channels such as ODA or non-OECD funding may be in jeopardy. Furthermore, whereas emerging partners such as China are playing an increasing role in providing financing for infrastructure in African countries, including as those as risky as the DRC, most notably through their EX-IM Bank, questions are also being raised about the sustainability of providing this level and type of financing. Whereas there are legitimate concerns that the crisis could have an impact on aid flows, for the private sector, most notably commercial banks, the crisis in the Eurozone is also seen as an opportunity to increase its financing in infrastructure development. Seen as a haven for dealing with the huge drop in Mergers and Acquisitions (M &A), one interviewee noted that the huge gap in infrastructure funding on the continent coupled with the crisis in Europe has resulted in some of the South African investment banks moving quickly to fund road, port and power projects in sub-Saharan Africa.

Whatever the sources of financing, it is rare that any project is able to find a single financing instrument. A number of people interviewed recommended that more work should be done to look at different financing mechanisms including options such as hybrid financing mechanisms. Countries such as Mozambique have also gone forward and developed a policy to look for collaborative mechanisms which has opened the door for engagement with companies such as the Brazilian company Vale. The OECD DAC has recently released a report aimed at mapping Africa's support for infrastructure that confirms that Development Finance Institutions (DFIs), international organisations and specialised agencies use a wide range of financing instruments. Instruments include "investment funds, blended grants, guarantees and export credits to attract private investors and to dissipate their concerns about the risk associated with bankable projects." (Mapping Africa's Support for Infrastructure, p. 4) The report has undertaken an extensive survey of the nature and extent of support to infrastructure development, has identified some of the new and existing instruments that have been developed to accommodate the changing environment and has analysed the strengths and weaknesses of the different types of instruments available.

The report also includes a specific examination of the leveraging effect of Overseas Development Financing (ODF) on private investment in recognition of the need to provide the kind of enabling environment and financing mechanisms to increase the likelihood of garnering private sector investment. With respect to the private sector, however, the report includes a rejoinder that reminds the reader that the objective of ODF is ultimately to achieve the goal of sustainable growth and poverty reduction in Africa. As such, the creation of a favourable enabling environment to attract private investment should not be seen as the sole objective. (ibid, p. 5) DFIs also play an important role in crowding in private investment, in part by providing essential funding to the preproject phase which aims to address investment issues such as the shortcomings identified at the planning stage. For example, the DBSA identified the general role that DFIs played in promoting infrastructure development in Mozambique which included "providing financing for activities to develop state and institutional capacity, technical assistance to develop, prepare and market project, crowding in the private sector through Public-Private Partnerships, debt forgiveness or write-offs to ease the fiscal burden as well as advocacy on a global stage about opportunities and appropriateness of investment in Mozambique." (Ruiters and Giordano, p. 29)

In terms of fostering synergies that can achieve both objectives, more can be learned by examining new or emerging financing mechanisms such as the Emerging Africa Infrastructure Fund (EAIF), a mechanism that lends on commercial terms but also aims to support projects that promote economic growth, reduce poverty and promote environmental and social best practices. Like most Development Finance Institutions, EAIF also has access to some grant funding to help with the development costs of projects including feasibility reports, consultancy fees or costs associated with capacity building that could be incurred by the developer or relevant government party sponsoring the project. (EAIF website) However in the interest of ensuring that sustainable funding is regenerated, backing feasible projects is of equal importance.¹⁰

Wedding the objectives of financial viability and poverty reduction has been a persistent challenge in financing infrastructure projects. Governments often wrestle with the need to ensure both public access and big private customer users in particular in ensuring that infrastructure benefits flow down to the poor and most marginalised. Whereas some sectors are easier to generate funding either through private sector investment or through user pay mechanisms such as toll roads or taxes on fuels, the access fees are often too high to facilitate the derivation of benefits to poorer sectors of the population. The question then becomes how to subsidise the poor.

In South Africa, there is free basic electricity for the poor. This means that social infrastructure is funded through fiscal resources whereas economic infrastructure must increasingly be funded by users. As one government representative noted, the issue of financing for the poor is connected to ensuring equity. To enable governments to better understand how to derive benefits for the poor, more work should also be done to examine and design subsidy programs that ensure that the poor are truly the beneficiaries. As one interviewee noted, the current subsidisation of water utilities benefits the rich far more than the poor. Overall, charging user fees can result in a huge outcry on the part of the general public. As William Dachs, ? of the Gautrain has observed through his previous work in the South African PPP Unit, Telkom appears to be one of the only infrastructure options

¹⁰. EAIF is considered fairly unique as a debt fund. Although it may be seen as a competitor to some DFIs and large commercial banks, EAIF differentiates itself by taking on different roles such as arranger; a co-lender or sole or main lender in smaller projects.

where users are willing to pay a fee. In almost all other areas such as water and transport, there is an expectation that financing should be provided through the taxes they have paid to the public purse.

In the case of transboundary water resource management (TWRM) projects, the PIDA Draft Report on TWRM has noted that financing presents a number of difficult challenges including the fact that tariffs "are regulated and widely subjugated to political purposes." (*PIDA, Draft Phase II Report TWRM*, p. 47) As a result, income streams are frequently insufficient even when backing is provided by government subsidies and guarantees. Referring back to points raised in the section on planning, the PIDA report emphasises that "extensive and intensive preparation" (ibid, p. 47) is essential to garnering financing for large TWRM projects. The report also notes that financing to prepare a project for bankability normally reaches a high of 10% of the overall cost of the project. Given the dearth in funding available to cover project preparation costs, the report is therefore recommending the establishment of a significant PPF to finance African water infrastructure in order to move forward on the development and implementation of bankable projects.

In a sector such as rail, it is impossible to think about upgrading an expensive rail network without private users who can commit volumes of freight or freight charge pay backs. Depending upon how the government negotiates the terms, public access or benefit can be limited or non-existent. Mining companies and their network of suppliers claim that it can be difficult to put in place deals that will work based on the requirement for returns to pay back to shareholders as well to ensure that benefits trickle down to the local constituencies. With profit being the principal driver, they would be inclined to argue against the inclusion of conditions that require a company to build additional infrastructure that is of benefit to the poor or those located off the main routes to the mines on the grounds that it can be difficult and too costly to implement. However, in Mozambique, the CEO of MCLI has reported that MCLI has been successful in incorporating social measures. More work should therefore be done to determine what the private sector can the realistically do to incorporate social benefits, what sort of costs are involved as a percentage of the overall project and what measures need to be put in place to promote the inclusion of social benefits.

The Open University and the University of Cape Town have initiated the *Making the Most of Commodities Program*me (MMCP) which is focusing on determining what are the possibilities to yield better societal returns from the current boom in commodity prices and to examine the extent to which the re-investment in the countries has created economic and development opportunities for the entire population. The program's work aims to grapple with this key question by focusing on the extractive industry in some key countries in southern and eastern Africa. An examination of the findings from the MMCP program and other related initiatives may help to yield recommendations worth exploring on how to facilitate a win-win relationship between profit and societal benefits.

In cases where the private sector is deriving benefits through, for example, extraction of natural resources, it has also been recommended that governments need to learn how or be committed to negotiating more favourable deals for accessing its natural resources such that additional infrastructure will bring benefits to the entire population, in particular the poor and the marginalised. Finally, since civil society frequently plays a role in advocating for the inclusion of the poor and marginalised, inclusion of CSO representatives in the preparation and implementation is essential. For example, civil society participation in the preparation and implementation of PIDA projects represents an overarching PIDA principle. As such, all of the PIDA projects are prepared in

accordance with internationally accepted standards for environmental and social assessment including calling for mandatory stakeholder participation. (PIDA, Draft Phase II Report TWRM, p. 56)

The DFIs have also tried to come in and make a contribution to sustainable development, but have not always been able to find the right models due to the need to find viable revenue streams. Financial viability is the age-old challenge in terms of financing bankable projects. Viability can be linked to challenges such as lack of sufficient vehicles using a road, the nature of the commodities being shipped as well as topographical barriers in countries such as Tanzania which cover a huge territory with varied and challenging landscapes. Mozambique, for example, is more affordable for building roads and rails because its topography is more amenable. For China, in particular, financial viability is less of a concern since the principal interest in the returns relates more to downstream activities, namely to the extraction of natural resources which enable them to produce high-yielding manufactured goods for export. They are often less concerned about potential profits that might be earned or lost through the investment in infrastructure. As such, inclusion of corporate social responsibility elements is frequently a criterion that recipient governments need to impose as part of the overall negotiation of an agreement.

Investigating and documenting how other regions of the world have tackled the financing challenge through undertaking case studies and pulling together best practices offers another opportunity for identifying new options. Whereas it will be useful to draw these lessons from other regions, also focusing and making linkages with countries with a similar economic context will be important. For example, whereas South Africa is a member of the BRIC countries which offers important opportunities to negotiate positions at international forum such as the World Trade Organization, its GDP and economy are more realistically aligned with the CIVETS¹¹ countries, a grouping of newly emerging economies, to which it also belongs. As one interviewee recommended, a country like South Africa should also consider examining and gathering best practices and lessons learned from countries such as Colombia where there are much greater similarities in terms of the size of the economy and the population size and base. As the AICD study has also concluded, when analysing any infrastructure situation, it is essential to keep in mind that approaches and solutions vary depending upon the country context, political and economic situation as well as the overall investment climate.

The AICD study has also noted an important finding, namely that addressing inefficiencies can result in a potential savings of \$16 billion per year. The study has undertaken extensive analysis to identify a number of areas where efficiencies could be improved and addressed. Given the current challenges to access funding for new initiatives in Africa, it would be worthwhile to build on these findings and prescriptions both to document and further quantify cases where efficiencies have been addressed as well as to provide further guidance and detail of how to address specific inefficiencies.

Of particular concern is the study's recognition that there is an under-spending on maintenance which is, according to the study: " one of the most perverse inefficiencies and the hardest to quantify" (Foster (2008), p. 73). Of greater concern is that countries that fail to invest in maintenance risk reaching a point of no return whereby the only remaining option is to begin *tabula rasa* with a completely new and costly infrastructure project. With this in mind, TMSA has also

¹¹ SO-called CIVETS group of countries—Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa—are also being touted as the next generation of tiger economies.

provided support to a study aimed at documenting the status of roads along the North-South Corridor with a view to determining where to target financing and to determine where to focus funding for maintenance in the short, medium and long term. (North-South Corridor Project Part 3, Maintenance Financing Options) Because of the noted high costs to rebuild dilapidated infrastructure, consideration of maintenance represents an important part of the analysis.

Financing Regional Infrastructure

Whereas there are a number of viable arguments for providing support to regional infrastructure projects such as economies of scale as well as its potential to promote trade and address the challenges of land-locked countries, financing for regional infrastructure projects is even more elusive and challenging to secure. In their examination of independent power pools which involve cooperation among a number of African countries, Eberhard and Gratwick have determined that most of the projects require debt financing of upwards of 70% to cover the total project costs. They have therefore observed that a key success factor that has emerged is the institution of competitively priced financing. The involvement of DFIs, credit enhancement and some flexibility in terms and conditions to allow for refinancing are being touted as possible approaches in the African context. (Eberhard and Gratwick, p. 6) Including a realistic assessment of risk is something they have also learned through their analysis noting that the greatest likelihood for ensuring sustainability appears to be linked to ensuring that "the risk premium demanded by financiers represents a true reflection of the country and project risks." (ibid, p. 6)

For regional projects, the Draft Energy Report for PIDA also recommends the establishment of a continent-wide risk guarantee facility funded by donors. Options cited and worth exploring include backing up the guarantee fund through the creation of a pool funded by multilateral and bilateral institutions as well as structuring the fund to be managed by an off-shore trustee to protect it from political interference. The report also recommends looking at the option to finance the fund through a levy on regional energy trade and asserts that the extended guarantee approach is the preferred method since direct financing of regional projects by donors "may not contribute significantly to leveraging additional commercial financing for regional projects." (*PIDA Draft Phase II Report Energy*, PIDA, p. 14)

To deal with limited financial sources for regional infrastructure, there is also a need to do more to develop a local and regional debt market. In a bid to overcome challenges to accessing funding for regional projects, the recent meeting of the Tripartite and IGAD Investment Conference that took place in September 2011 included an announcement about plans to create regional infrastructure bonds. The Tripartite should be praised for proposing one solution to a difficult financing situation. However, some underwriting on the part of donors or traditional partners may be necessary to make the bonds viable.

Other recommendations include a regional surcharge for uses of infrastructure that has regional reach and potential. However, countries may be sensitive to talk about how a harmonised surcharge can be created within a region to fund bigger infrastructure projects, particularly if benefits are not perceived to be distributed equally. The challenge is more acute when it comes to soliciting financial input when one country is expected to host a project that offers regional benefits. The DRC is often cited as harboring enough water generation potential to electrify the entire continent. With limited

financial capital due to a host of political and economic reasons, funding the project alone with the hope of reaping longer term benefits is simply untenable. To deal with these financial constraints, Westcorp was developed with a view to establishing a Special Purpose Vehicle that would enable benefiting countries to bankroll the project. Whereas the concept is a good one and worthy of further investigation, countries that stand to benefit need to be sure that they are committed to providing sufficient amounts of funding to make the project viable.

With traditional international financial institutions heavily dependent upon uncertain financing from their Western members, it is anticipated that there will be an increased role and weight played by regional banks. The 2011 Least Developed Country report has a focus on South-South cooperation with an emphasis on the promotion of regionalism. The report is proposing different types of regional financial cooperation including regional payment systems to provide incentives to intraregional trade; regional monetary systems to cushion against external shocks and the use of regional and subregional development banks to provide long-term finance to support public and private investment. (Least Developed Country Report, p. 114) Regional development banks (RDBs) represent an important source of development finance for regional members and can facilitate the establishment of innovative financial instruments. They are also able to promote greater cooperation between RDBs and its beneficiaries in order to foster enhanced reciprocal trust that could result in more streamlined and efficient development-oriented lending operations in Least-Developed Countries. (ibid, p.116) Indeed, regional Development Banks, such as the Asian Development Bank, are already playing a key role in facilitating regional economic integration among LDCs and their middle income neighbors. In Latin America, some countries have also established sub-regional banks, such as the Latin American Development Bank, which have already demonstrated positive results.

There is an expectation that RDBs can offer a greater sense of regional ownership and control of development projects. Because they are based in the region of operation, regional or sub-regional development banks have more direct access to information and can be more strategic about forging closer relationships and partnerships with countries in the region thereby enabling them to be better positioned to exert pressure when one or more countries is dragging its feet in terms of collaborating on a regional initiative. (ibid, p.116) RDBs are also able to be more hands-on and flexible when they are developing projects that require the cooperation of a number of countries. Whereas there have already been a number of exchanges between African, Asian and Latin American regional organizations including as part of the G20 preparatory meetings, it would be worthwhile to pull together and further investigate lessons learned and best practices stemming from the involvement of regional development banks worldwide into a document or report for use by relevant governments and regional organizations

Generally speaking, RDBs have performed well in providing effective development financing. However, with escalating costs and increased interest in funding regional projects, additional financing is still needed to fund crucial regional investments. Within this context, UNCTAD is proposing that developing countries that have access to sovereign wealth funds should invest 1% of their assets in regional development banks, for example, in the form of increased paid-in capital. The proposal is based on an assumption that contributions would be made on a voluntary basis. The *Least Developed Country Report* asserts that the adoption of this approach could prove to be an optimal vehicle for channeling resources to LDCs, but could also facilitate increased investment in regional infrastructure which would have the knock-on effect of promoting trade and, if planned correctly, securing additional financing for the growing interest in promoting support for green technologies. More work would need to be done to articulate the financial terms. As well, lenders and recipients would need to come to a common agreement about the mechanisms and levels of support to be provided on a regional basis.

For stronger economies such as South Africa, it has also been recommended that wealthier governments should explore options to provide greater sovereign backing for their development finance institutions to enable them to lend into riskier markets as a means of advancing regional integration while also opening up and strengthening their own market potential. Since South Africa is heavily dependent upon power to drive its economy and has developed a heavy dependence upon carbon-emitting coal options, providing external support for an external power project as a potential to access power options could offer a means of rendering its own economy more attractive to Foreign Direct Investment. Indeed, one interviewee from a commercial bank noted that the an external investor expressed a level of reluctance to invest in South Africa's manufacturing sector due to the precarious and environmentally unfriendly nature of its current power sourcing. The recent announcement of an MOU between South Africa and the DRC could represent an important step towards accessing a sustainable source of hydroelectricity over the long term.

The Infrastructure Action Plan submitted to the G20 by the MDB Working Group on Infrastructure includes a list of key criteria for developing catalytic regional projects. Criteria include ensuring that issues such as political support and institutional capacity are addressed. (Infrastructure Action Plan, p. 4) At the same time, the plan refers to an initiative being finalised by the World Bank and the Asian Development Bank aimed at introducing incentives for staff to focus on leveraging additional resources for regional projects rather than exclusively maintaining their traditional functions of preparing and committing the institution's lending resources. The use of incentives may be a useful push factor in terms of making more progress on regional projects. However, it will be essential that MDB staff refer to and consider the locally-based challenges of achieving some of the criteria listed in the initiative on developing catalytic regional projects, most notably political commitment and institutional capacity. Furthermore, the approach needs to be holistic and should not exclusively target overcoming barriers or creating incentives linked to the lender. In tandem, it will also need to ensure that all of the other hurdles are overcome at the local level, particularly those on the side of the host governments. Without adopting an integrated approach, it may prove difficult if not impossible for this scheme to realistically overcome the overall challenges to securing financing for regional infrastructure.

Emerging Partners as Financiers

There is a changing global landscape in which emerging economies based in southern countries are becoming more important economically for developing countries. With growing concerns about the impact of the financial crisis in Europe and the US, least developed countries are being advised to forge closer links with emerging economies with higher levels of growth such as China, Brazil and India. Aside from the motivation to build infrastructure linked to the extraction of natural resources as well as to establish a consumer base, emerging economies also see developing countries as potential havens for investing excess capital. For example, Indian infrastructure firms are increasingly engaging in projects in Africa with the view to offsetting the impact of slowdown in domestic orders that are linked to a host of internal problems such as delays in government decision making and environmental considerations. Furthermore, as an article in the Economic Times notes, Indian firms see Africa as an attractive continent to invest because it has lower barriers of entry. (Economic Times, November 1, 2011)

Some of the key emerging partners including China, India, Brazil and South Africa are increasingly regrouping under platforms such as BRICS, IBSA and BASIC as a means of negotiating common positions at international forum such as the World Trade Organization and the UN Security Council (UNSC). While China, India, Brazil and South Africa are clearly united in negotiating positions of common interest and see these platforms as serving an important political and economic role on the global stage, the tendency remains for each of these countries to move forward bilaterally in negotiating agreements with individual countries and, in some cases, to compete with one another for business or access to natural resources. Brazil, for example, has recently been promoting itself as offering more favourable terms in its operations than countries such as China, most notably in terms of social responsibility. By building upon its own history and commitment to principles such as community development, Lyal White, a professor at the Gordon International Business School has done extensive work in Brazil, and has observed that Brazil's engagement in infrastructure development in Africa tends to integrate social considerations about the positive and negative impact on a community as part of its efforts to negotiate resource extraction contracts.

In relation to South Africa's efforts to expand its reach as an emerging economy, it will be important to have a full understanding of the nature and expectations from its relationships with other emerging economies such that it can derive the most favourable benefits both for itself and for the continent writ large. As Darlene Miller, Acting Research Director of Human Sciences Research Council notes: "the South African government has to ensure that it holds its own in the continent in the face of the competing investors of China and India." (Miller, p. 2) Capitalising and deriving financial and employment benefits from its role as the "gateway to the continent" as well as marketing its relationships and knowledge of the cultural and political dynamics of operating in Africa represents one way for South Africa to achieve this goal.

In the same vein, South Africa, as an emerging economy, faces the specific challenge of being a member of an increasingly influential membership on the global stage while also needing to maintain its role as a representative and key interlocutor for the African continent through forum such as the G20 and the UNSC. Unfortunately, the positions of the two respective groupings are not always compatible, as in cases such as the November 2011 climate change negotiations in Durban, where South Africa had to play a dual role as a representative for the continent negotiating strategic African issues such as forestry and agriculture while also promoting a focus on mitigation as an industrialised emerging economy and representative of the BASIC grouping. Managing these two identities and ensuring that its own interests are protected is a challenge worthy of reflection and stocktaking with a view to understanding the implications and identifying the best way to balance its inward role on the continent and the region with its role as an emerging economy with an interest in looking outwards towards the global economy.

Whereas other emerging players such as such as Korea and Vietnam are also active on the continent, the BRICS countries, in particular, seem to be garnering the most attention. The CIVETS configuration

which includes Colombia, Indonesia, Vietnam, Turkey and South Africa is also gathering steam on the world stage. However, their presence in Africa has not yet manifested the same interest and media coverage as the BRICS countries. To date, the response to BRICS countries is generally mixed. Sceptics see the emergence of countries such as Brazil, China and India on the continent as a new form of colonialism or scramble for Africa. Other countries such as South Africa which is forging closer relationships through the BRICS and IBSA platforms as well as through bilateral agreements see the emergence of these players and their platforms as a viable means to promote South-South cooperation and to reduce a dependency upon the conditions imposed by Western funders.

With the increasing wages in countries such as China and India, the 2010 AFDB report on China in Africa suggests that Africa could become the future destination for manufacturing of emerging economy goods which could result in the creation of much needed employment on the continent. In a recent article in the Sunday Times, Greg Mills, columnist and Director of the Brenthurst Foundation, portrays the rise of Asia and other markets in Africa as offering greater opportunities for Africa as well as an alternative path for development that has the potential to release African countries from the perceived shackles of "conditions and mores" that he believes have been imposed by Western development. (Mills, G. p. 34) Mills also notes that the African gravitation towards emerging partners of the South is also driven by "the hurt inflicted by colonialism (which) still rankles in much of Africa." (ibid, p. 34)

Similar to the drive of former colonialists to source natural resources externally, China's "Go Global" mandate is motivated by a push to develop its own economy as quickly as possible. With limited natural resources available internally, Africa is seen as an obvious source of materials to feed that hunger. Citing the case of Angola shortly after the end of its civil war, the World Bank paper on China's growing role as a financier for infrastructure includes an examination of the deal China negotiated with Angola in 2004 to secure access to Angolan oil. In particular, Angola negotiated a \$ 2 billion loan that was backed by an agreement to supply China with 10,000 barrels of Angolan crude per day. (Foster, Butterfield, Chen and Pushak, p. 27) As is the case with most Chinese investments, the loan passed through the Export-Import (EX-IM) Bank of China which is the lending arm of the Chinese government. As the World Bank paper explains: "support from emerging partners such as China (and also India) constitutes official financing between lower-income countries, and is delivered not through development agencies, but rather through EX-IM Banks with an explicit mission to promote trade and development in the originating country." (ibid, p. 27)

Referred to now as the "Angola Mode", it characterises some of the financing deals China has struck with resource rich countries in Africa to engage in resource-backed financing deals.¹² (*ibid*, *p.27*) As one interviewee from a donor agency observed from his experience working in China for five years, the Chinese are some of the shrewdest negotiators in the world. With this in mind and recognising that the point is relevant in relation to any negotiation, some have suggested that African governments need to be clear about what is at stake and what they can reasonably gain when they

¹² According to an article in Reuters, Congo has a \$6 billion "infrastructure for minerals" deal with China that was meant to revamp railways. The deal follows the same model as Angola adopted and led to the coining of the term "Angola Mode" whereby China has rebuilt infrastructure in exchange for oil. Delays in receiving cash from China has forced the DRC to turn to miners to address the funding gaps. Sierra Leone and Liberia have also secured railway and port development as part of contracts giving access to iron ore concessions and similar projects are planned in Gabon and Cameroon. (Reuters, October 31, 2011).

enter into negotiations with China and other emerging partners. Both the World Bank paper and the AFDB paper on China and Africa recommend that countries need to improve their negotiating skills in dealing with China. The AFDB study also recommends looking and learning from positive examples of the negotiation of favourable contracts such as the case where Botswana successfully used international consultants from top legal firms to negotiate lucrative contracts for its natural resources with DeBeers, a South African mining firm. (Schiere, Ndikumana and Walkenhorst, p. 9)

Some of the people interviewed praised emerging partners because they are capable of delivering quickly and reliably. In contrast, others questioned the quality of work as well as the commitment to incorporating social benefits to the recipient country including use of local labour and resources, technology and skills transfer as well as community development and consideration of the environmental impacts. A lot has been said about the Chinese financing model as being a key element for the success of Chinese companies in winning tendering bids. In general, deals are processed quickly and with no strings or conditions attached. What some financing partners may consider to be conditions to securing financing, others view as instituting the necessary checks and balances to ensure that an infrastructure project not only delivers infrastructure for economic development but also includes social benefits to the population and assurances that the environment will not be unnecessarily damaged. Abandoning conditions such as environmental assessments and community consultation is an important measure to enable the fast tracking of projects, thereby satisfying a concern that has frequently been raised by African countries about unnecessary delays and burdensome bureaucratic hurdles.

It is important to recognize and assess the source of previous delays. Traditional partners have, over the course of years of negotiating with their developing partners as well as responding to lobbying from local and international civil society organisations, signed on to ensuring that the early stages of project development integrate general and specific corporate social responsibility dimensions coupled with due diligence assessments. Meeting these obligations inevitably causes delays in moving forward on a project. In contrast, BRICS countries have, to date, been slow to integrate these considerations unless they are specifically stipulated by the recipient country. BRICS countries have also been known to rush through the design work and to forego the impact studies as they see them as unnecessary.

Whereas the institution of conditions causes undue delays, it would be worth investigating what are the costs and benefits of fast tracking projects or ignoring corporate social responsibility conditions at the planning phase. Undertaking a quantitative and qualitative assessment to evaluate the specific impacts on the local population and on the environment of ignoring these conditions, ideally in consultation with local civil society organisations, could also be a useful and revealing investigation to undertake. Through the course of such an investigation, identifying whether there are particular conditions that represent unnecessary bureaucratic hurdles or delays could lead to finding solutions or means to expediting the overall planning process by all relevant partners. While it may seem obvious it would also be worthwhile to assess or to remind recipient countries about the value of incorporating social and environmental considerations as well as the benefits of insisting upon a certain level of local employment or skills transfer as part of the negotiated deal.

There is no question that the initial and on-going motivation for BRICS countries to build infrastructure in Africa is linked to a quest to extract and transport natural resources from African

countries to their own nations in order to expand their own economies. However, experts insist that the tide is changing and that countries such as China are showing a greater openness to consider the development dimensions of their operations. While national benefits remain the paramount objective, emerging partners are negotiating more with a view to ensuring that their image within the country and globally is not tarnished by reports of poor quality infrastructure or lack of engagement of local workers. This may include some level of integration of community development or consideration of environmental issues.

Most of the emerging partners have also developed and are delivering some form of development support. Since 2009, China has established the Forum on China-Africa Cooperation (FOCAC) where it has pledged \$10 billion in concessional loans for Africa and has also called for the need to support Africa's efforts to address issues encompassed under the Millennium Development Goals as well as other development issues such as climate change and food security. According to an article in the McKinsey Quarterly, China's development does not follow the traditional development trajectory. Instead, China's "blended model of aid, investment, trade and technology serve as levers for development" (Davis, S and Woetzel, J.) and builds on China's own experience of receiving aid and investment in the 1970s and 1980s. According to recent study by the Centre for Chinese Studies, China does not use the term 'development assistance' as defined by OECD-DAC referring instead to it as 'external assistance'. Given differences in nomenclature makes it difficult to compare and even quantify China's development contribution using the OECD-DAC guidelines which, for now, are considered the global standard for measuring, tracking and assessing development aid. (Grimm, p. 4)

India and Brazil are also stepping up to the plate with their own form of development cooperation often through an injection of funding, a suite of one-off projects or a program to bring Africans to their countries for training. Like most of the other emerging economies that are developing or expanding existing external assistance, the integration of lessons learned including the move towards a programme-based approach to development that enables recipient countries to plan their programs based on the commitment of multi-year budgets, has generally not yet been embraced. China continues to provide its assistance based on a project-based model which is often more administratively burdensome for recipient countries. According to the authors of the McKinsey Quarterly: "These efforts are sometimes associated with a particular investment or a Chinese official's political commitment to a local African leader. Such projects are not part of a broader program to build networks of hospitals, for example, or to develop a replicable and scalable approach." (Davis, S et al.)

The adoption of a project-based approach is a model that recipient partners encouraged Western donors to abandon in favour of a program-based approach , an approach that represents one part of the principles of the Paris Declaration. The Declaration sought to integrate lessons learned from previous development failures by providing developing countries with greater predictability, local ownership as well as improved coordination and alignment on the part of support from donor countries. Since China's funding principally comes in the form of concessional loans, the World Bank paper on China and Africa has also raised concerns about the potential of countries locking themselves into a new form of unsustainable debt. (Foster et al., p. 15)

The adoption of more favourable practices and support for some kind of development or external assistance means that the perception of emerging economies is also evolving. A recent article in *the*

Economist notes in its examination of China in relation to its presence in Zambia that Chinese performance has improved and that "the Chinese are exasperated by the way in which they have been singled out for criticism" (*The Economist, October 1, 2011*) There is no doubt that cultural and linguistic barriers may play a role in generating negative perceptions together with clashes in culture in terms of work style and demonstrated level of effort. It is also of relevance that the reach of China's development and investment is still nonetheless focused on a few African countries of interest, most notably the resource-rich or those that offer gateways to resource-rich countries. In the case of China, the AFDB study confirms the longstanding existence of a development program, but also notes that it is "mainly allocated to "all weather friends" such as Egypt, Ethiopia, Mali and Tanzania." (Schiere et al, p. 20)

A number of interviewees emphasised that, as with any agreement, responsibility falls equally to the governments of African countries to negotiate better terms which could include things like engagement of local labour or insisting that infrastructure development incorporate construction of feeder roads that would be of benefit to local communities. In the case of any of the negotiations, more work and analysis may need to be done to determine what information and skills countries need both to negotiate and assess the terms of the contracts they have negotiated as well as to monitor and evaluate the projects while being implemented and upon completion. If a country determines that social and environmental considerations represent an important element of their infrastructure support, capacity should also be built to assist them to incorporate the kinds of terms that ensure that these practices are incorporated. Where necessary and appropriate, awareness raising on the benefits of incorporation as well as the costs such as delays in proceeding should also be incorporated as part of the capacity building program.

The AFDB study on China and Africa also puts the onus on the African leaders to strengthen African governance and the business environment as a principal means of ensuring that benefits accrue to their people. As one government representative noted, the low cost of loans has resulted in incentives to complete the projects as quickly as possible through the use of Chinese labour. Integrating skills transfer and other conditions within an agreement would most certainly increase the cost of the project as well as lead to likely delays. However, it can also provide long-term benefits to the host communities. Some countries such as Tanzania have already implemented policies to increase local benefits of foreign investments by insisting upon the employment of unskilled Tanzanian workers on projects receiving foreign finance. Angola has also learned from its first experience with China and is requiring the use of local construction material. With the recent election in Zambia, newly-elected President Sata is said to be sticking to his election promise by requiring that Chinese investors ensure that local labour and resources are used fairly and effectively. The challenge remains, however, with respect to the capacity and willingness to enforce these agreements.

The relevance of China to infrastructure development on the continent is that the Chinese are now considered the major player. As the OECD paper Mapping Support for Africa's Infrastructure Investment notes: "some estimates suggest that China has outplaced the World Bank as the leading funder of Africa's infrastructure." (Mapping Support for Africa's Infrastructure, p. 5) Brazil and India are also increasingly playing a role as well but are dwarfed in comparison to the advances made by the Chinese particularly in the areas of rail, road and power development. The nature of the financing via the Chinese EX-IM bank accounts for one reason that China is capturing an increasing

share of the market. The issue of risk which bedevils many of the other banks that tend to make loans directly to recipient governments is overcome by the fact that China channels little or none of its funding directly to a recipient country. Chinese funding for infrastructure in Africa generally stays in and flows through Chinese banks and companies. Risk is also less of a concern since funding for infrastructure is seen as the means to reach the bigger goal, namely natural resource extraction for economic development. A recent article in the Economist which examines the rise of state capitalism has noted that state-owned Chinese infrastructure companies are winning contracts worldwide. (The Economist, January 21, 2012, p. 11)

In addition to offering favourable financing terms in the form of low interest rate loans, the AFDB report notes that Chinese firms are also able to offer highly competitive prices due to offering lower wages both to their nationals and to local labourers. The use of cheap Chinese labour both as engineers and for physical labour has also enabled Chinese firms to frequently outbid other financiers or companies including South African companies which have played a dominant role in construction on the continent. To facilitate greater opportunities for South African firms to compete on firmer ground, some private sector interviewees have recommended that the Development Bank of Southern Africa with the backing of the South African government consider providing cheap financing to the South African private sector as is done by the Chinese EX-IM Bank. Any of the firms or banks will also have to compete with the fact that China has also established a favourable reputation in Africa for meeting its deadlines and for working efficiently. (AFDB, p. 5) As the AFDB study has confirmed through its survey of African countries, "Chinese managers have a strong work ethic and entrepreneurial spirit and are willing to engage in markets where profit margins are low (at least initially) and supply chains are weak." (AFDB study, p. 20) Chinese players are also sending the message that they are committed to stay for the long haul and often show a greater willingness to live and work under the same conditions as their African counterparts.

In response to criticisms levelled against the Chinese, the African Development Bank's study aims to improve the understanding of the China-Africa relationship by examining the current cooperation on infrastructure as well as identifying ways to engage the Chinese government. One of its recommendations calls for improved communication between management of Chinese-owned enterprises in Africa and African civil society organizations. To overcome cultural and linguistic differences, they recommend expanding scholarship opportunities for Africans to study in China. This would likely require a major catch-up on the part of African countries, since the Chinese are already steps ahead in mastering their understanding of Africa. During a presentation at the University of Pretoria in October 2011, author Moeletsi Mbeki noted that during a visit to China he was surprised to discover that his books had been translated into Chinese and that the Chinese were offering numerous opportunities for their people to participate in six months of "African immersion".

Some of the experts on China have also noted that it is unfair to lump all of the Chinese projects under one roof. Indeed, there is a sense that those projects that are more directly linked to the Chinese government have the greatest potential to evolve and address the concerns raised by recipient countries and by the international community at large. Some of the ventures undertaken by smaller private sector interests tend to fall below the radar of the Chinese government making them more difficult to control. Smaller private ventures also tend to disappear into the continent where it is more challenging for the Chinese government to monitor them as well as to encourage a move along the spectrum towards the promotion and adoption of favourable labour, social and environmental practices.

The presence of Chinese small-scale private sector initiatives is also linked to the embracing of a long-standing entrepreneurial spirit that is reinforced by the recent adoption of capitalist principles. An interviewee from a commercial bank who had recently worked in China also made it clear that China's historical origins and political party may be communist, but its economic growth is modelled after a private sector and capitalist growth model. Given the success of this growth model, some believe that more opportunities should be pursued to learn from and work with the Chinese. In addition to fostering more opportunities for South-South cooperation, it has also been recommended that more joint ventures between Western partners and emerging partners be struck whereby each country would play to its strength.

As one interviewee recommended, this would mean that Western partners could cover the funding and work associated with the preparatory phase through grants and where appropriate through loans, and emerging partners that are able to deliver infrastructure projects more cheaply and efficiently would focus on the implementation phase of an infrastructure project. The challenge with any kind of joint venture is merging the conditions now entrenched within the operations of traditional partners such as the need to include environmental assessments with the approach of emerging partners which, at this stage, tend to be predominantly condition free when it relates to corporate social responsibility. Governance is also often a condition that is reviewed by traditional partners in part to ensure due diligence measures are in place with a view to anticipating and managing potential concerns with graft or to address capacity shortcomings. As the AFDB report notes, however, China considers interventions in aid recipients' domestic politics as "an infringement of sovereignty, while traditional donors emphasize that aid is more effective in countries with good governance." (Schiere et al, p. 7)

With this sort of proposal for a shared approach, some interviewees from the development finance institutions, in particular, specifically raised concerns that recipient countries are accessing grant funding available through multilateral and bilateral funding sources for the preparatory phase only to turn around and offer the contract for implementation of the project to the Chinese. Some would argue that the end justifies the means and that whatever means can be found to get the infrastructure built is justified. Others are recommending that recipient countries commit to a greater level of transparency upfront in the terms that they negotiate. It has also been recommended that new terms be negotiated when countries receive support for project preparation such as signing on to a "right of first refusal" with the institution or institutions that provide the preparatory support.

Many of the traditional partners have also signed on to the OECD-DAC Principles for untying aid as well as the Paris Declaration on Aid Effectiveness both of which convey a commitment to local ownership in the use of local skills, in enabling local control of funding and in incorporating technical assistance and capacity building where gaps are identified. As the AFDB report notes, "China has at times emphasized the construction of new facilities, while not necessarily addressing long-term sustainability such as maintenance and capacity building." (*ibid*, p. 10) Both Brazil and China continue to negotiate agreements that insist upon the use of their own nationals in the development and implementation of infrastructure projects making skills transfer or revenue generation for local

labour an elusive outcome. Some interviewees have said that this approach stems from concerns by emerging economies about the ability of local labour to deliver on the assigned mandate. Capacitating and empowering developing country governments to negotiate conditions such as skills transfer may be one way to address this issue.

A positive approach proposed by some of the Western players is to begin by opening a dialogue with emerging partners that is aimed at looking for more opportunities to work jointly on projects based on the principles of transparency and mutual benefit. The AFDB is calling for improved coordination between aid and investments from China and from traditional partners. The G20 offers an important avenue to explore this partnership option. The decision to include all G20 countries as participants in the meetings of the Infrastructure Consortium for Africa also represents an important step in building bridges and fostering collaborative relationships. This approach would need to ensure greater openness and transparency on the part of all countries in terms of both the development and implementation phase in order to level the playing field and foster a more favourable environment for North-South collaboration.

Fortunately there are already examples of collaboration that are emerging between traditional Western partners and emerging partners that offer the potential to learn lessons and to integrate best practices. For example, in West Africa, DfID is cooperating with China on health and malaria projects. It would therefore be worth gathering information and, where necessary, undertaking case studies on how these models of cooperation operate with a view to fostering greater opportunities for collaboration. The additional merit in adopting this approach is the potential for traditional partners to transfer some of their lessons learned and best practices garnered over the past 30-plus years of working on development cooperation to emerging partners. While South-South cooperation is becoming the popular approach to development being embraced by emerging economies, a representative of the South African government noted that it would be unfortunate to discard everything that has been learnt over the years by the Western partners.

Indeed, interviewees cited examples of errors made by the Chinese such as the sale of rail cars that do not work in Africa or the failure to incorporate a maintenance plan into the terms of the agreement. Ironically, both of these errors were previously committed by Western supporters and lessons have subsequently be learned that would be worthwhile sharing more broadly. In practical terms, the AFDB is recommending that the China-DAC Group be used as a forum to share lessons learned and best practices from traditional development partners. However, to ensure the integration of all emerging players on the continent, a broader grouping such as the G20 may be a more appropriate platform.

Private Sector Engagement in Financing Infrastructure

Leveraging Instruments

Given the constraints faced by the public sector in securing adequate financing for infrastructure development, the private sector is increasingly being seen as an important source of investment. In general, the private sector can play an essential role in contributing to infrastructure finance, representing approximately 20 percent of infrastructure financing in developing countries. (Delmon, p. 3) Historically, however, the private sector has played a smaller role in supporting infrastructure in Africa than in other regions of the world. Despite the need and the potential benefits that can accrue to the private sector through investing in and supporting the development of improved

infrastructure, private investors have tended to shy away because of the small markets, inadequate tariffs as well as the overall perception of risk.

Investors also face a host of challenges including weak enabling environments, lack of political commitment, legal and ownership issues, environmental risks as well as regulatory challenges. Of equal importance for the private sector is the need to identify a viable revenue stream which tends to limit the sectors in which it is willing to invest. As William Dachs, Senior Executive Manager, Technical Services at the Gautrain has noted: "You can do all of the advisory things, but if you can't find a revenue stream to attract the private sector, then forget it. This accounts for why the private sector is principally in telecoms. People are generally willing to pay for a SIM card."

It is usually at the project structure phase where the creation of the appropriate technical and commercial structure for a project becomes critical for attracting finance. (*ICA Project Preparation Guide*, p. 6) This includes attracting the right mix of finance which often involves both public and private sector finance. With private sector support being deemed as essential, there are a number of products aimed at leveraging private sector investment such as the World Bank's Partial Risk Guarantee and Multilateral Investment Guarantee Agency's (MIGA) ¹³political risk instruments which aims to mitigate political risk while fostering the creation of an enabling economic environment for capital inflow to Africa. (*Africainvestor*, p. 68) Indeed, the World Bank has developed a whole host of risk mitigation products including political risk, breach of contract by a government entity, market risk and default risk because it recognises that investors need assurances that they are protected on all fronts.

Development partners are playing an important role through the provision of financing to leverage the contribution that the private sector can make. This includes addressing some of their key concerns such as strengthening the enabling environment and providing support to mitigate risk. Citing the OECD Creditor Reporting System, the OECD-DAC report that maps support to Africa's infrastructure notes that development agencies allocate about 25% of Overseas Development Finance (ODF) to strengthening the enabling environment for the private sector by principally supporting activities such as providing experts or training government staff in various stages of planning and operations. (Mapping Support for Africa's Infrastructure, p. 4).

A number of donors are supporting the Private Infrastructure Development Group (PIDG) which is an initiative working in partnership with donors, local operators and government bodies to overcome the obstacles to private sector infrastructure by offering a range of specialised financing and project development facilities and programs. The facilities and program are able to provide financial, practical and strategic support that is specifically tailored to addressing market gaps. (PIDG web site) The IFC's Special Initiative was recently developed with a view to complement and expand IFC's existing efforts in the area. The initiative stems from a response to a growing demonstration of government readiness to contemplate private delivery of infrastructure and Public-Private Partnerships. (IFC web site)

¹³ MIGA is a member of the World Bank Group that aims to promote Foreign Direct Investment to contribute to poverty reduction through the provision of political risk insurance to private lenders and investors (MIGA web site)

Public-Private Partnerships

Overall, there is an increasing focus on the private sector, most notably with a particular focus on PPPs, in large part due to the limited money available from the public purse. Through its PPP Unit, the South African National Treasury has developed a *PPP Manual and Standardized PPP Provisions Guide* which defines a PPP as: "a contract between a public sector institution and a private party, in which the private party assumes substantial financial, technical and operational risk in the design, financing, building and operation of a project." (*Public-Private Partnership Manual, pp. 4-5*) According to Jeffrey Delmon, author of a World Bank/PPIAF book on Private Sector Investment in Infrastructure, PPPs also offer an opportunity to raise additional funds for infrastructure investments and, more importantly, provide a means to "extend or leverage better budget funding through efficiency gains." (Delmon, p. 7) While the International Finance Corporation has noted that there is no one set definition for describing a PPP, there is no doubt that PPPs need to be seen as a clear partnership whereby financing and risk are shared between the private and public sector.

PPPs are also often cited as being a successful example of engaging the private sector with government in infrastructure development because they can play an important role in improving procurement of public sector infrastructure projects. The Draft Final Report for the High-Level Panel on Infrastructure has indicated that comparative analysis has shown that PPPs can contribute to saving time and increasing social benefits. The Panel also suggests that PPPs can reduce cost overruns relative to public projects and can therefore contribute to the overall efficiency of an infrastructure project. (*HLP Report on Infrastructure,* p. 8) In addition to the potential to foster more innovative solutions, a study conducted by the European PPP Expertise Centre (EPEC) also cites accelerated and enhanced delivery as two key non-financial benefits that can be derived from engaging in a PPP. (*EPEC Study on the Non-Financial Benefits of PPPs*)

However, both the HLP Report and the Infrastructure Action Plan note that the public investment must be designed to provide a supportive framework for the beneficial private sector involvement that seeks to address their needs and concerns. At the same time, the HLP report notes that creating a favourable enabling environment plays a central role in fostering the potential to secure infrastructure project financing and includes the need to ensure that the legal and regulatory frameworks provide protection for all parties involved in PPPs, including the government, the private sector investors, the lenders, the designers, contractors and operators, and the user of the infrastructure services. (HLP Panel on Infrastructure, Draft Final Report, p. 7) According to William Dachs, Senior Executive Manager at Guatrain, PPPs work well when you have a competitive market, a well-subscribed market with a high willingness to pay, and the environment is well regulated and well known. Where it does not work well is when the risk profile becomes skewed and when the private sector is operating in an environment in which it lacks experience. Hospitals, for example, is cited as a popular playing field for PPPs due to private sector experience and the public sector's need to deliver on essential services.

A government's approach and attitude towards the private sector can also send positive or negative messages to the private sector in terms of a genuine interest in engagement as well as an interest in understanding the terms under which the private sector must operate. Some private sector representatives are of the view that PPPs will not advance without first confirming that there is legitimate will on the part of government to engage with them which includes demonstrating that government has a good understanding of the terms under which the private sector needs to

operate. Given that infrastructure is a long-term undertaking, one of the main challenges and concerns raised by the private sector is the lack of political commitment and predictability, particularly when there is a change of government.

The CEO of BEPEC, a private sector umbrella organization, cited a case where the private sector had explored a project by engaging with relevant government representatives as well as a newly established PPP Unit. At the point where progress was being made, an election took place ushering in a new President who took the decision to dismiss many of the people with whom the consortium was dealing as well as to disband the PPP Unit. Even with the institution of all of the capacity and risk measures cited above, a lack of political certainty increases the perception of risk and results in a greater reluctance for the private sector to invest the money required to engage in the bidding process.

A number of interviewees also spoke about the inherent distrust that seems to exist between government and the private sector in Africa making it difficult to explore opportunities for any kind of collaboration including PPPs. There was also a feeling that there is insufficient or non-existent dialogue between the public and the private sector and that more needs to be done to find ways for the public and the private sector to work together. The Walvis Bay Corridor group has adopted a forum approach in moving forward on its approach to PPPs. It argues that it represents an important way to fast track projects that are not advancing. What is more important is that a forum includes people who have the ability to take decisions. Indeed, one of the other obstacles identified is that often delays are caused by the fact that the private sector is having to deal with people who lack the ability to take decisions. To deal with this issue, Tumisang Moleke, the Head of the PPP Unit in South Africa, is recommending that the design, operation and maintenance of infrastructure be housed under one entity as a means of ensuring that all of the necessary people are available both to understand the process and to be able to take the necessary decisions.

The establishment of an official forum through which the private sector can engage with the public sector is another recommendation being put forward. Umbrella business groups have the potential to play this role, but they, too, must be strengthened in order to play their role effectively. By engaging the private sector there is also a greater possibility that the market perspective will be integrated, sometimes serving as a counter balance to projects that are driven by the public sector and are not always based on sound economic and financial analysis. It was therefore recommended that more work be done to identify the best ways for government and the private sector to use their respective skills as well as to identify ways to convince government representatives of both the merits and ways to engage the private sector.

While PPPs are being heralded as the answer to dealing with dwindling public sector funding, as one person noted, if you remove mobile telephones, you are left with a very different story in terms of the level of engagement of the private sector. According to Joel Kolker, a World Bank representative who has worked on PPPs since the 1990s, a quick search on the PPI database shows that Africa has done very little over the past decade in terms of genuine PPPs in the area of core infrastructure such as power and transport in large part due to lack of capacity and lack of political will. Others have also argued that the private sector is only willing to engage in sectors where it is certain about the revenue streams or where it has developed considerable experience. As has been witnessed in the case of protests over toll road charges or increases in electricity fees, the public seems to have little

to no tolerance for paying additional fees beyond what is paid in taxes for the delivery of basic services making it less appealing for the private sector to engage. The private sector is always keen to be paid to construct the infrastructure or to manage the services. However, they are far more reluctant to assume the role of collecting fees or tariffs that may not be favoured by the general public.

This being said, power may be experiencing a renaissance for engaging the private sector. Increased interest stems from an increase in acceptability for private sector engagement as well as an adoption of pragmatism about the need to move quickly on the construction of power facilities to ensure long-term economic stability and to stave off potential protests from angry consumers. Transport, however, is facing difficulties in part because of the current dissension emerging around the toll road in South Africa's Gauteng area as well as a recognition that many African countries simply cannot generate enough revenue or traffic to justify their inclusion. Indeed, as one interviewee noted, PPPs risk being seen as the catch-all solution to lack of funding even when the conditions are not favourable for private sector engagement. They can also mutate into the goal rather than the means to the goal. Given the complexity of engaging in PPPs, in some cases, a government may simply decide that it makes more sense to seek the funding through the issuing of bonds or by looking for the most favourable borrowing terms.

Since PPPs are a fairly new phenomenon for many African countries, there is also a general lack of capacity and understanding about how to proceed. Furthermore, the establishment of PPP Units is just emerging, and those that have been established tend to be quite weak and in need of strengthening. Across the continent there are very few PPP Units that exist. Aside from South Africa, two other African countries, Mauritius and Nigeria, have strong PPP Units that are capable of developing PPPs in an efficient and effective manner. In cases like Kenya where they do exist, they are still considered to be quite weak and lacking in capacity. In a number of countries, there is simply an overall lack of expertise. Where capacity is lacking, political will is once again be needed to commit the funding needed to engage the kind of expertise to shepherd a PPP from start to finish.

To deal with capacity shortcomings, the Infrastructure Action Plan prepared by the Multilateral Development Banks and submitted to the G20 High-Level Panel on Infrastructure includes a recommendation for expanded technical assistance through the establishment of PPP practitioners' networks. By providing access to networks of PPP professionals, relevant people in government and the private sector could receive help to develop the legal and regulatory frameworks for PPPs as well as to support the development of PPP units in each country. (Infrastructure Action Plan, p. 5) Based on the experience of the European Union PPP Expertise Centre, it is expected that this network will provide an opportunity for professionals to work together to develop common approaches and to achieve more efficient scale in capacity building and training activities. ¹⁴ Whereas mentoring and training may offer some measure of capacity building, the Head of South Africa's PPP Unit is of the view that people learn best through repetitive actions and is therefore recommending the creation

¹⁴ Some of the Multilateral Development Banks have already developed tools, web sites and information kits in a bid to advance the PPP agenda. The International Financial Corporation (IFC) has developed an Infrastructure Resource Center for Contracts, Laws and Regulation (PPPIRC) contains sample PPP agreements and has recently released a peer-reviewed journal on PPPs. PPIAF has also established a platform for dialogue on PPPs.

of centres of excellence to enable people to go through a process over and over again in order to learn through repetition about the various stages of developing a PPP.

In some cases, PPP Units are being developed to support the push to establish PPPs without necessarily examining the whole picture of what the private sector needs. One of the roles of PPP Units is to analyse contingent liabilities and to give recommendations. Furthermore, the overall role and expectation of PPPs and their supporting Units tend to be conceived differently in each country making it difficult for the private sector to develop a systematic way to engage either at the national or the regional level. One industry representative spoke of their experience in Zambia where PPP legislation had recently been enacted and a PPP Unit had been installed in the Ministry of Finance. The PPP Unit was generally very weak and lacked the necessary technical information. Given the lack of technical information, the private sector bidder had to increase the level of risk management which translated into the decision by the private sector to request substantially more money to implement the project.

The issue of PPPs is even more problematic at the regional level where there is limited demand or interest on the part of the private sector to engage. As a result of a need and recognition of the merits of coordinating efforts to support PPPs, of sharing best practices as well as the need to secure additional funding for regional projects, in 2010, the Ministers of Infrastructure within the SADC region met and agreed that SADC must bring to centre stage PPPs for infrastructure delivery. With the support of GIZ, the World Bank Institute (WBI), South African National Treasury and the Commonwealth Secretariat, SADC Development Finance Resource Centre (DFRC)has been identified to serve as the secretariat of the SADC PPP network. Anticipated activities include support for capacity building aimed at the development of skills, institutional capacity as well as policy and regulatory capacity with a view to addressing some of the barriers to the development of bankable projects in the region. (SADC DFRC promotional brochure).

The establishment of a network of PPP practitioners in the SADC region is not solely aimed at building capacity along the principles of economies of scale. With a major focus on infrastructure, it is also seeking to promote public-private dialogue among relevant stakeholders including banks and accountants in order to stimulate debate and reach a common understanding. Whereas a list of projects has been established, the major challenge remains in developing them into bankable projects. A SADC Project Preparation Fund is being presented to SADC Ministers for funding the development and implementation of infrastructure projects. Along with the challenges listed in the sections above of the report, progress on this initiative will take time to put in place and to build up the institutions needed to make PPPs work effectively in the region.

Furthermore, at the SADC consultations, the private sector continued to ask Member State governments and SADC to submit bankable projects that the private sector can, with confidence, agree to move forward and develop.¹⁵ Some members of the private sector tend to be of the view that PPP mode is often looked at as a solution to funding shortfalls, but those who put it forward often fail to factor in the huge risk capital cost in trying to develop a project upstream. In general, there is a huge amount of upstream work that must be done before you can get the project to bankability. For the private sector to come to the table to bid on an infrastructure project worth

¹⁵ DBSA is contributing \$200,000 to staff the SADC DFRC Secretariat with two people and GIZ is putting in an equal amount.

\$200 million requires an investment of approximately \$10-\$15 million or as much as 10% of the overall project. In general, the private sector must invest a lot of money to get to the bid phase, and it can take two to three years before a decision is taken. Too often the private sector is reluctant to take the risk when they consider the regulatory and policy environments in which they must operate in Africa.

Decisions to cancel the PPP can be seen by some in industry as the death knell for private sector engagement in PPPs. Given the level of investment made by the private sector, it can cause anger within the private sector community and send a message to some that government is either not serious about engaging with the private sector or lacks a solid understanding of the financial implications for the private sector in investing in a bid as well as its need for a degree of predictability. As one industry representative noted, the key elements that the private sector is seeking within government are efficiency, capacity and stability. It also changes the approach and level of risk that the private sector will place when considering engagement on any future tender. If the terms are changed through the course of the process such that the project is no longer deemed to be commercially viable, the private sector is left having invested time and money on a project that they may no longer wish to bid on.

SADC DFRC is aiming to capacitate government to talk to and negotiate with the private sector and to understand the private sector within the context of educating government about the nature of PPPs and how to come up with PPPs. Whereas it is acknowledged that each country context is different, a case study or stock taking through consultation with the private sector to learn about the challenges they face in dealing with the public sector could be a useful exercise and an important source of information to communicate to government representatives. At the same time, the private sector also has a role to play in fostering relationships, engaging in dialogue and in dispelling perceptions that its sole purpose is to make a profit at all costs. Furthermore, it needs to appreciate that one of the challenges most governments face is how to deal with public perceptions that the private sector is being subsidised through public sector funding. Although PPPs are intended to involve a fairly balanced level of burden sharing, they are often misunderstood and poorly regarded since citizens tend to assume that the government is subsidising the private sector for the delivery of infrastructure projects.

Despite the challenges mentioned above, the tide towards private sector investment may be turning. Although there is still a manifestation of caution, an active driver towards partnership-based infrastructure is now being observed. (*Africainvestor*, p. 70) In the case of South Africa, the announcement by the South African Department of Public Enterprise to significantly increase the capital expenditure budget of state-owned freight and logistics as well as to accelerate investments in new rail and ports capacity has resulted in an announcement by Public Enterprises Minister Malusi Gigaba about the interest in exploring the possibility of public-private partnerships. The government is also finalising protocols for a framework to allow the private sector to invest in the state's capital expenditure projects. Whereas political announcements may bode well for progress, what the private sector will still be looking for is the reassurance that the government is committed to developing and maintaining a friendly investment climate over the longer haul.

An article in *Africainvestor* also indicates an increasing momentum developing behind private sector investment in infrastructure projects at both the national and regional level. According to SADC

DFRC, the private sector both domestically and internationally has expressed a lot of interest to get business and market information in order to look for market opportunities. For example, the recent recommendation by the G20 HLP for the use of the Sokoni Africa Infrastructure Development Marketplace as an important technology platform to increase the quality of information available to investors through better links to project sponsors and financiers represents a strong endorsement for increasing private sector engagement as well as a clear demonstration of private sector demand. With emerging economies playing an increasing role in infrastructure development, it may be also worth investigating how to take advantage and integrate these new players into the PPP configuration while also seeking to maintain certain safeguards such as value for money.

The Role of Development Finance Institutions (DFIs)

Development Finance Institutions also have an important role to play in fostering greater participation on the part of the private sector in infrastructure development. According to a Study by the Overseas Development Institute, DFIs have the potential to contribute to growth and poverty reduction by supporting the development of a vibrant private sector in developing countries. DFIs also tend to share a common focus on fostering economic growth and sustainable development. With a special mandate to provide financing to the private sector, they tend to emphasise the importance of financing long-term viable enterprises due to the view that only profitable and sustainable business will contribute to growth in the long run. (te Velde and Warner, p. 2)

DFIs generally provide subsidies in the form of technical assistance or grants for activities such as capacity building. Funding is often generated from profits made from investments in safer areas or, in the case of international projects, may also come through contributions from international donors. These subsidies are principally aimed at improving the regulatory environment, expanding options in terms of access to finance, assisting in restructuring and privatising state-owned enterprises as well as fostering the promotion of PPPs. (*ibid*, p. 4)

DFIs can play an important role in bridging support between public and private sector operations and frequently identify opportunities to exploit the complementarities between the two sectors. In the case of post-conflict countries, for example, DFIs seek to "narrow the gap between pure commercial loans from the private sector and grants from donor agencies. "(Ruiters and Giordano, p. 12) An investigation of independent power projects (IPPs) conducted by Eberhard and Gratwick determined that DFIs are also willing to provide support in areas where commercial banks show greater reluctance. For example, IPPs tend to be less attractive to commercial banks and are often supported by DFIs which are noted for providing credit to projects across the pool. As the study determined, "sponsors have appreciated the tendency of DFIs to stand by power projects or to resist renegotiating terms when unexpected or uncontrollable events such as droughts can have an impact on the financial viability and potential for returns on investment. "(Eberhard and Gratwick, p. 6)

Likewise, the support DFIs provide frequently seeks to crowd in the private sector by lowering the level of risk and by demonstrating the benefits to other potential investors of investing in a particular sector or country as well as strengthening or reinforcing the overall enabling environment. Once DFIs have created a favourable investment environment, however, the expectation is that they should look "for an exit strategy and a shifting of obligations to the commercial credit markets." (Petersen and Crihfield, p. 71 from Thorne, p. 10)

Because of the nature of their business, DFIs are also assumed to have a greater understanding and appetite for risk. Depending upon their financial situation as well as the sovereign backing availed by their host country, DFIs can often be the first investor into a country or sector thereby creating a more favourable environment to attract private sector investment. In the case of riskier markets such as post-conflict countries, DFIs may choose to enter high risk markets in an attempt to foster an environment that will be conducive to private sector investment. Indeed, a key principle of a development bank is to provide complementary funding which is principally linked to the concept of comparative advantage. The capacity to understand and manage risk as well as to have a good understanding and knowledge of the clients in these markets represent two fundamental strengths tied to a DFI's comparative advantage. (Thorne, p. 10)

This being said, what is put forward in principle does not always translate into practice. According to Janine Thorne who conducted a recent study on DFIs, "national Development Banks have a long history of failure." A representative in the International Division of the DBSA also emphasised that the DBSA is aware of past failures of development banks such as the Land Bank and is doing everything possible to avoid following that same path. As such, the willingness of governments and shareholders to support a high tolerance of risk fluctuates in terms of a sponsoring country's own tolerance for risk particularly when relevant government and shareholder representatives perceive that the nature of a loan may jeopardise the long-term sustainability of the Bank.

In 2008, Trevor Manuel, South Africa's Finance Minister at the time, called for South African DFIs to increase their appetite for risk in a bid to play a more effective developmental role in the region and on the continent. (Ruiters and Giordano, p. 14) However, what is said in political messaging must also translate in terms of the practical willingness of a country to step forward and back risky loans. As Janine Thorne, a former representative of the DBSA has noted, "a government may talk about leveraging the DBSA's financial muscle, but it gets very concerned when the financials come under pressure. There is only so much risk that the Bank can take without crossing this line. There has been a concerted effort to improve risk management, to allow the Bank to take on more risk while staying financially sound." However, risk management tools and policies can only go so far in managing risk, particularly in countries emerging from conflict or with other governance challenges. In cases where risk is particularly acute, one approach is to ring fence the funding in a bid to ensure that a DFI ensures the maintenance of its overall risk controls.

PART VII Recommendations/Lessons Learned

The following is a list of recommendations drawn from the report on the Challenges to Regional Infrastructure Development. Since the report was prepared as a survey which did not enable time for detailed investigation of particular topics, it is possible that some of the recommendations have already been undertaken. It is hoped that readers of the report will provide input and advice to the DBSA and other relevant stakeholders about those recommendations that are worthy of further investigation or follow-up.

Corridors:

a. Lessons learned and best practices from the North-South Corridor should be gathered and shared with other emerging corridor projects. Some studies to gather lessons learned have already been undertaken such as those available on the TMSA web site.

However, more could be done to track findings throughout the process of developing and implementing a corridor as well as to set up a systematic way to gather and share information.

- **b.** The corridor approach to development should factor in all elements needed to enable the development of transport along the continent such as ensuring the existence of strong economic regulatory mechanisms.
- **c.** The definition of relationships among projects is an important building block before moving forward on the design and implementation of corridor projects.
- **d.** Undertake a study to investigate the best options for managing corridors through investigating and gathering lessons learned on existing governance structures and models such as MCLI and Walvis Bay Corridor. This includes seeking to determine what criteria should be used to determine the best and most appropriate mechanism or structure to adopt including whether to adopt some kind of temporary or permanent mechanism for coordination. Details on the governance structure of identified options will also assist in expediting the development of a relevant coordinating mechanism.

Regional Integration:

- a. Undertake a survey with relevant stakeholders from countries within the SADC region to identify perceptions and concerns which are causing barriers to regional integration.
- b. Undertake further investigation of the other regional bloc models such as the East African Community and European Union to gather lessons learned and best practices for overcoming some of the regional integration impasses within the SADC region.
- c. Undertake a study to identify appropriate opportunities for the South African government and the private sector to overcome perceptions of regional dominance through initiatives that engage with and provide support to least developed countries in the region. If appropriate, develop pilot programming that can be tested in some of the SADC countries with a view to expanding region-wide.
- d. To smooth the path for political engagement on regional integration, there is a need to raise awareness among the population both locally and regionally about the wealth potential for the region of engaging cooperatively. To do so, information and arguments should be gathered and assembled in a format such that it is understandable to the general public. Communication and outreach programs with media, civil society and other relevant stakeholder groups should also be developed. Civil society organizations should be engaged as partners in the process.
- e. Allocate sufficient time in a regional project to forge relationships and negotiate agreements. Undertake case studies with initiatives that have been successful in forging relationships to gather lessons learned and best practices.
- f. Ring fence specific issues in order to facilitate dialogue among all the members of a working group dealing with regional or corridor issues. Ring fencing can be done in the form of the establishment of informal working groups.
- g. Establish a principal coordinating committee that brings together all of the relevant players to overcome the coordination challenge.
- h. Undertake further analysis about the economic consequences such as job losses of failing to introduce effective trade facilitation measures. Prepare information in an accessible format in order to promote these findings to the relevant stakeholders.

i. At the early phase, cooperating countries need to demonstrate a commitment to cooperation and consultation as essential building blocks to achieving the overall objective of regional cooperation and coordination. This may require the preparation of legally-binding contracts.

Planning:

- a. Early rigor can save money in the long run by eliminating projects that should not have gone beyond the pre-feasibility stage. It is recommended to spend \$50,000 at the pre-feasibility stage to determine if a project is bankable and financially viable before disbursing any additional funds.
- At the pre-feasibility stage, ensure that alternative technical approaches are reviewed with a view to determining whether they are more effective than the proposed approach. (PPIAF Strategy for Southern and Eastern Africa)
- c. Centralisation of planning and oversight of projects can help in addressing the prioritization exercise.
- d. Coordination among the relevant departments is essential since a number of departments such as the Ministry of Finance must inevitably be consulted to ensure their buy-in and support for the project. Governments should therefore establish coordinating committees on infrastructure development and ensure that all of the relevant ministries are included. If necessary, they should begin by developing an understanding of what departments should be involved or consulted in the process.
- e. Analysis should be undertaken to quantify the financial losses, most notably through the provision of preparatory funding, in cases where tenders need to be re-opened or where the bid is not able to go to tender at all. The results of this analysis should be shared with relevant stakeholders interested in developing future infrastructure projects.
- f. The identification of a project champion is important to ensuring that the project is effectively shepherded through the necessary departments. This is best done by having the champion present the project to senior government officials and other relevant stakeholders. The champion should also assume the main responsibility for taking the project forward and should ensure that he or she is supported by strong and competent bureaucrats.
- g. In terms of costing at the preparatory phase, it is important to allocate sufficient funds to conduct feasibility studies as well as to ensure that there is always sufficient expertise available to conduct the study both externally and within the public or private sector that is managing or overseeing the process.
- h. Planning and budgeting for the incorporation of monitoring and follow-through should be done at an early stage to ensure that a government has the financial capacity to assess the quality and sustainability of projects as well as to assess that the completed project meets the terms of the contract. When needed, the budget should include funding to build the capacity to assess the quality of a project upon completion.
- i. The AICD study has recommended that performance pay be linked to infrastructure project completion. Part of the criteria for assessing performance should be tied to assessing whether the relevant bureaucrats have ensured the delivery of high quality and sustainable infrastructure.

- j. A government should ensure upfront that the signed contract allows for a country to request recourse in the event that the project does not meet the quality and sustainability standards
- k. More work and analysis should be done on determining what information and skills a country needs both to negotiate and assess the terms of the contracts they have negotiated as well as to monitor and evaluate the projects while being implemented and upon completion.

Capacity Building:

- a. Determine the capacity needs and gaps as early as possible by undertaking a capacity gap analysis or skills assessment before moving forward on the development of a bankable project. Support may need to be provided and capacity built about how to undertake an effective assessment.
- b. Tackle all major capacity issues at an early stage while also ensuring that all of the technical capacity is catered for before moving forward on the financing agreement
- c. Investigate and gather lessons learned as well as best practices from programs that undertake capacity gap analysis of government ministries such as the Millennium Challenge Corporation.
- d. Lessons should be gathered about the best pedagogical methods to provide training and capacity building that ensure effective and sustainable skills transfer.
- e. Where capacity is lacking, planning activities should be done in a partnership format whereby capacity building is incorporated as a 'learning-by- doing' part of the process.
- f. Adopt a programmatic approach to an infrastructure project so that the role and importance of building and using local capacity can be incorporated as part of the overall program design rather than as stand-alone, once-off initiatives.
- g. Best practices and lessons learned should be gathered and documented on how to create the kind of working environment with the necessary incentives to encourage those whose capacity has been built to remain in their positions.
- h. The design of capacity building programs should be based on the adoption of the perspective of building long-term assets.
- i. In the case of skills that require a tertiary education such as engineering and accounting, a government needs to adopt a long-term, cradle-to-grave vision that begins with engagement with the department of basic education or its equivalent to ensure that students acquire the necessary skills such as math and sciences to later be in a position to qualify for the requisite tertiary education programs.
- j. Lessons should be learned and shared with relevant government departments about the experience of other countries in negotiating skills transfer and/or the use of local labour as a condition for securing an infrastructure tender.
- k. Where broad-based capacity is lacking across several departments, countries should consider the formation of a consortium of experts.
- I. When using external consultants to address capacity gaps, lessons should be gathered from the experiences of using consultants including procurement procedures, budgeting etc..

PPPs/Private Sector Engagement:

a. Provide additional support to strengthen the capacity of relevant institutions such as SADC DFRC to play an effective role in capacitating relevant stakeholders to undertake PPPs.

- b. A survey should be undertaken to gather information and assess the capacity of African governments to engage in PPPs including assessing the capacity of PPP Units and identifying ways to strengthen relevant capacity. The study can build upon initiatives proposed by the HLP and previously undertaken by organisations such as SADC DFRC.
- c. Case studies or stock taking through consultation with the private sector to learn about the challenges they face in dealing with the public sector could provide an important source of information to communicate to government representatives and to improve overall relations.
- d. The private sector needs to develop a better understanding of the challenges governments face as well as how to engage with them more effectively.
- e. A study should be undertaken to identify the best ways for government and the private sector to use and appreciate their respective skills. The investigation should also seek to identify the barriers to developing PPPs as well as to determine the most effective ways to improve the relationships between these two groups.
- f. To develop an enabling environment that will attract a quality developer, a government should invest the time to gather a good understanding of what investors' needs are as well understanding the criteria they use to take decisions.
- g. When appropriate and needed, an official forum should be established through which the private sector can engage with the public sector. Umbrella business groups tend to play this role. However, in cases where they are weak, support should be provided to enable them to play their role effectively.
- h. Best practices and lessons learned should be gathered to assist governments to effectively communicate and promote the use of PPPs and engagement of the private sector to the general public including when and how to undertake consultations.
- i. Explore options for integrating emerging economies into the PPP context.
- j. Establish centres of excellence to enable government representatives to learn about PPPs through a process of repetitive learning by doing.

Financing for Project Preparation:

- a. A study should be undertaken to assess the feasibility as well as the approach to the establishment of a continental or regional project development financing facility.
- b. More money needs to be allocated to cover the costs of project preparation. Funding also needs to be bundled or include higher ceilings of access to reduce the overall transaction costs for the institution that has to manage multiple funds. (HLP Recommendation)
- c. An investigation/study should be undertaken to determine how many of the projects funded through PPFs go to bankability. Building on existing findings, the study should also seek to gather additional information on obstacles to bankability.
- d. A study should be undertaken to determine the feasibility and approach to the institution of some kind of instrument to ensure that the PPF money is spent as effectively as possible.
- e. An investigation should be undertaken to determine whether the allocation of more money for the upfront analysis or what is referred to as the "fatal flaw financial model", would reduce the likelihood of wasting project preparation funds on un-bankable projects.
- f. An investigation should be undertaken to assess the merits of the recommendation to cap the grant equity at 20% as a basis for determining whether to go further in the preparatory and assessment stage.

Financing Infrastructure and Financing Mechanisms:

- a. Building upon the survey report of the OECD study aimed as mapping infrastructure financing, a more detailed study to assess and document the pros and cons of different financing mechanisms including options such as hybrid financing mechanisms should be undertaken. Specific attention should be given to mechanisms to support regional infrastructure.
- b. Further investigation of the findings and prescriptions of the AICD study in relation to dealing with inefficiencies should be undertaken both to document and further quantify cases where efficiencies have been addressed as well as to provide further guidance and detail to relevant stakeholders about how to address specific inefficiencies.

Social and Environmental Considerations:

- a. To enable governments to better understand how to derive benefits for the poor, more work should be done to examine options and provide support for the design of subsidy programs that ensure that the poor are the true beneficiaries.
- b. Building on the work of MMCP, more work should be done to determine how the private sector can be encouraged and enabled to effectively incorporate social considerations. The investigation should seek to document and quantify what the private can realistically do and what measures need to be put in place and what skills need to be built to promote and enable the inclusion of social benefits.
- **c.** An investigation to determine what are the costs and benefits of fast tracking projects which tends to include foregoing the inclusion of corporate social responsibility conditions at the planning phase should be undertaken.
- d. For infrastructure projects that are tied to resource extraction, governments should develop the capacity among relevant bureaucrats to negotiate agreements with the private sector that include the integration of social benefits and environmental considerations.
- e. If a country determines that social and environmental considerations represent an important element of their infrastructure development, capacity should be built to assist them to incorporate the kinds of terms and conditions that ensure that these practices are incorporated. Where necessary and appropriate, awareness raising on the benefits of the incorporation as well as the costs such as delays in proceeding should also be incorporated as part of the capacity building program.

Risk Mechanisms:

- a. More work should be done to document, assess and share information among relevant stakeholders about the risk mechanisms available.
- b. For regional projects, the PIDA Draft Energy Report for PIDA has recommended the establishment of a continent-wide risk guarantee facility funded by donors. More work should be done to investigate the merits of this recommendation.

Financing Regional Infrastructure:

a. A regional surcharge for uses of infrastructure that has regional reach and potential has been recommended. More work should be done to investigate the merits and feasibility of this recommendation.

- b. A study should be undertaken to gather lessons learned and best practices on the use of a Special Purpose Vehicle or to other mechanisms that would enable benefiting countries to jointly support a regional infrastructure project that is based in one host country.
- c. A number of exchanges between African, Asian and Latin American regional organizations including as part of the G20 preparatory meetings. It would be worthwhile to pull together and further investigate lessons learned and best practices stemming from the involvement of regional development banks worldwide in regional infrastructure projects.
- d. Gather and share information on the different funding mechanisms and options as well as procurement rules in cases where countries with different levels of GDP engage in a regional infrastructure project.
- e. The HLP has recommended that reviews of existing project development financing facilities be performed on a regional basis, and that they be done jointly by the Multilateral Development Banks and bilateral donors. The results of this study should be shared widely and consideration should be given to organizing some kind of forum to discuss the findings.

Emerging Economies:

- a. Lessons learned and best practices should be gathered in negotiating infrastructure projects with emerging economies with the view to building the capacity of relevant government representatives.
- b. Lessons should be learned from positive examples of the negotiation of favourable contracts such as the case where Botswana successfully used international consultants from top legal firms to negotiate lucrative contracts for its natural resources with DeBeers.
- c. The AFDB study on China and Africa is recommending improved communication between management of Chinese-owned enterprises in Africa and African civil society organizations. To overcome cultural and linguistic differences, they recommend expanding scholarship opportunities for Africans to study in China. Further investigation should be undertaken to assess the merits of these sorts of programs.
- d. Lessons and best practices should be gathered with respect to joint ventures between Western/traditional partners and emerging partners. For example, in West Africa, DfID is cooperating with China on health and malaria projects. It would therefore be worth gathering information and, where necessary, undertaking case studies on how these models of cooperation operate with a view to fostering greater opportunities for collaboration.
- e. It was recommended that recipient countries commit to a greater level of transparency upfront with respect to the terms that they negotiate for the development/preparation and implementation of infrastructure projects. It has also been recommended that new terms be negotiated when countries receive support for project preparation such as signing on to a "right of first refusal" with the institution or institutions that provide the preparatory support.
- f. The capacity of developing country governments should be built to enable them to negotiate conditions such as skills transfer with emerging economy partners.
- g. Forums such as the China-DAC Group, the G20 and ICA should be used to share lessons learned and best practices between traditional development partners and emerging partners about the development and implementation of development projects and programs as well as to explore opportunities for collaboration.

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