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International Growth Centre

PPPs and Missing Markets in Sub-Saharan Africa

A Study on Project Preparation Funding

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ABBREVATIONS

General terms

ACP	African, Caribbean and Pacific Group of States
ADA	Austrian Development Agency
AFD	*Agence Française de Développement* [French Development Agency]
AfDB	African Development Bank
AICD	African Infrastructure Country Diagnostic
AIIM	African Infrastructure Investment Managers
AWF	African Water Facility
CEPA	Cambridge Economic Policy Associates
COMESA	Common Market for Eastern and Southern Africa
DBSA	Development Bank of Southern Africa
DFI	Development finance institution
DFID	Department for International Development
DGIS	Dutch Ministry of Foreign Affairs
EAC	East African Community
ECOWAS	Economic Community of West African States
EIB	European Investment Bank
EPC	Engineering, procurement and construction
EU	European Union
FEMIP	Facility for Euro-Mediterranean Investment and Partnership
IBRD	International Bank for Reconstruction and Development
ICA	Infrastructure Consortium for Africa
ICT	Information and communication technology
IFC	International Finance Corporation
IsDB	Islamic Development Bank
IPPF	Infrastructure Project Preparation Facility
KfW	*Kreditanstalt für Wiederaufbau* [German Development Bank]

MDB	Multilateral development bank
MES	Minimum efficient scale
NEPAD	New Partnership for Africa's Development
NIAF	Nigerian Infrastructure Advisory Fund
NPPF	New Project Preparation Facility
ODA	Official development assistance
PAP	Priority Action Plan
PIDA	Programme for Infrastructure Development in Africa
PIDG	Private Infrastructure Development Group
PIM	Project information memorandum
PPIAF	Public-Private Infrastructure Advisory Facility
PPF	Project preparation facility
PPP	Private-public partnership
REC	Regional economic community
SADC	Southern African Development Community
SECO	Swiss State Secretariat for Economic Affairs
SOC	State-owned Company
TAF	Technical Assistance Facility

Units of measurement

All figures are in US$ unless otherwise specified.

1. CONTEXT

1.1. INFRASTRUCTURE CHALLENGE

The need for accelerated infrastructure development in Africa is a pressing one. Numerous studies have highlighted the infrastructure requirement, notably the African Infrastructure Country Diagnostic (AICD) and, more recently, the Programme for Infrastructure Development in Africa (PIDA). Successively larger figures have been touted as budget requirements to address the backlog in the continent's infrastructure.

Infrastructure is critically important in supporting economic growth and development. It is well established that productive infrastructure is a necessary pre-condition for economic growth. Perkins, Fedderke and Luiz (2005) draw the analogy of the economy and its infrastructure being akin to a building and its foundation. Indeed, endogenous growth models have shown that infrastructure expenditure can raise the marginal product of other capital (Barro, 1990). Infrastructure not only facilitates economic growth but also acts as an important input to human development (Fay *et* al, 2005). In short, the existence of infrastructure aids economic development, and good quality infrastructure quickens the pace of economic and social progress.

Africa has an enormous infrastructure requirement. As a continent, it lags behind its peers on a range of socio-economic infrastructure measures (Yepes *et al.*, 2008). Not only is Africa typified by ageing infrastructure that is inadequate for existing socioeconomic demands but the accumulation of infrastructure stock has occurred far more slowly in Africa than in other developing regions (Foster, 2008). Africa presents certain unique challenges for infrastructure development. The dispersed nature of settlements in rural areas, where over one-fifth of the continent's people live, increases the cost of infrastructure provision.

A different challenge exists for urban areas, where rapid urbanisation strains current infrastructure resources (Foster and Briceño-Garmendia, 2010). This aggravates attempts to address socio-economic deficiencies and constrains economic growth prospects. Improving infrastructure in Africa would increase economic growth rates. Simulations suggest that increasing infrastructure to the standard of Mauritius, an economic success story, would lift African per capita growth by 2.2 percent (Foster and Briceño-Garmendia, 2010).

The level of intraregional infrastructure integration is low in Africa, whether measured by road network, electricity grid, or ICT backbones (Foster, 2008:4). Correspondent to this is a high cost of the infrastructure services, far above those of other developing countries (Foster, 2008:7). Over and above the higher costs users face, inadequate infrastructure constrains doing business in Africa, particularly in low-income countries. It is estimated that inadequate infrastructure may depress firm productivity by approximately 40 percent (Escribano *et al*, 2008). This ultimately impacts on the relative living standards of Africans.

1.2. PROJECT PIPELINE

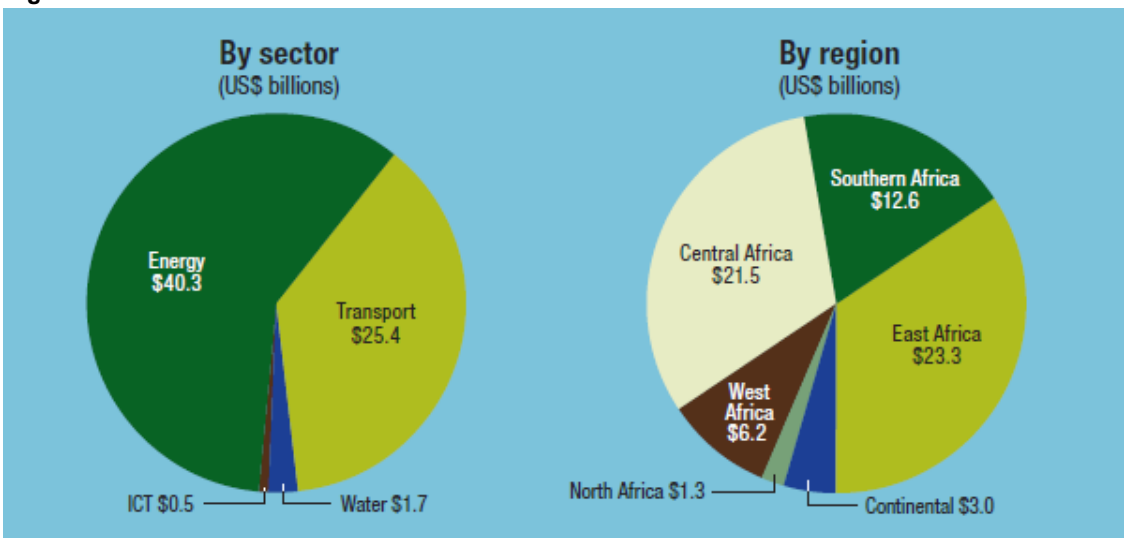
The Programme for Infrastructure Development in Africa (PIDA) estimates that over $360 billion through 2040 is required to address critical projects in the infrastructure backlog. The total African infrastructure challenge is far larger, estimated at between $60 billion and $93 billion annually to address the current backlog. Currently, annual spending on infrastructure is around $45 billion (Foster and Briceño-Garmendia, 2010).

In the short term, the Priority Action Plan (PAP) of PIDA highlights 51 projects with an estimated capital requirement of $67.2 billion to be completed before 2020 to meet Africa's urgent infrastructure needs.[1] This amounts to expenditure of approximately $7.5 billion annually (less than 1% of African GDP).[2] Further, the PIDA has also identified medium- and long-term projects to be completed by 2030 and 2040 respectively.

The PAP wholly concentrates on four infrastructure sectors (energy, transport, water and ICT), with energy sector funding requirements accounting for over 59 percent of the total. Together, energy and transport account for nearly 97 percent of all spending.[3] This provides a relative ranking of sectoral importance in infrastructure development, a notion that is useful to keep in mind when evaluating existing facilities and facility design.

Geographically, the bulk of this expenditure is focused on Central and East Africa (PIDA, 2011).

Figure 1: Overview of PIDA PAP



Source: PIDA (2011)

A vital component of any infrastructure project is project preparation. This process spans the inception of a project concept right through to support for the transaction, execution of project documents and post-implementation phases. Particularly important in this process is bringing the project to the market so as to attract and secure investors, crucial for any project but an especially acute need in Africa given relatively shallow capital markets.

Currently, there is an inadequate flow of bankable projects to the market. Indications are that the binding constraint on African infrastructure development is not necessarily insufficient project capital but rather an insufficient flow of bankable projects to appease the available capital.

This paper analyses the current market for project preparation in Africa. Surveying this landscape includes consideration of the avenues through which project preparation assistance may be obtained, particularly those dedicated facilities that provide funding and technical assistance. While many facilities exist in Africa, infrastructure projects are generally slow to get

[1] The 51 projects are broken up as follows: energy, 15; transport, 24; water, 9; and ICT, 3

[2] This requirement and associated spend is premised on an annual rate of growth rate in African GDP of 6.2 percent and compares favourably with figures from the Africa Infrastructure Country Diagnostic (AICD).

[3] Energy projects include hydropower, interconnections and pipelines; transport projects include connectivity, corridor modernisation, ports and railways modernisation, air transport modernisation (PIDA, 2011).

off the ground. Without a steady flow of well-packaged projects, Africa's infrastructure requirements continue to grow. Inadequate deal flow means that risks are not priced appropriately and there is sub-optimal price discovery for infrastructure projects.

Further, the paper considers the relevant parties ("players") to infrastructure development. By understanding their interests and perspectives, as well as the constraints that these agents face, it seeks to provide policy solutions to improve the flow of bankable projects. Commitment by African governments to an action plan of prioritised infrastructure projects under PIDA will further raises the importance of project preparation facilities (PPFs) and their successful and efficient operation with a very limited pool of capital.

The central area of investigation is whether performance of project preparation funds can be addressed by redefining the way in which these facilities operate in Africa. Specifically, the paper investigates whether market failure exists for project preparation and what the sources of this may be. It finds that the allocation of funding for project preparation facilities is not optimal. Requisite private sector money is not forthcoming and "public" money injected into the market is misdirected, which potentially aggravates the problem by crowding out the private sector.

Additionally, consideration is given to whether micro facility design changes and/or a new facility may be successfully used to improve PPF outcomes and potentially "crowd in" private sector money and thereby alleviate the apparent funding gap.

2. PROJECT PREPARATION AND FACILITIES IN AFRICA

2.1. UNDERSTANDING PROJECT PREPARATION

Effective project preparation can help to alleviate the African infrastructure backlog. Behind the financial figures for infrastructure development are physical projects that must be completed. The conceptualisation, design, evaluation and financing of projects are crucial components of the work that is required to bring a project to eventual fruition. This planning and packaging is broadly termed "project preparation".

Effective project preparation is required to ensure that a steady supply of projects is delivered timeously to meet the needs of users as well as their political representatives. Both the pipeline of PAP projects and the continent's wider infrastructure backlog requires a renewed focus on project preparation.

2.1.1. Design features of PPFs

Project preparation may be undertaken by a number of different institutions under various guises. An important conduit for preparation services is provided by project preparation facilities (PPFs). These facilities are established with the sole aim of assisting in project development.

Stage

Project preparation may be distilled into separate stages, each with their own components, as laid out in the figure below.

Early stage support focuses on identifying different project concepts and determining the enabling environment required to bring such projects to fruition. After the project has been originated and adequately conceptualised, *mid-stage* support moves into research-intensive preparation work, with various elements having to be investigated and tested for feasibility of the overall project in detail. *Late-stage* support relates to arranging finance for the project, as well as providing post-transaction support to the project sponsor/developer.

Table 1: Stages in infrastructure project preparation

STAGE	PHASE	COMPONENTS
Early stage	**1. Enabling environment**	Designing enabling legislation Designing regulatory approaches Reforming project-relevant institutions Reforming policy Building capacity to support project Building consensus around project
	2. Project definition	Identifying desired outputs Determining priority of project relative to others Identifying project champions Preparing action plans (including terms of reference) Conducting pre-feasibility studies
Mid-stage	**3. Project feasibility**	Performing financial modelling Conducting economic, social, technical, legal and environmental studies
	4. Project structuring	Assessing public and private options Structuring project finance Designing legal entities
Late stage	**5. Transaction support**	Designing and conducting bid process and drafting contracts Negotiating financial and legal terms
	6. Post-transaction support	Finalising post-signing financial arrangements Conducting scheduled tariff reviews Renegotiating or refinancing project

Source: adapted from Leigland and Roberts (2007)

Most, but not all, PPFs focus their support on individual stages of project preparation rather than supporting all phases.

Institutional arrangements

Generally, facilities are housed within DFIs like the EIB, World Bank, AfDB and DBSA. Other models include PPP units set up inside the finance ministry of a country, which takes the lead in project preparation, in that country. Project preparation facilities may also be hosted by third-party, private entities acting as project development companies.

There are two levels of institutional management that relate to PPFs:

i. *Fiduciary management (host institution).* Usually the entity tasked with managing and disbursing the facilities' funds

ii. *Facility management (implementing entity).* The management of the PPF, development and implementation of its strategy, preparation of terms of reference for resource provision and the monitoring and evaluation of results (ICA, 2011:34).

Delivery of the actual project-development services are usually conducted by third-party consultants.

Geography-specific

Preparation facilities based generally offer their services across the continent, particularly sub-Saharan Africa. In certain instances, there are donor restrictions on eligible countries, either as a result of geography (e.g. the Euro-Mediterranean Fund, funded by Mediterranean countries for North African recipients) or as a result of a previous colonial power relationship.

Sector-specific

Generally, facilities are not sector specific. One example of an effective sector-specific facility is the African Water Facility (AWF).[4]

2.2. EVALUATING PREPARATION FACILITIES IN AFRICA

The purpose of PPFs is to bring projects under planning to fruition, i.e. strengthen the project pipeline. In response to Africa's infrastructure needs, a substantial number of project preparation facilities have been established. These generally cut across countries and regions, with many focused on technical assistance for infrastructure projects that range across sectors. However, given that there are many facilities in existence but still too few projects being brought to the market, an evaluation is necessary of whether project preparation is acting as a constraint on the flow of deals (narrowing rather than widening the project "pipeline") or if the problem lies elsewhere.

The ICA/CEPA report identifies a core group of 17 PPFs, of which it finds only 12 are currently operational.[5] This was from an initial list of up to 67 potential sources of project preparation funding (ICA, 2012:6).

Our research suggests that there may be 26 project preparation facilities in existence for sub-Sahara African infrastructure. These are listed in the table below. The appendix provides a detailed table of PPFs in sub-Saharan Africa, collated from various sources, including the facilities in the ICA/CEPA report.[6] These facilities are predominantly financed by donors and DFIs, and housed within DFIs or regional economic communities (RECs). Variations of this model, however, do exist, such as InfraCo which operates on more of a private sector basis.

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[4] Water projects are a relatively low priority under the PAP, accruing only 2.5 percent of funds allocated to infrastructure development in this sector.
[5] The remaining five are yet to achieve minimum funding levels or have not committed to any projects (ICA, 2012:6).
[6] Note that facilities that focus on North Africa only and that are country-specific are excluded from the list here. This criteria therefore excludes the Facility for Euro-Mediterranean Investment and Partnership (FEMIP) Support and Trust Funds, as well as the South Africa-specific DBSA Development Fund. Moreover, it excludes the Arab Financing Facility for Infrastructure Technical Assistance Facility (AFFI TAF), which is listed in the ICA/CEPA report.

Table 2: Project preparation facilities in Africa

Project preparation facility	Remaining funding (US$ million)
AFD DBSA Project Preparation and Feasibility Study (NEPAD PPFS)	0
African Catalytic Growth Fund	-
African Water Facility (AWF)	66
ACP - European Commission Energy Facility II	101.5
COMESA-EAC-SADC Project Preparation and Implementation Unit (PPIU)	10
DBSA EIB Project Development and Support Facility (DBSA-EIB PDSF)	7
ECOWAS PPDU	6
Energy Sector Management Assistance Program (ESMAP)	88
EU-Africa Infrastructure Trust Fund (EU-AITF)	99
Fund for African Private Sector Assistance (FAPA)	19
Global Environmental Facility (GEF)	-
Global Infrastructure Project Development Fund (InfraVentures)	84
Global Partnership for Output-Based Aid (GPOBA)	155.2
IFC Advisory Service	-
InfraCo Africa	15
Infrastructure Development Collaboration Partnership Fund ("DevCo")	33
Islamic Development Bank (IsDB) Technical Assistance Facility	-
Japan Policy and Human Resources Development (PHRD) Technical Assistance Grant Programme	-
NEPAD Infrastructure Project Preparation Facility (NEPAD IPPF / RIPA IPPF)	14.7
Nigerian Technical Cooperation Fund (NTCF)	19.6
PIDG Technical Assistance Facility (PIDG TAF)	21
Public Private Infrastructure Advisory Facility (PPIAF)	47.3
SADC PPDF	6
Sustainable Energy Finance Initiative (SEFI) Investment Advisory Facility	-
Sustainable Energy Fund for Africa (SEFA) Project Preparation Window	14
USAID AIP	10
TOTAL	**816.3**

Source: ICA; PPIAF; various facilities' websites and documents

Given the comprehensive nature of project development, the funding requirement for project preparation is usually significant. It is estimated that preparation funding is between 5 and 10 percent of the project value (Leigland and Roberts, 2007). Studies by PIDA and the AU corroborate these estimates, with 7 percent taken as the central estimate across sectors (ICA, 2012:33). An upper bound of 10 percent, however, may be more appropriate for African infrastructure projects for two reasons. Firstly, project preparation frequently turns out to be more complicated than anticipated in the case of many African infrastructure projects. Secondly, infrastructure projects often lack the necessary "upstream" (early stage) preparation. This is aggravated by the lack of a basic legal and regulatory enabling environment, as well as a weak policy environment (Leigland and Roberts, 2007).

2.3. PROBLEMS WITH FACILITIES IN AFRICA

2.3.1. Funding pool too limited

The pressing infrastructure need in Africa is partly demonstrated by the ramp-up in project preparation funding in recent years. Commitments from PPFs for Africa have increased from $10 million in 2005 to over $80 million in 2010, mostly as a result of resolutions made at the G8 Gleneagles Summit in 2005 (ICA, 2012:10).

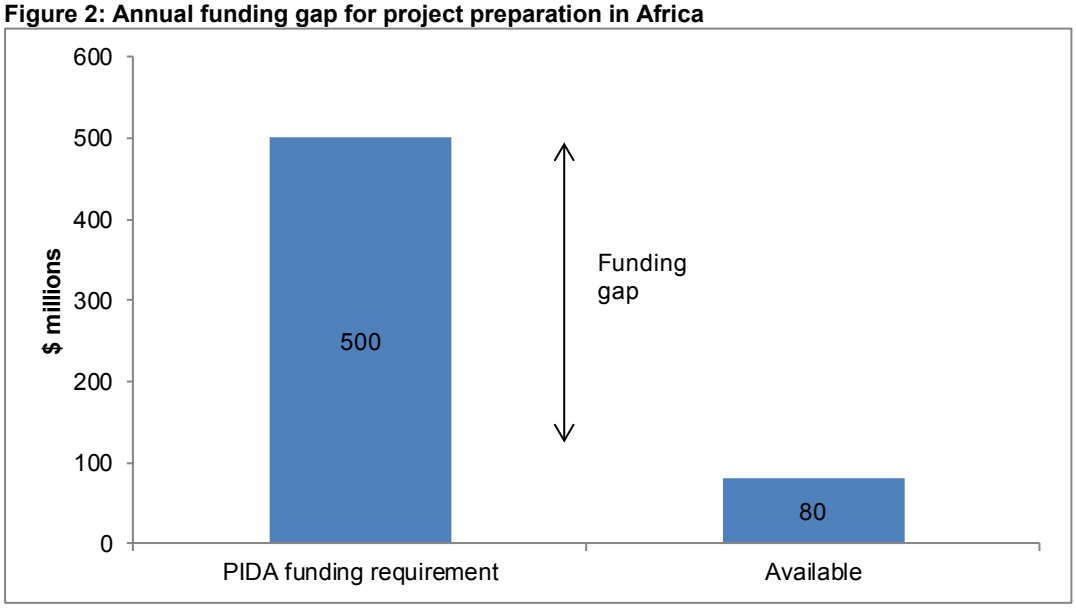
The ICA report finds that approximately $190 million in the active PPFs is available for preparation purposes. Its estimates further suggest that remaining available funds would cover another three years of project preparation given the historic trend (ICA, 2012:11).

We estimate the remaining funds at a much higher amount, around $816 million.[7] This figure is obtained by pooling all uncommitted funds of the identified PPFs. On an annual basis, presuming the $80 million per annum PPF funding trend continues, this would provide support for the next decade.

This timeline aligns with that of the PIDA PAP programme. However, the PIDA study indicates that the financial requirement for the preparation of its priority projects is expected to be more than $500 million annually (an average of 7 percent of capital expenditure). This will amount to $200 million in the first year before ramping up (PIDA, 2011:8). Using Leigland and Roberts' (2007) estimates, we suggest that, in fact, a higher funding requirement for the PIDA's priority projects may be appropriate, at $375-$750 million annually for the duration of the programme (2012 to 2020).[8]

The size of the current funding for project preparation ("the pot") is arguably insufficient for the infrastructure demand. The lack of adequate infrastructure project preparation funding has been identified by both the G20 and MDBs (ICA, 2012:5). The figure below provides an illustration of the estimated annual funding gap for project preparation. This is assuming no further funding injections are provided to these facilities. The gap highlights the acute funding need.

Figure 2: Annual funding gap for project preparation in Africa



Source: Genesis Analytics calculations

It should be noted, however, that PPFs are not the only source of funding for project preparation. There are several other sources of funding that are cumulatively "considerable relative to that provided by the PPFs", including credit and credit advances from multilateral

[7] See appendix 2 for details on the calculation of this amount.
[8] This is 5 to 10 percent of the expected capital cost of the projects under PIDA PAP.

development banks (MDBs); bilateral and special purpose trust funds; local governments; and private sector institutions (ICA, 2012:38-39).[9]

Indeed, PPFs may not be the largest source of project preparation funding as private project developers do spend money to take projects to market. However, the dedicated purpose of PPFs suggests that they do have a greater importance than the funding contribution may indicate (ICA, 2012:14). Moreover, while the above are alternative sources of project preparation resources, their mandates indicate that such services are generally incidental. Project sponsors/developers would therefore benefit from targeted assistance from PPFs.

The existence of such a potentially large funding gap indicates that there is a need for a rethink of project preparation and development in Africa. Whilst it is undeniable that the continent requires massive infrastructure development, new ways to prepare projects for the market may be required.

2.3.2. Utilisation of the current funding pool

The limited project preparation funding is aggravated by the existing market structure and design features of preparation facilities. Common design features of these are identified below.

Bureaucratic administration of facility funds. The majority of the PPFs are funded with donor/DFI money. As a result, these facilities are generally hosted in DFIs and facility functioning is influenced by the policies and competencies of the host institution (ICA, 2012:14). Overly bureaucratic procurement policies can slow the pace of preparation work and make facilities less responsive to the needs of prospective project sponsors/developers. Conversely, policies that provide facilities and consultants with some flexibility may see improvements in the speed of project development. (An example of this is the Nigerian Infrastructure Advisory Fund [NIAF], a DFID-funded initiative, which permits expenditure of up to £30 000 before sign-off from DFID is required.)

Inadequate technical capacity of advisors. Facilities are often inadequately resourced and those resources that they do have available do not produce the appropriate documentation to take a project to the bankable stage.

Ad hoc nature of preparation support. There is substantial scope to improve the efficiency of regional project preparation. Project preparation funding for most infrastructure initiatives remains *ad hoc* and opportunistic, resulting in delays and postponements of projects (PIDA, 2011:8).

The structure of the project preparation market is also not entirely supportive of a strong project pipeline.

Fragmented and uncoordinated facility services. The structure of PPFs in Africa may be described as being fragmented, uncoordinated, and with too many facilities with inadequate funds to achieve minimum efficient scale (MES). In other words, many of the PPFs that target African infrastructure are too small to be effective. There have been suggestions that too many project preparation facilities exist in Africa which are small in size and therefore ineffective at dedicating resources. As a result of this, there is not enough funding for individual facilities to have significant impacts in the region (Leigland and Roberts, 2007). This fragmentation

[9] It is noted that post the 2008 financial crisis, more of the funding burden for project preparation will have to be borne by African governments (ICA, 2012). This said, aid budgets have generally escaped the austerity measures that governments of developed nations have placed on expenditure programmes.

persists despite the fact that the facilities often undertake similar activities. This raises concerns about the effectiveness of certain facilities as they may lack the necessary economies of scale to deploy their resources in an impactful manner. Further, the vast array of facilities coupled with the requirement that project preparation be co-financed by other means (including other facilities) points to a possible coordination problem.

Insufficient assistance for early stage project origination. Early-stage support is vital because getting government to create the enabling environment will generate PPP proposals and private sector interest. It is this stage of the project cycle that currently receives the least resources, particularly where the public sector is seeking to originate and solicit private sector interest in PPPs (ICA, 2012:9). (Though PPIAF has been the facility most active in providing assistance with early-phase project development, particularly for PPPs (ICA, 2011:48).) This is a particularly pertinent challenge as the lack of government capacity in Africa often necessitates that the private sector originates projects.

Early-stage project preparation tends to be more management intensive than downstream activities. Most PPFs, instead, target the middle and late stages of project preparation. These tend to be less resource intensive and align better with the interests of many facilities (eventual project lending through MDBs). Consequently PPFs that focus on early-stage activities have relatively higher expense-to-commitment proportions, of between 20 and 30 percent of funds (ICA, 2011:70).

Gaps also exist for other types of projects:

i. *Mid- to late-stages of private sector-originated projects.* Specifically, to assist governments with advisory support when negotiating on transactions originated by the private sector (ICA, 2011:14).

ii. *Mega/transformative projects.* Given the size and importance of these projects, greater project preparation requirements are necessary for project development

iii. *Public sector originated PPP projects*. Although most bespoke PPFs have been set up to solely support public-sector originated PPPs, this is still an identified gap and probably speaks to skills capacity within governments.

Where there has been success in PPF models, it has been found in two areas. These are:

Focused facilities. Clearly defined facilities that focus on particular project phases and sectors tend to have better outcomes. These avoid “mission creep” for donor agencies toward generalised capacity building and allows for the targeting of specific projects. An example is the African Water Facility, which assists in the development of water and sanitation projects only, and has successfully disbursed $114 million since its inception in 2004.

DFI-based facilities that support the downstream phase. There is ample late-stage support from DFIs because their involvement in the late stages of projects allows the host institution (fund manager) to arrange lending/investment opportunities. It is clearly in the interest of DFIs to support projects that are near to financial close to secure the lending opportunity.

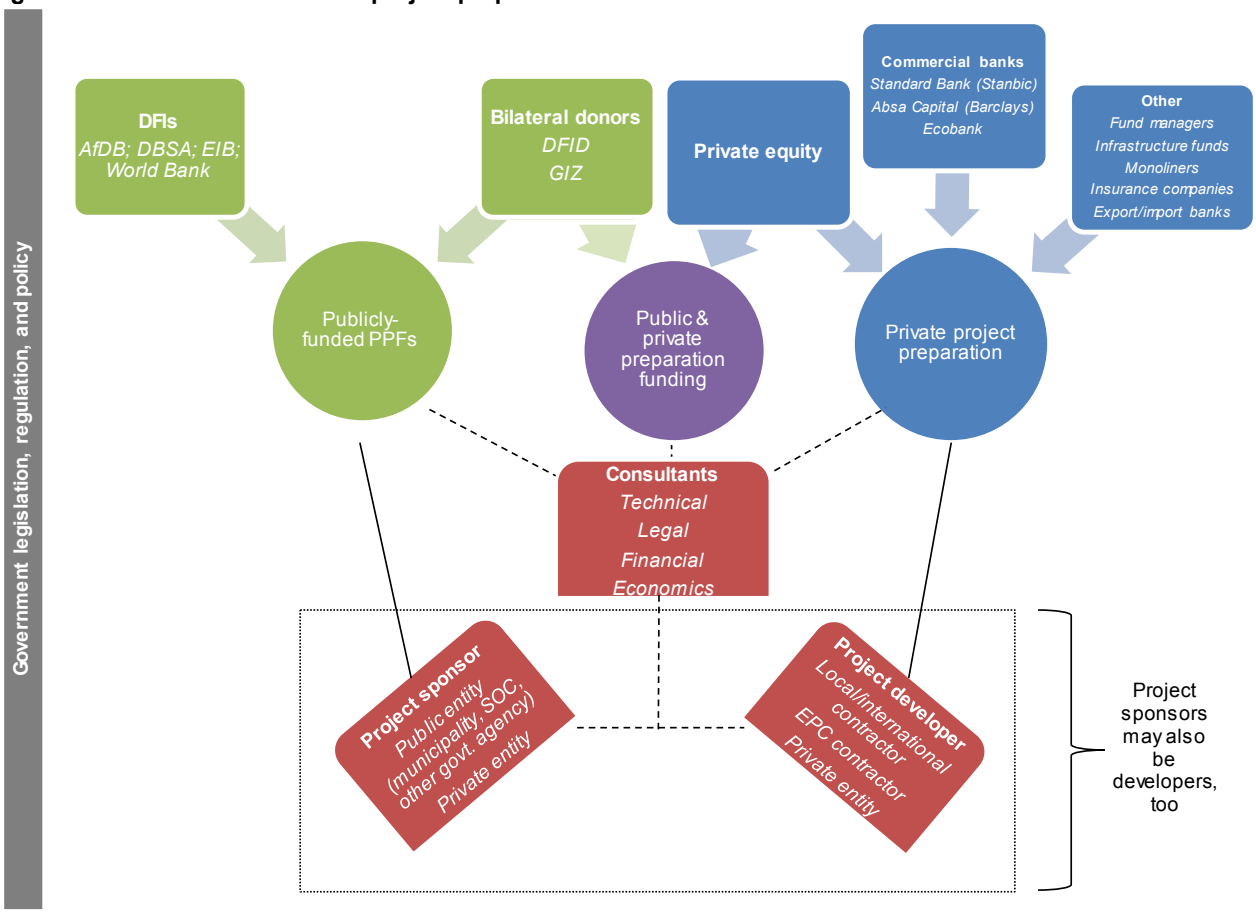
3. KEY PLAYERS IN PROJECT PREPARATION

Preparation facilities are an important mechanism for preparing infrastructure projects in Africa. Understanding the incentives, constraints and views of each of the critical players in project

preparations provides a good indication of the institutional landscape and the opportunities for reform.

Institutional interaction in the market for project preparation occurs across various levels and sectors of the economy. Figure 3 is a high-level presentation of the institutional landscape.

Figure 3: Structural schematic of project preparation



Source: Genesis Analytics

This stylised structure of the institutions provides a useful way to understand the role of the key parties to the project preparation process. The three critical players discussed below – the donors and development finance institutions (DFIs); the governments; and the private sector financiers.

3.1. DONORS AND DEVELOPMENT INSTITUTIONS

Objective

Donor agencies such as the UK's Department for International Development (DFID), World Bank and African Development Bank (AfDB) are non-profit entities. Their success is measured in their ability to facilitate the development of infrastructure which improves socioeconomic outcomes. This forms part of their broader mandate.

These organisations naturally face a budgetary constraint. The pool of funding made available by relevant sponsors (ultimately developed country governments) is limited and must be allocated across a number of pressing development needs.

Situational analysis

Although aid budgets in developed countries have generally escaped recent fiscal austerity measures, there is a very real need for projects to deliver results for the politicians that support donor funding. As it currently stands, one may argue that the taxpayers of developed countries are not getting sufficient return on their money because of the weak project pipeline. Given that donors and DFIs are the primary funders of PPFs, it important that improvements are made lest budgetary cuts be made to programmes.

Given that the multitude of PPFs is largely a result of DFI actions, these donor organisations are of the view that a large centralised fund is not a panacea for project pipeline ills and that there is nothing wrong with having a variety of funds, differing in size, focus and specialisation.

Regional specialisation, however, is seen as important for project development. More crucial is ensuring that political will is maintained to push projects forward, as part of a chain of self-reinforcing activities (illustrated in Figure 5).

Although it is commendable that these institutions are effective at bringing projects to market, one must be wary of the perverse incentives that exist for MDB facilities. A number of DFIs house facilities that work with the advisory team. The advisory business is separated from the investment arm by a "Chinese Wall". However, the nature and structure of the deal suggests that DFI's advisory arms often push projects towards their funding arms. In this way, DFI preparation funding can crowd out mid- to late-stage private sector preparation money.

3.2. PRIVATE SECTOR FINANCIERS

Objective

Unlike donors and DFIs, the involvement of private sector financiers in infrastructure projects is supported by the profit motive. The term "financiers" as used here encompasses commercial banks, equity investors and investment managers for pension funds, *etc.*

Financiers may be split into those that provide equity for infrastructure deals and those that finance the debt component.

Broadly, equity for infrastructure projects is provided by private equity firms and infrastructure equity funds, where needed. The equity market may be somewhat less competitive in Africa, given the shortage of investors for equity-type instruments. The result is that these financiers are not induced to provide preparation services as the deals will eventually be brought to them at an advanced stage.

Commercial banks provide the debt for such transactions. Banks vie for the role of "lead arranger" in project finance deals. The lead arranger role normally falls to the bank that sources the transaction, or is the house bank for the project sponsor. Lead arrangers tend to earn higher fees and there is substantial competition between finance houses to secure this position as a result.

Several factors may constrain financiers in the provision of preparation services. These entities face the problem of limited resources, with respect to both time and financial capital. Firstly, constraining further (upstream) involvement of private financiers is the opportunity cost of project appraisal. Project preparation is extremely time intensive. Given that banks and private

equity firms have limited resources, there is limited appetite from these entities to further involve themselves in project preparation. As one industry source put it, banks are not in the business of providing consulting services. Secondly, banks have a limited amount of capital with which to finance both project preparation and the projects themselves. This constraint is partially alleviated by the practice of selling down specific project asset exposure to other financial institutions.

Lastly, regulatory restrictions may preclude investment from private entities. The stringency of regulatory reform for the banking industry under the Basel III rules limits the exposure banks can have, both in terms of seeding capital for project preparation as well as the projects themselves. The regulations disincentivise banks from investing equity in projects, diminishing the likelihood of their involvement in a project preparation facility. Banking regulations also make it difficult to make long dated funding available under Basel III as the horizons for debt provision usually mean that funds can generally be locked up over a 7-10 year period.[10]

There is also evidence that there is a regulatory impact on equity provision. Infrastructure equity funds are generally funded by pension fund money and, at least in South Africa, life assurance legislation precludes funds from investing in seed capital ventures, of which project preparation funding forms part.

Situational analysis

Forays into project preparation have generally not borne fruit in the past for private entities. As a result, banks and other private financiers generally do not involve themselves in project preparation. Where they do, however, they expect projects to eventually repay these advisory services, either at financial close or by recouping the amount over the project lifetime. This may be at a nascent stage, where “business case analysis” is performed. In such instances, the bank will act in an advisory capacity to the project developer to assess the viability and feasibility of the project. However, it is apparent that predominant involvement from commercial banks in terms of project preparation is very much “late stage”, where it performs its own technical due diligence.

While African infrastructure is an increasingly attractive asset class to investors, projects that are most appealing for investment are predominantly found in private industry, such as oil and gas, mining, and power. Other infrastructure projects that are more socially oriented, such as school and hospitals, are low priorities for banks to finance. This is for two reasons. Firstly, banks are only really interested in a project when it is anchored by a commercial entity as this mitigates project risk. This is because projects that generate revenues in hard currency are usually more “bankable”. Banks will generally not provide capital to projects that have hard currency exposure with local earnings. This makes extractive industries such as oil, gas and mining inherently attractive and social infrastructure projects generally not. Secondly, these projects have contractually-specified off-takers. This feature reduces project risk.

There is a strong view that infrastructure deals are not being produced to satisfy available capital. In other words, financing is available for suitable projects should they be brought to the market. This is arguably true for both equity and debt finance. This corroborates the sentiments of Leigland and Roberts (2007) and suggests that the project pipeline is at fault for the lack of infrastructure development rather than an absence of capital.

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[10] This story is supported by the AICD, which suggests that available finance is generally (relatively) short-maturity commercial bank lending. Given its time/length profile, it is not ideally suited for infrastructure projects. The study goes on to endorse the development of corporate bond markets and regulations that allow for greater participation of institutional investors in infrastructure projects (Foster and Briceño-Garmendia, 2010).

Further, those projects that reach the bankability stage often do so after a lengthy period of time. There are several reasons cited for this. (These are briefly touched upon here and further explored later in the paper.) Regulatory issues often provide hold-ups in the preparation process. These generally relate to poorly defined regulations or overly-complex bureaucratic requirements, including licences, permits and tax regimes. The typology of these issues hints at problems in the early stage of project preparation.

Difficulties in engaging with and coordinating project stakeholders may also be to blame for delays in the finalisation of project preparation. Private financiers find it difficult to coordinate the different stakeholders on projects, especially for cross-border transactions, where the involvement of arms of various governments makes it extremely difficult to broker constructive negotiations. Further, the interaction of DFIs (often overly bureaucratic) and small African governments (generally lacking capacity) can further complicate matters.

Those projects that do arrive on the desks of financiers are of two types. Firstly, there are those where a project sponsor/developer approaches the bank with a sound business case, often where there is an already agreed off-taker that is the state or some organ of the state. Secondly, there are projects that have been PPF-driven from an early stage

Due diligence by banks, particularly for credit risk evaluation, demands rigorous and comprehensive documentation for the financial closure of a project. The analysis centres on the assessment of project risk (financial) and technical due diligence (operational). Banks complain that many projects that are brought to their attention as being at the bankable stage are, in fact, far from this.

The shared perspective from these entities for preferred projects generally runs along the lines of risk mitigation:

i. Contractually specified off-taker with credibility and/or strong balance sheet

ii. Ring-fenced project cash flows

iii. Government support, in the form of guarantees or other

iv. Standardised project documentation

v. Predictable bidding process and timetable

3.3. GOVERNMENT AGENCIES

Objective

The primary function of the government with respect to project preparation is to deliver infrastructure projects that improve socioeconomic outcomes and facilitate growth of the economy. This has several dimensions to it, including the timeous delivery of politically appropriate projects. Projects are driven by governments through various agencies. Thus, project sponsors may range from local government (municipalities) to state-owned companies (SOCs).

Often, projects can simply be politically motivated and detached from underlying economic need. Just as good project preparation should ensure that worthwhile infrastructure projects are taken to the market, so it is necessary that preparation also acts as a gatekeeper to screen out economically unviable projects.

Two constraints are of primary relevance to governments and its agencies. Firstly, governments are constrained in the traditional sense of limited budgets. Small African countries face underdeveloped tax collection systems and therefore limited revenue bases. Whereas developed nation governments would generally provide the necessary financial resources for project preparation, this is often not possible in Africa. Moreover, capital markets may not be suitably developed to provide the necessary early-stage capital to sponsors/developers. Indeed, South Africa is considered the only credit market in Africa that is capable of providing competitive and sufficiently-sized local currency infrastructure loans (ICA, 2011:23). Secondly, governments may also be constrained by limited technical skills when it comes to evaluating infrastructure project plans.

Private-public partnerships (PPPs) may ease both of these constraints. PPPs can be housed off balance sheet and often entail risk-sharing arrangements between the government and the private consortium. Additionally, involving the private sector enables the government to tap into technical skills that may have otherwise been unavailable to it.

Across all infrastructure projects, the government also plays the important role of regulator, or "rule-maker".

Situational analysis

There is a lack of awareness among the government officials interviewed about the availability of project preparation facilities. In many countries, officials from DFIs will be the ones to initiate the application to PPFs and project preparation is often funded using bilateral donor support or as part of support programmes from institutions such as the World Bank.

External project preparation may act as a useful means for technocrats in governments to screen politically motivated projects that do not have a genuine economic rationale from those that have a justifiable basis.

Many governments do not have extensive experience in evaluating PPPs. Those that have gained the most from developing and evaluating such projects cite the long-term presence of skilled preparation advisors, working side-by-side with government officials, as proving most beneficial for government capacity building.

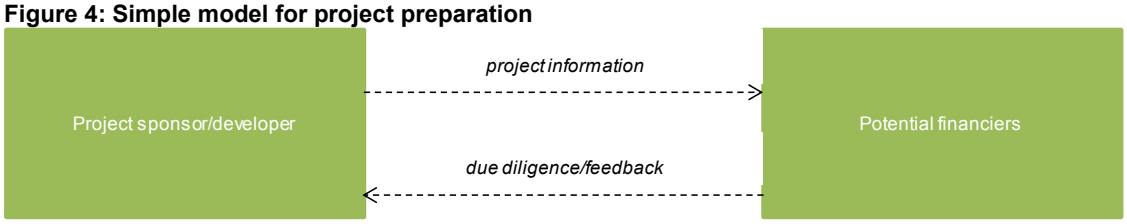
3.4. CONSTRAINTS TO PROJECT PREPARATION

3.4.1. A simple model of project preparation

Following from the above, an understanding of the parties' interests and motivations, coupled with the project preparation landscape, provides the basics of the analytical framework used to drive towards design recommendations.

At their essence, PPFs are designed to produce bankable project documents, including project information memoranda (PIMs). This is the vital link between the feasibility stage and transaction finalisation. Project documentation allow for project capital-raising and thereafter project construction to begin. Underpinning the timeline between project inception and financial closure (as laid out in Table 1) is the flow of information between the project sponsor/developer and financier.

Figure 4: Simple model for project preparation

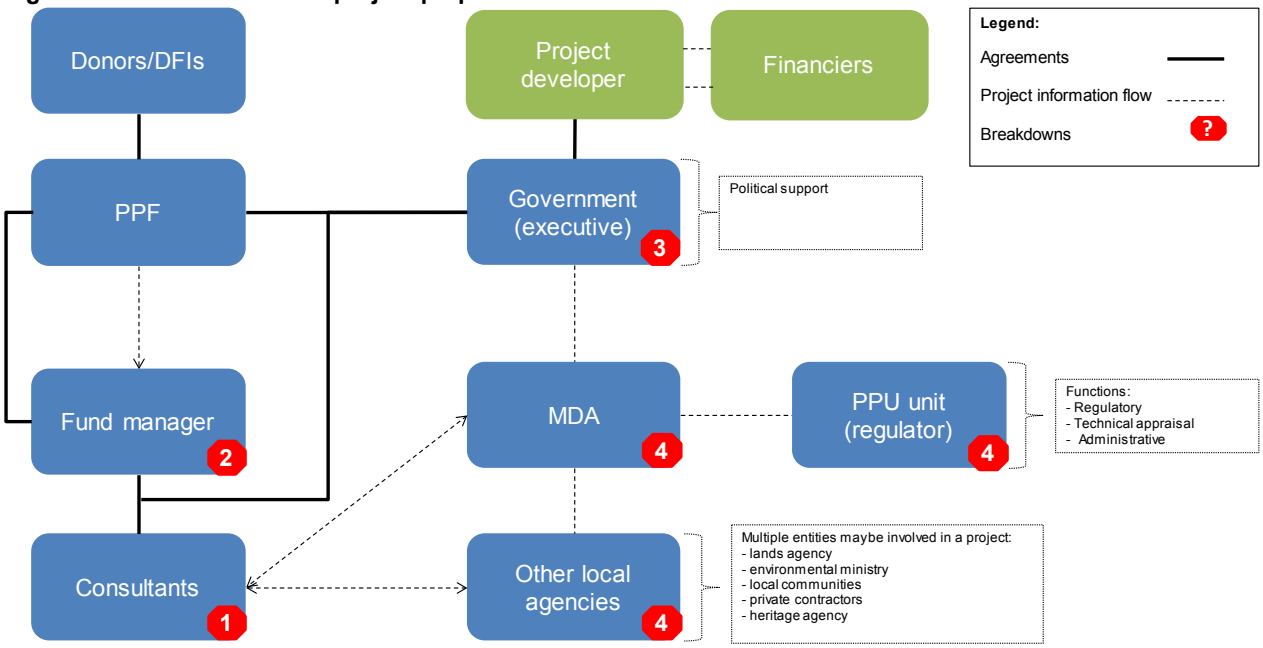


Source: Genesis Analytics

The project sponsor can signal the potential viability of the project. This may be in the form of preliminary governmental approval, early-stage analysis of project viability, *etc*. However, financiers require detailed information to make an investment decision and developers require information to price their bids. The PIM responds to these requirements. The necessary pre-feasibility and feasibility (economic, financial, legal, technical) studies required to form the PIM are produced by relevant experts.

Ideally the funding for preparation should come from the sponsor, who may be a private company or a government entity. Private companies generally have the money to fund project preparation and are able to develop projects using their own resources. A similar ability exists amongst developed nation governments. Government entities in Africa, however, are often hamstrung in their ability to finance the necessary components for project preparation. The same goes for sponsors and developers, hence the importance of PPFs. These complications induce a greater systemic relationship between entities and a more complex for understanding PPFs.

Figure 5: Extended model of project preparation



Source: Genesis Analytics

Given their primary objective, financiers generally do not involve themselves in the early stages of project preparation. In general, developers respond to public tenders and would only engage in technical studies as part of their due diligence process after the government has defined a detailed project scope[11]. The areas of potential breakdown in the flow of critical information useful in project preparation are shown above and explained further below (p 23).

[11] This excludes the case of unsolicited bids where project developers initiate and drive project preparation.

With a limited capacity to originate projects in governments, many public infrastructure projects may take a protracted amount of time to reach the market. This is despite the fact that there is an alignment of incentives between the government entity, project sponsor, project developer and financiers. Although all players have the incentive to develop the infrastructure, most are unwilling to bear the full cost of project preparation. Governments in particular have shown reluctance to budget fully for project preparation activities and thus the need to draw in funding from DFIs, project developers, and other private investors.

3.4.2. Extending the model and exploring market failure

The disjuncture between the infrastructure requirement and the lack of adequate projects raises the question whether "market failure" exists in the context of project preparation. In other words, are certain aspects of the market for project preparation failing to produce optimal outcomes?

Market failure exists where the conditions necessary to achieve an efficient market-clearing solution do not materialise or are violated in some way. Common factors that may result in the failure of markets include the existence of public goods and externalities; imperfect competition; incomplete information; and/or uncertainty. Generally, these factors result in market failure as a result of high transaction costs (Brown and Jackson, 1990:28-29).

To identify "market failure", one must correctly define the market in question. In this case, the correct market is that of project preparation, which broadly refers to the package of project preparation services (from the early, to middle and late stages). There is good reason to believe that market failure may be present in the market for project preparation, as evidenced in the shortfall of funding from public and private sources.

The primary source of market failure for project preparation is uncertainty around the likelihood of project uptake, and relates to investor uncertainty generated by informational and other constraints such as political factors.

Uncertainty – informational and otherwise

Project design and implementation is inherently risky. Any investment, however, requires that the investor bears some level of risk. It is when this risk is no longer quantifiable that one moves into the realm of "Knightian uncertainty" (Knight, 1921). Following the taxonomy of Knight (1921), one can distinguish between risk and uncertainty where risk that is no longer quantifiable is termed "uncertainty" (or Knightian uncertainty). The lack of a probability attached to this uncertainty yields the market failure, as economic agents are unable to form rational expectations on the bankability prospects of projects. As such, private financiers are unwilling to invest significantly in project preparation.

For investors, there should be a declining risk profile during the long planning and investment cycle to allow for an appropriate pricing of risk over this period. The long planning cycle (four to seven years and sometimes longer) induces a great deal of uncertainty among investors. Further, concerns over the quality of information and assumptions made thereon for project documentation aggravates uncertainty. It is widely accepted that a market will not function adequately in the absence of full or correct information for participants.

Information is available in the form of project concepts advanced by the project sponsor. However, project preparation funding for further project development will be limited in the absence of a continuous flow of reliable information between project sponsors/developers and

financiers. Inadequate technical and financial documents are examples of common information gaps. Even traditional cost-benefit analysis will often lead to unrealistic project evaluations due to poor cost estimates or an overestimation of benefits (demand). This may arise from an inadequacy (or unavailability) of the necessary data.

An additional source of uncertainty emanates from the political process that surrounds infrastructure design and procurement. The potential for political commitment to wane on a project, or for an economically questionable project to be pushed through, dampens private sector enthusiasm and creates uncertainty.

Subsequent design failure

In developed countries, government agencies are supported by budgets that can fund the necessary project preparation. This is matched on the private sector side by investors conducting their own due diligence of the project. In Africa, given competing claims on extremely limited resources, governments have not prioritised project preparation and the private sector is wary of initiating projects given regulatory and policy uncertainties.

In the ensuing market failure (market forces not providing sufficient funding), the public sector has responded through donors and DFIs. These public entities allocate additional resources to alter the market's suboptimal outcome. However, there is a misallocation of project preparation resources, in that the donor/DFI allocation of PPF funding is sub-optimal. In the absence of a competitive process for the allocation of financial resources in the PPF market, funds are misdirected towards the middle to late stages of project preparation, whereas strengthening the overall project pipeline would be better served by focusing on the early stage.

Breakdowns in the project preparation system

As illustrated in figure 5, above, the complexity of the project preparation system means that it is also prone to several "breakdown" points which slow information flow and prolong the time taken for projects to reach the market. These breakdown points are as follows:

1. *Advisory teams.* Consultants that are hired by PPFs may have weak or incomplete skills that do not provide adequate information to financiers (a bankable PIM).

2. *Bureaucratic interface*. Host institution culture and rules may be overly bureaucratic and lead to slow response times when processing applications from sponsors.

3. *Political commitment*: Political will around projects is known to vacillate. This creates uncertainty for potential project financiers and a reluctance to incur preparation costs that may not be recoverable when political support is withdrawn.

4. *Governmental capacity*: The AICD observed that "[w]eak regulatory autonomy and capacity constraints undermine the credibility of independent regulators. Most African regulatory agencies [including PPP units] are embryonic, lacking funding and in many cases qualified personnel." (Foster and Briceño-Garmendia, 2010).

   Project sponsors are often line ministries and other government agencies with insufficient technical skills to drive projects through the lengthy preparation process. External consultants may aggravate the skills gaps when no real knowledge and skills transfer takes place resulting in negligible improvement in technical capacity. A lack of technical capacity may also lead to internal coordination failures amongst the various arms of government that are typically involved in granting regulatory approvals.

4. RECOMMENDATIONS

4.1. PROPOSING A NEW TYPE OF FACILITY

It is neither feasible nor desirable to centralise funds from existing project preparation facilities. However, in light of the large funding gap for project preparation, there is scope for a new type of facility to be designed and established to address the constraints to more effective performance.

The ICA/CEPA report cautions against setting up any new facilities, given the problems that affect existing ones. It suggests that many should be left to wind down their operations while better performers are provided with additional funding for project preparation work. This suggests "picking winners" in an artificial selection process but it does not address the problem facing governments in the interim while waiting for the market to "settle". A much more proactive approach is required to improve the flow of bankable projects to the market.

An alternative approach is to move towards larger regional facilities that are consolidated in terms of administration and resources (both skills and financial). This approach is more likely to improve project flow to the market. Pooling resources by region would increase the ability to deliver prepared projects to the market by exploiting scale economies and providing more comprehensive and systematic support to projects. This would address the fragmented and uncoordinated nature of the existing PPF landscape, which could be improved if a new facility were designed to address the problems of scale and coordination.

The expanded regional facilities would provide project preparation funding and services. Furthermore, the consolidated regional facilities should be set up alongside individual country PPP units. The facilities would offer technical assistance to the individual country PPP units, in areas such as project origination and development, review of technical studies, management of consultants, and support during procurement of contractors. The close collaboration with local PPP units will help to secure political support at the country level. In effect, the regional PPF would only work on projects that have been filtered by the PPP units, after a clear political mandate has been secured.

The facilities may be set up as independent regional organisations with affiliations to the RECs. Many of the RECs currently have PPFs (for example, SADC PPDF and ECOWAS PPDU) but face similar problems to other facilities. This may be partly attributable to the bureaucracy of these organisations or the fact that they are not sufficiently close to market players. An energised, independent organisation would be able to perform project preparation more effectively if properly positioned with the investor community. An independent facility with REC affiliation will help streamline administrative efficiency while maintaining the much-needed political backing through the RECs.

The following salient points underscore this new direction:

i. The large project preparation funding gap indicates that the preparation market is far from saturated in terms of funding.

ii. Despite the plethora of current facilities, there are still several critical service gaps in the PPF market, particularly in the early stages (origination, scoping, etc).

iii. Creating independent regional facilities with close links to the RECs and to potential investors may circumvent existing institutional shortcomings.

For these regional facilities to credibly offer an improvement to the project pipeline, several design issues must be addressed compared to the two dozen existing PPFs. These are necessary to attract both the necessary funding and skills. We detail these below.

4.1.1. Design consideration 1 – facility focus

Improving the outcomes of project preparation facilities must consider the relevant aspects these facilities have towards project development. These are:

Stage

Project development in Africa would be better served by specifically targeting early to mid-stage preparation. Rather than merging existing facilities and getting them to change tack by moving from middle/late stage preparation to early stages, future funding commitments should flow to early stage and mid-stage activities. Early-stage activities that would be supported by this facility include project origination, project concept refinement and business case development. It is assumed that the upstream regulatory/ policy reform aspects would be addressed by other facilities such as PPIAF, prior to them being taken up by the new PPFs.

There is a gap evident in early stage project development. Findings by the ICA allude to the fact that a concentration of a few facilities would be appropriate for early-stage project preparation (ICA, 2011:15). Our research indicates that "public" money in the middle and late stages is crowding out private capital. Project preparation would therefore not cease should donor/DFI flows decrease; instead, project flow may increase as this redirected money eased the upstream constraints. By doing so, the resultant effect would be to, in fact, crowd in private sector money into the middle and late stages.

Early-stage activities have a higher expense-to-commitment ratio (20-30%) (ICA, 2011:70). This represents the greater implementation efforts required upstream (management intensity). This higher cost ratio is one reason why facilities may have steered away from these phases in the past. While average costs can probably be lowered if the facility executes on the downstream phase too (which may also provide a return on the funding), there appears to be ample late-stage support from MDB-based facilities. This is because involvement in the late stages of projects allows the host institution to arrange lending/investment opportunities. Instead, scale economies may be exploited by focusing funds for early phase activities in a consolidated facility.

By providing early stage project preparation funding (including pre-feasibility studies), the facility is de-risking this part of the process. Offering mid-stage support ensures that projects are carried to the point where they become attractive propositions for DFIs and/or private sector financiers to provide late stage (transaction) support.

Furthermore, the continued existence of PPIAF is vital in assisting to unblock upstream preparation constraints. This focuses on the enabling environment side (legislation, regulation and policy) that falls outside the scope of the proposed regional facilities.

Sector

A focus on PIDA PAP projects is an appropriate starting point for a number of reasons, including that adequate demand is likely to exist (it has been identified that these are urgent infrastructure requirement to facilitate Africa's growth) and that the necessary political will is more likely to exist to push these projects through.

It is not necessary to focus the facility's efforts on any particular sectors. That said, analysis of the PIDA PAP programme suggests that the energies of the facility will naturally gravitate towards sectors of greatest importance. The overwhelming financial requirement for PIDA PAP lies primarily in two sectors – energy and transport.[12] Conversely, the financial requirement for water and sanitation is relatively small. In addition, this sector appears to have a successful facility dedicated to developing these projects, the African Water Facility (AWF). ICT, the other broad infrastructure sector, is unlikely to require significant support from PPFs as there is evidence that this infrastructure sector is overwhelmingly developed by the private sector with great success. (Evidence from the World Bank's Private Participation in Infrastructure (PPI) database suggests that the overwhelmingly majority of investment in African infrastructure between 2000 and 2008 was for telecoms. [See AIIM, 2011].)13

Region

Regional facilities are likely to unlock scale economies which would improve preparation success. Indeed, the AICD argues that "[g]reater efforts are needed to facilitate preparation of complex regional projects, which are particularly costly and time-consuming to prepare. That is especially true when projects are large in relation to the size of the host economy and when they essentially depend on financing from downstream beneficiaries. They also stretch the donor financing systems that are more typically geared toward national investments." (Foster and Briceño-Garmendia, 2010:22). Moreover, indications are that regional infrastructure development will not progress without a greater emphasis on project planning and preparation (PIDA, 2011:8).

As suggested above, we propose consolidated facilities for each of Africa's major geographic regions. Three facilities are envisaged for major regions of sub-Saharan Africa – for Southern, Eastern, and Western Africa. Initially, a single facility could be established, possibly in southern or eastern Africa due to the geographic focus of the PIDA PAP. As the new regional model takes root, the other facilities would be established progressively, in line with market demand.

There are questions over the regional model versus strengthening the country based PPP units. The regional model allows regional best practices to be deployed to other countries through an institution that has direct links to the country PPP units. In addition, scarce technical skills within individual countries (especially technical, financial and legal) would be supported by the regional facility. Although projects rely heavily on consultants to carry out the technical and financial studies, the role of government officials in the PPP units remains vital to actually get the project moving and to maintain political support. The regional facilities will work in partnership with the country PPP units on projects identified by the latter.

Focusing on PPP units alone has not worked very well over the past decade. There are about a dozen PPP units across Africa with varying degrees of capacity. In spite of successive overseas training programmes, the majority of them struggle to get their projects out of the starting blocks because they lack the practical, hands-on experience. Regional facilities will work with the staff in PPP units on selected projects. This way, the regional facilities will build skills on an ongoing basis while also hiring in specialist consulting skills for individual projects.

4.1.2. Design consideration 2 – funding the facility

[12] Admittedly, projects in these sectors do suggest a large granularity in specifics to project design, e.g. nuclear vs. coal; road vs. rail.

[13] In fact, the AICD criticises African governments, particularly in middle-income countries, for directing public expenditure towards ICT, which it argues could easily be provided by the private sector (Foster and Briceño-Garmendia, 2010).

Funding source

Although DFIs have a clear development mandate, they often operate with similar incentives to private financiers. For example, consider the EU-Africa Infrastructure Trust Fund which acts as a "club" for DFIs that provide ostensibly independent advisory services for project preparation but often funnel projects towards the investment arms of their organisations. As a result, there may be "cherry picking" of infrastructure projects by development institutions.

Projects that may have been funded by private sector entities are, instead, driven by facilities operating with public funds and those projects that are less attractive to the private sector that should be funded by public money remain neglected. Such an outcome is perverse and suggests that there may be a crowding out fully-fledged private sector financiers.

Instead, funds from DFIs may be better channeled towards early stage activities where the appetite for private sector involvement does not exist. By adequately funding components of early stage preparation, the project pipeline will be unblocked and a greater number of bankable projects be delivered to the market. Focusing "public" money on this stage of the process will "crowd in" private sector money from commercial banks and equity investors. Enacting the necessary reforms in the upstream phase should improve the risk profile of infrastructure projects to the stage where private sector participation is improved.

The facility would not initially include private sector funding but should be designed for the possibility of such an injection in the future. (See the text box below.) Additionally, government money would not be considered for the facility. While obtaining political commitment to infrastructure processes is critical, enlisting government funding for project preparation may be counterproductive as this may provide governments with the leverage to influence the management of the facility which should ideally be semi-autonomous.

Box 1: A model for attracting private sector money

Considering the apparent success of the Brazilian development bank, BNDES, in developing a pipeline of infrastructure projects, this paper considered whether a similarly structured project preparation facility would be effective in meeting Africa's infrastructure needs. Although project preparation facilities are currently funded predominantly by donors, this alternative arrangement seeks to "crowd in" private money from commercial banks and pension funds. These entities are often the ultimate providers for capital (in the form of both equity and debt) to projects under preparation and thus such an arrangement has a clear alignment of incentives for financiers.

The funding structure suggested to stakeholders was a blend of private and "public" money.[14] The former would ideally be provided by fund managers and other private equity firms. The latter would be development finance institutions.[15] Co-investment would mean not only across the public and private sectors but across entities in each of these categories. In other words, competing banks and other finance houses would co-operatively invest in the facility. This may help align interests, something that the PIDA study indicated was necessary for African project preparation (PIDA, 2011:8). Both the public and private sector will only pursue projects that have some probability of eventual success as they are liable to repay the money.

Several advantages provide the rationale for such a facility. Firstly, public money de-risks upstream, early stage preparation. Secondly, combining private and public money increases the ability of the facility to

[14] Detailed consideration was not given to whether government money should enter into the facility. Our initial view is that while this may help align the interests of the government in preparing projects, their direct stake in the facility may allow them to inhibit preparation activity should political commitment waver.

[15] Preferably it would not include donor agency money to avoid the "Daily Mail" problem. This would be in an effort to avoid negative impressions from society, in the case where public money was seen as enabling private gains.

"produce" project preparation.

Our research indicated that the appetite for such a facility does not exist at this time. Private financiers are unable or unwilling to invest funds where they cannot control outcomes to their benefit. The idea was suggested to several pan-African commercial banks and infrastructure funds. Generally, the banks appear reluctant to financially commit to such a facility. This is given past experiences with project preparation and the constraints that they face (regulatory, opportunity cost). Fund managers appeared equally lukewarm to such a facility, citing factors such as the desire to control the process as reasons for not supporting the idea.

Funding model

Given the large funding requirement for project preparation in Africa, sustainability of facilities necessitates reconsideration of the funding model. The PIDA study argues that "[a] concerted effort is needed to ensure than an adequate volume of project preparation resources is made available from African domestic funding and other sources, such as multilateral development banks and project preparation facilities." (PIDA, 2011:8). Currently, most PPFs provide unconditional grants for project preparation. This hampers their survival as 'going concerns' and, as ICA argues, also potentially creates a moral hazard for grant recipients.

Many projects do not require the implicit subsidisation that such preparation funding suggests. Redeemable grants or interest-free loans (repayable from securing project funding at "financial close") would help recycle revenue in the facility and prolong their existence.[16] To recoup expenses incurred in project preparation, costs could be "rolled up" and built into the value of the project to be paid by the concessionaire. Redeemable grants are a preferable revenue-recycling method as this decreases transaction costs – loans are contractually more complex as they are still owed whether or not the project goes ahead.

Private sector funding should be considered although this could introduce conflicts of interest if those providing funds to the PPF are also involved in the downstream investment activities of projects. Yet, private financiers will not invest in the new facility unless they can reap a benefit from participation. One approach would be to invite private financiers to contribute to the PPF which would give them the right of first refusal to participate in project financing (on a competitive basis). The price of getting into the "club" is a contribution to capitalise the PPF (of say $2million), but members of the club would not have any influence on the actual running of the PPF. Their benefit would be preferential access to a steady pipeline of bankable projects over a fixed period of time (say five years) as well as the ability to co-finance with DFIs and donors.

Private financiers that commit to co-funding the new facility would have the opportunity to shape the structure and focus of the facility at the outset, before operations begin. Their inputs regarding the operational model would help to ensure that the PPF is informed by private sector thinking. Private financiers may also contribute human capital to the PPF in the form of secondments for fixed periods, although such arrangements would not give them any privileged access to project information; it would however improve the ability of the PPF to deliver bankable projects timeously. Private financiers could be given an option of either contributing capital or skilled resources, or a combination of the two, which would accord different status in the PPF.

[16] Grants may be preferable to loans as they provide greater speed and flexibility during contract negotiations.

Funding size

To achieve necessary economies of scale and make a meaningful impact to project preparation, we propose that each regional facility be capitalised with between $100 million and $200 million.

Such large amounts are necessary to achieve scale economies for the facilities. Consolidating future funding flows to regional facilities will provide more comprehensive and systematic project preparation services, countervailing the existing PPF landscape which is typified by fragmented and uncoordinated facilities.

4.1.3. Design consideration 3 – improving commitment and coordination

To improve the flow of projects from the pipeline, there needs to be a greater degree of buy-in from political leaders. Getting governments to support projects and maintain commitment is essential. Consideration must be given to how project preparation facilities can be designed so as to improve the likelihood of government commitment over the project life cycle.[17]

Political priorities that are prone to pushing infrastructure projects with little or no economic screening often characterise the budgetary process of African countries (Foster and Briceño-Garmendia, 2010). Shielding infrastructure development from the vagaries of the political process will also reduce risk (real and perceived). Indeed, African government officials welcome project preparation requirements as a means of deterring poorly-motivated "political" projects. Private financiers tend to shun projects that lack sound economic and financial fundamentals.

It is, of course, difficult to develop a generic approach for dealing with the political risks of an entire region. However, cognisance can be taken of those factors that slow the movement of projects from conceptualisation to financial close. To address the coordination problem between the key actors in project preparation (donors/DFIs; private sector financiers; governments), a multi-actor board of directors is proposed for the new facilities. This would take the form of representatives from DFIs, private finance institutions, and – for government buy-in – representatives from the RECs (SADC, COMESA, EAC).

It is essential that the new regional facilities are affiliated to their respective RECs. In giving RECs a sense of ownership of each facility, political commitment will be enhanced. However, it does not follow that the facilities should be embedded within the RECs. It might also be necessary to have board level representation from individual country PPP units.

Reiterating the importance of a sound enabling environment

Attracting greater private investment in Africa requires markets that are based on clear and coherent legislation with the enforcement of commercial law (particularly relating to contracts) and transparent procurement by governments. This enhances certainty. The absence of such enabling legislation and regulations may act as a bottleneck for countries to unlock greater private sector interest (PIDA, 2011).

Necessary reforms include the development of legislation and regulations that have the necessary political commitment from the outset. A top-down approach should see commitment to the process filtering down to line ministries and implementing agencies. A recent example of the success of this process is South Africa's independent power producer

[17] Indeed, this may entail taking cognisance of political motivators like the electoral cycle.

(IPP) programme for renewable energy. Government support, through appropriate regulation as well as demonstration of political will, has successfully attracted significant private sector participation in energy generation in the country.

4.1.4. Design consideration 4 – facility management and advisory team

The skills and resources that facilities possess are vital to their success. PPFs with well-resourced implementation units have had greater success with project preparation efforts than those that were smaller and less well-resourced (ICA, 2012:67).

Management team

We propose that the management team for the new facility be drawn from DFIs and private finance institutions as these institutions have experience in producing bankable project documents. Projects need to be designed in such a way that there is an agreed "checklist" that addresses investor needs. Selecting people with expertise in the project development environment will assist the facility in producing project documentation that is acceptable to investors.

Flexibility should also be provided for management to sign-off on preparation services and related costs that fall below some defined threshold. This reduction in administrative bureaucracy will improve turnaround times of services offered to project sponsors and/or developers.

Advisory team

Focus should be on retaining consultants with the requisite technical skills that produce feasibility studies and the ultimate PIM that is sufficiently comprehensive and rigorous to be considered bankable by the market.

The facility should generate pre-qualified lists of appropriately skilled professionals (that have the technical aptitude to produce bankable documentation) from which services can be directly procured.[18] This would also assist in avoiding delays that currently hamper the responsiveness of facilities.

4.1.5. Design consideration 5 – skills transfer

Building local skills capacity in relevant government institutions would help address the gap that African governments currently face, whereby they are improperly resourced to assess private sector-originated projects. The partnership with local PPP units, alluded to earlier, will ensure a steady transfer of skills to the country level.

The AICD suggests that institutional reform should *inter alia* "strengthen the planning function of the line ministries". One of the report's recommendations is for the institutional strengthening of sector line ministries. This is necessary because "[t]hese line ministries have responsibility, which, if not adequately discharged, can jeopardise the functioning of the sector. They take the lead in sector planning, participate in the formulation of the public budget, and execute investments" (Foster and Briceño-Garmendia, 2010). This suggests intervention at the early stage of project preparation (ie, during pre-feasibility when line ministries are in the forefront).

[18] Screening devices that may be used include assessing consultants based on previous experience working for private sector finance houses or successfully packaging projects for the private sector. Experts that demonstrate understanding of the local political economy may also receive preferred status.

Appropriate skills in government PPP units are often inadequate to appropriately assess the scoping, feasibility and bankability of projects. Those countries and sectors that have shown the greatest progress have been those where external consultants have worked side-by-side with government officials for extended periods of time, allowing for knowledge to be imparted and skills development to take place.

It is imperative that governments garner the resources and build the capacity necessary for not only preparing projects but also implementing, operating and maintaining the underlying infrastructure (PIDA, 2011:9). Often, PPPs and cross-country (regional) projects increase the level of skills and competencies required. The new facility would formalise skills transfer programmes so that external consultants are placed "on the ground" and paired with appropriate local officials. Longer-term engagements in this vein are also likely to improve skills development.

4.1.6. Design consideration 6 – facility location

Geography

The facility office should be located in one of the major financial centres in each region. This suggests that Johannesburg, Nairobi and Lagos would be candidates for the southern, eastern and western region facilities respectively.

Institution

The institution that hosts the PPF secretariat should engender flexible and speedy responses to project sponsor and developers. Host institutions that avoid overly bureaucratic structures are therefore preferable as they speed up deal flow. Institutional bureaucracy is one of the constraints identified as causing the project preparation process to break down. Indeed, there is even scope for a private sector advisory firm to oversee the facility, as in the case of USAID AIP which is managed by Nexant (ICA, 2012).

We therefore propose that each regional facility be established independent of any existing DFI or REC structure but work closely with them in identifying projects and clients

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APPENDICES

APPENDIX 1 – LIST OF INTERVIEWS

Table 3: List of interviews conducted for this report

Name	Designation	Date of meeting
James Leigland	Technical advisor, PIDG TAF	22 January 2013
Nick Amin	Senior Economic Advisor, DFID	29 January 2013
Andre Kruger; Theuns Ehlers	Public sector and PPP financing specialist, Absa Capital; Head of project finance, Absa Capital	29 January 2013
Gordon Smith; Vincente Pons	Currency and African Asset Distribution, Ecobank	30 January 2013
Ntlai Mosiah	Head: Power and Infrastructure Advisory and Coverage, Standard Bank	30 January 2013
Joel Kolker	Regional coordinator, World Bank (former PPIAF regional head)	10 February 2013
Sandra Rwamushaija-Rusagara; Shilesh Muralidhara	Strategic Investment Unit, Rwandan Development Board	12 February 2013
David Ssebabi; Orono Otweyo	Privatisation/Project Coordination Unit, Ugandan Ministry of Finance	19 February 2013
Mitesh Pema; Hayley Stern	Associate Director, AIIM; Executive, AIIM	21 February 2013
Ulisha Singh	Infrastructure Investment Professional, Old Mutual Investment Group South Africa	22 February 2013
Isabel Sumar	Director, Directorate of Studies, Mozambique Ministry of Finance	27 February 2013
Edward Farquharson	Executive Director: Project Management Unit, PIDG	05 March 2013

APPENDIX 2 – PROJECT PREPARATION FACILITIES IN AFRICA

See next page

Table 4: List of project preparation facilities currently available in Africa (in alphabetical order)

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
AFD DBSA Project Preparation and Feasibility Study (NEPAD PPFS)	2003	DBSA	AFD; DBSA	General infrastructure	Yes	12	12	0	(1) Projects with high environmental or social risks without risk mitigation measures; (2) Projects that contravene accepted international labour practices; (3) Projects that are funded/promoted by companies blacklisted by the development and financing community or relevant governments due to corruption or other irregular activities; (4) Projects involving illegal activity, military or gambling activities	Active; funds fully disbursed
African Catalytic Growth Fund	2006	World Bank	DFID	General infrastructure	Unknown	-	-	-	Evidence of a credible strategy for shared national growth; evidence of a constraint to growth; evidence of government commitment; evidence that a regional institution (where applicable) can effectively manage the programme with technical support	Active, though limited information exists
African Water Facility (AWF)	2004	AfDB	Algeria; Australia; Austria; Bill & Melinda Gates Foundation; Canada; Denmark; EU; France; Norway; Senegal; Spain; Sweden; UK; AfDB	Water (hydro-electric, water transport, water supply and sanitation)	Yes	178	112	66	N/A (other than projects must be water and sanitation-related)	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
ACP - European Commission Energy Facility II	2009	European Commission	EU Member States	Energy (various clean energy power stations, education, policy and research)	Yes	200	98.5	101.5	Countries that have not ratified the Cotonou Agreement	Active
COMESA-EAC-SADC Project Preparation and Implementation Unit (PPIU)	2011	COMESA	DFID	General infrastructure		20	10	10	Focus on the North-South Corridor	Active
DBSA EIB Project Development and Support Facility (DBSA-EIB PDSF)	2010	DBSA	DBSA; EIB	General infrastructure	Yes	7.5	0.5	7	(1) Projects with high environmental or social risks without risk mitigation measures; (2) Projects that contravene accepted international labour practices; (3) Projects that are funded/promoted by companies blacklisted by the development and financing community or relevant governments due to corruption or other irregular activities; (4) Projects involving illegal activity, military or gambling activities	Active
ECOWAS PPDU	Unknown	ECOWAS	Government of Spain	General infrastructure	Unknown	6	0	6	Unknown	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Energy Sector Management Assistance Program (ESMAP)	1983	World Bank	The Netherlands; UK; Germany; Denmark	Energy	Yes	113	25	88	Unknown	Active
EU-Africa Infrastructure Trust Fund (EU-AITF)	2007	EIB	European Commission; Austria; Belgium; Finland; France; Germany; Greece; Italy; Luxembourg; Netherlands; Portugal; Spain; United Kingdom	General infrastructure	Yes	530.1	431.1	99.0	Projects not related to infrastructure, or with no regional impact	Active
Fund for African Private Sector Assistance (FAPA)	2006	AfDB	Government of Japan; AfDB; Government of Austria; Austrian Development Bank	General infrastructure	Yes	49	30	19	All regional member countries of the AfDB are eligible, except those countries under sanction; preference is given to requests that feed into AfDB/ADF-financed projects	Active
Global Environmental Facility (GEF)	1991	UNEP	32 donor countries. Projects are managed by the UNEP, UNDP and World Bank	General infrastructure	Yes	-	-	-	*Project eligibility criteria:* Projects must reflect national or regional priorities and either improve the global environment or advancing the prospects of reducing its risks; *Country eligibility criteria:* Countries that have ratified the relevant treaty are eligible to propose biodiversity and climate change projects	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Global Infrastructure Project Development Fund (InfraVentures)	2008	IFC	IFC	General infrastructure	Yes	100	16	84	Majority of funds are for late-stage project preparation	Active
Global Partnership for Output-Based Aid (GPOBA)	2003	World Bank	DFID; World Bank; IFC; Netherlands; Australia; Sweden	Basic infrastructure and social services	No	285.9	130.7	155.2	Requirement that government authorities endorse any project proposal that involves technical assistance; co-financing will strengthen the application for support; if technical assistance is provided, there is an expectation that the recipient will be applying for output-based subsidies.	Active
IFC Advisory Service	-	IFC	IFC	General infrastructure	Yes	-	-	-	Advisory service costs fully recovered (25% from government, 75% from winning bidder in transaction). Where the government is unable to pay its share of the cost, an application may be made to DevCo for assistance	Active
InfraCo Africa	2004	PIDG	DFID; Dutch Ministry of Foreign Affairs (DGIS); Swiss State Secretariat for Economic Affairs (SECO); Austrian Development Agency (ADA)	General infrastructure	Yes	65	50	15	Supports privately originated projects and develops them to a stage where private developers are willing to invest. Focus is on greenfield projects in poorer African countries	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Infrastructure Development Collaboration Partnership Fund ("DevCo")	2004	IFC	IFC; DFID; Netherlands; Sweden; Austria	General infrastructure	Yes	74.45	41.45	33	Funds only available to support projects where IFC Advisory Services is the lead financial advisor	Active
Islamic Development Bank (IsDB) Technical Assistance Facility	Unknown	IsDB	IsDB	General infrastructure	Yes	-	-	-	Contribution requirements (public sector 10%, private sector 25-50%); priority given to consulting firms from IDB member countries and to LDC member countries for infrastructure and agriculture	Active
Japan Policy and Human Resources Development (PHRD) Technical Assistance Grant Programme	1988	World Bank	Japan; World Bank	General infrastructure	Unknown	-	-	-	Only a single grant per operation may be requested	Active
NEPAD Infrastructure Project Preparation Facility (NEPAD IPPF / RIPA IPPF)	2004	AfDB	Canada; Denmark; Germany; Spain; United Kingdom (DFID)	General infrastructure	Yes	50.5	35.8	14.7	Projects not related to infrastructure, or with no regional impact	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Nigerian Technical Cooperation Fund (NTCF)	2004	ADB	Nigeria	General infrastructure	Yes	25	5.4	19.6	Goods and serviced to be financed must emanate from ADB member countries. Consultants must be nationals, permanent residents or entities established under the laws of member countries of the ADB. Consultants from Nigeria, Nigeria diaspora and women are given preference.	Active
PIDG Technical Assistance Facility (PIDG TAF)	2003	PIDG	Bi-lateral development agencies; multi-lateral development agencies; bi-lateral finance institutions; DFIs; MDBs; trust funds housed at MDBs, DFS, *etc.*	General infrastructure	Yes	40	19	21	Funding only available on an application basis to the PIDG facilities	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Public Private Infrastructure Advisory Facility (PPIAF)	1999	World Bank	DFID; Japan; World Bank; Asian Development Bank; Australia; Austria; European Bank of Reconstruction and Development; France; Germany; IFC; Italy; Millennium Challenge Corporation; Netherlands; Sweden; Switzerland; United States	General infrastructure	Yes	260	212.7	47.3	Requirement that government authorities endorse any project proposal that involves technical assistance	Active
SADC PPDF	2008 (currently operation-alising)	DBSA	German Development Bank (KfW)	Unknown	Unknown	6	0	6	SADC member countries only	Active
Sustainable Energy Finance Initiative (SEFI) Investment Advisory Facility	2000	UNEP	UNEP SEFI	Energy	Yes	-	-	-	Limited to transaction support for sustainable energy projects	Active

Facility	Inception	Host institution	Funders	Type of projects	Supports PPPs?	Total fund size (US$ million)	Committed (US$ million)	Remaining funding (US$ million)	Exclusions and conditions	Notes and comments
Sustainable Energy Fund for Africa (SEFA) Project Preparation Window	2011	AfDB	Government of Denmark	Energy	Yes	14	0	14	Unknown	Active
USAID AIP	2008	Nexant (private energy advisory company)	Government of the United States	Energy	Yes	35	25	10	Preparation funding tied to US trade support	Active
TOTAL						**2071.5**	**1255.2**	**816.3**		

Source: Infrastructure Consortium for Africa; PPIAF; various facility-specific websites and documentation

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