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Public Financial Management in Infrastructure in Africa

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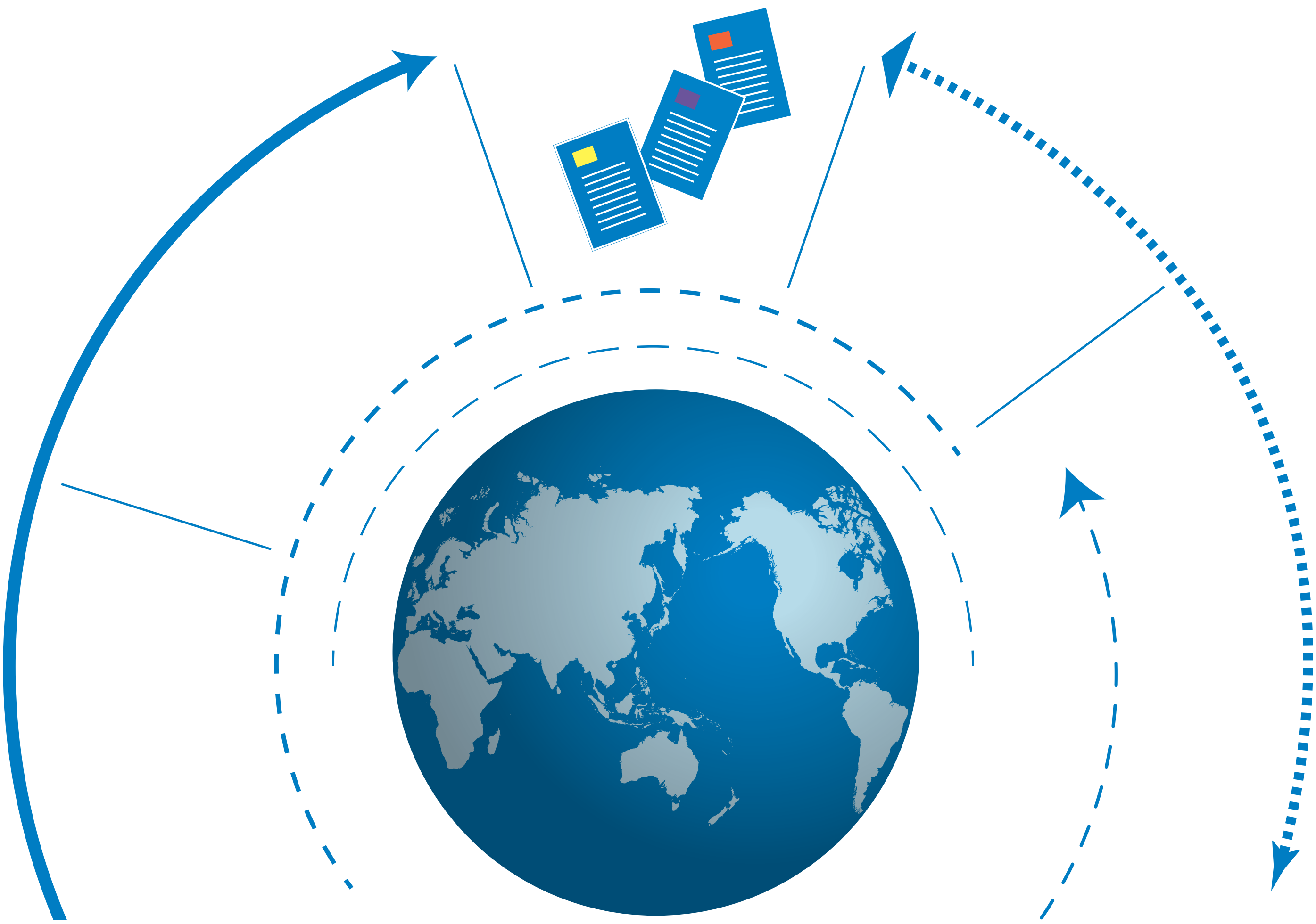

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PREFACE

Better infrastructure is badly needed to improve the lives of African people and to strengthen the competitiveness of African economies. This has been documented, among others, in the successive editions of the African Economic Outlook, which the OECD Development Centre has published jointly with the African Development Bank since 2002. The extent of the challenge is also well recorded: to close the gap with other parts of the world and achieve national development targets on the continent, the World Bank estimates that $93 billion must be spent on infrastructure every year over a ten-year period.

Can this challenge be met? There are some encouraging signs, such as the launching of the Programme for Infrastructure Development in Africa by the African Union Commission, the NEPAD Secretariat and the African Development Bank. In addition, higher growth, windfall revenues from natural resources and debt cancellations have increased the fiscal space for many African governments to invest in infrastructure. However, serious concerns remain. In particular the ambition of mobilising private investment on a significant scale, for instance in the form of public-private partnerships, has yet to materialise. Also while public investment budgets have increased in many countries, the capacity of national administrations to optimise the quality of public expenditure too often remains a constraint.

The latter is the subject of this Working Paper. How do public authorities manage public spending on infrastructure in Africa? To what extent do budgetary processes and institutions hamper the continent's infrastructural development? To answer these questions, the Development Centre adapted the analytical framework it used to study similar issues in Latin America and joined forces with the Collaborative Africa Budget Reform Initiative (CABRI) to administer a questionnaire to its network of budget officials in African countries. The results are mixed: while the efficiency of public expenditure *per se* is assessed rather positively, infrastructure development too often suffers from inadequate medium-term planning. The evidence assembled here suggests that attention should be paid not only to mobilising funds but also to enhancing governments' capacity to spend them effectively on development.

This paper was produced as part of the OECD Development Centre's work on fiscal policy in Africa. We hope it contributes to African governments' efforts, supported by CABRI, to increase the quality of public expenditure in infrastructure.

Mario Pezzini
Director
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July 2014

RESUMÉ

Dans quelle mesure les processus budgétaires et les institutions entravent-elles le développement des infrastructures en Afrique ? Pour répondre à cette question, ce document analyse les réponses de responsables du budget à un questionnaire administrés dans 22 pays africains : Bénin, Botswana , Burundi, Cameroun , Cabo Verde, Tchad, République démocratique du Congo, Djibouti, Gambie, Kenya, Lesotho, Madagascar, Maurice, Maroc, Namibie, Niger, Rwanda, São Tomé et Príncipe, Sierra Leone, République du Soudan, la Tunisie et le Zimbabwe.

Ses principales conclusions sont les suivantes :

1. La sélection des projets d'infrastructure pourrait être améliorée. En particulier, le processus d'évaluation a besoin d'une utilisation plus systématique d'analyses coûts-avantages et/ou coût-efficacité ; la sélection des projets n'est pas suffisamment fondée sur l'amélioration des indicateurs physiques ; la société civile n'est généralement pas consultée.

2. Les projets prioritaires sont généralement mis en œuvre en premier et les différents niveaux de planification (national, sectoriel et local) se chevauchent souvent, même si les objectifs locaux sont moins prioritaires.

3. Les sources de financement de l'infrastructure sont nombreuses et variées, mais les fonds publics en représentent la majeure partie. La tendance à l'augmentation des montants dépensés au cours des dix dernières années est compatible avec le fonctionnement globalement positif de ce mode de financement. Le principal défi est maintenant de lutter contre la tendance à favoriser les nouveaux investissements au détriment des dépenses de fonctionnement et d'entretien.

4. En ce qui concerne la façon dont les gouvernements africains utilisent les fonds publics pour le financement des infrastructures, l'étude souligne que leur action est dans l'ensemble efficace, efficiente et conforme aux règles de la prudence budgétaire.

5. Malgré ces constats généralement positifs, certains problèmes spécifiques méritent plus d'attention afin d'améliorer la rentabilité des dépenses d'infrastructure. Dans la phase de planification, une utilisation prudente de l'évaluation économique, financière, sociale et environnementale permettrait d'assurer la faisabilité et l'opportunité des projets. Le manque d'entretien a des effets délétères sur l'efficacité des investissements. Il faut reconsidérer les objectifs politiques des dépenses d'infrastructure dans les phases de planification et de budgétisation, car ces phases sont génératrices d'inefficacités liées aux coûts cachés.

Classification JEL: H54 O20

Mots-clés: Afrique, infrastructure, budgétisation et planification nationale, réformes de gestion des finances publiques.

ABSTRACT

To what extent do budgetary processes and institutions hamper infrastructural development in Africa? To answer that question, this report analyses the answers of budget officials to questionnaires administered in 22 African countries: Benin, Botswana, Burundi, Cameroon, Cabo Verde, Chad, Democratic Republic of Congo, Djibouti, Gambia, Kenya, Lesotho, Madagascar, Mauritius, Morocco, Namibia, Niger, Rwanda, São Tomé and Príncipe, Sierra Leone, Republic of Sudan, Tunisia and Zimbabwe.

The main conclusions of the report are as follows:

1. The selection of infrastructure projects could be improved. In particular the appraisal process needs a more extensive use of Cost-Benefit and/or Cost-Effectiveness Analyses; the selection of projects is not sufficiently based on the improvements of physical indicators; civil society is generally not consulted.

2. Highest priority projects are implemented first and the different planning levels (national, sectorial, local) generally overlap even though local objectives are less of a priority.

3. The sources of finance infrastructure are various and numerous, but public funds represent the bulk of it. The growing trend in the amounts spent over the last ten years is consistent with the overall positive functioning of this mode of financing. The main challenge is now to circumvent the capital bias that tends to favour new investments over operation and maintenance expenditures.

4. Regarding how African governments use public funds for infrastructure financing, the survey underlines the fact that their action is overall effective, efficient and subject to the rules of fiscal prudence.

5. Despite the general optimistic situation described above, some specific aspects deserve more attention in order to generate more value for money in infrastructure spending. In the planning stage, a careful use of economic, financial, social and environmental appraisal would ensure the feasibility and the desirability of the projects. Inefficiencies related to the inadequate attention to maintenance require a change in political objectives for infrastructure spending at the planning and budgeting phases. There are inefficiencies related to hidden costs.

JEL Classification:

- H54 National Government Expenditures and Related Policies: Infrastructures.
- O20 Development Planning and Policy: General.

Keywords: Africa, infrastructure, National budgeting and planning, Public financial management reforms. reforms.

I. INTRODUCTION

For decades, the role of infrastructure in growth and development has been regularly emphasised in economic literature. One of the first justifications relates to the *Big Push* theory (Rosentein-Rodan, 1943, 1961): large amounts of investments are needed to embark on the path of economic development and in particular infrastructure investments. This question has gained renewed interest since the late 1980s when the productivity of public expenditure was questioned (Aschauer, 1989).

Despite the debate on the magnitude of their effects (OECD, 2006), the variety of channels through which infrastructure affects growth is clearly identified. Infrastructure represents a direct input into production through the services it provides (transport, energy, and information technologies). Indirectly, it can also alter the composition of other inputs and play a role through economies of scale and scope (Bennathan et al., 2006; Straub, 2008). Infrastructure is also at the core of structural transformation of economies (UNCTAD, 2009; Lin, 2011).

Empirical evidence tends to confirm that these mechanisms are actually at work in the infrastructure-growth relationship, even in Less Developed Countries (LDCs) (Estache and Garsous, 2010; Djiofack-Zebaze and Keck, 2006; Escribano, Guasch and Pena, 2009; Calderón, 2009).

The other beneficial aspect of infrastructure is its action as an anti-poverty tool. The provision of infrastructure services to the poor is crucial in order to ensure their connectivity with economic activities and additional productive opportunities (Estache, Foster and Wodon, 2002). Isolation from economic centres created by a lack of infrastructure provision hampers the development of local markets (Deichmann, Shilpi and Vadkis, 2008; Mu and van de Walle, 2011).

The beneficial expected impact of infrastructure is even stronger for poorer countries (Bennathan and Canning, 2000; Estache, 2010). Bridging infrastructure gaps is consequently a high priority for LDCs and in particular in Africa. [1]

However, Africa's infrastructure networks increasingly lag behind those of other developing countries. The situation has not changed significantly since the 60s, despite an increasing trend in public investment in infrastructure since the 2000s (World Bank, 2010).

1. Since more than 34 of the 48 LDCs are African countries. www.unohrlls.org/docs/ohrlls/ldcs/UN_LDC_Factsheet_130517.pdf

In this context, CABRI[2] and the OECD Development Centre have jointly undertaken research with the main objective of assessing whether budgetary processes and institutions in Africa are hampering (or not) infrastructural development. This question stems from the fact that descriptive evidence and the economic literature on growth and public infrastructure highlights the point that spending does not automatically translate into growth returns. The empirical relation between economic growth and performance or physical indicators for infrastructure is strong, whereas the relation between growth and public spending is relatively weak and in some cases not significant: the underlying interpretation refers to public infrastructure spending on governance and institutions (Jimenez, 1995; Sanchez-Robles, 1998).

The way in which public authorities manage public spending on infrastructure through budget processes and institutions is known as the concept of *Public Financial Management* (PFM). This notion of governance in public spending can be summarised as the procedures, established by law or regulation, for the management of public monies through the budget process, which includes formulation, execution, reporting and analysis (Potter and Diamond, 1999, in Prakash and Cabezon, 2008; Lienert and Fainboim, 2010). Good public financial governance is achieved when these procedures result in responsive public services through public spending that is affordable, transparent and accountable, and which funds government priorities without wastage or corruption (CABRI, 2010d).

PFM reforms in developing economies include interventions aiming at "improving the comprehensiveness of budget operations, building better links between annual allocations, medium-term policy objectives and performance indicators, and computerising budget management and expenditure controls" (de Renzio, Andrews and Mills, 2010). These initiatives typically cover the issues related to infrastructure financing in Africa. Good PFM is therefore key to ensuring infrastructure deployment, as the achievement of development objectives relies on an efficient and effective delivery of services and a sustainable quality/level of services (OECD, 2011; Kioko et al., 2011). Good PFM can also help align different national agendas, one of the tremendous challenges hampering the realisation of the cross-border infrastructure programmes (World Economic Forum, 2014).

The present report focuses on PFM in infrastructure and is based on data collected through questionnaires administered to budget officials in 22 African countries:[3] Benin, Botswana, Burundi, Cameroon, Cabo Verde, Chad, Democratic Republic of Congo (DRC), Djibouti, Gambia, Kenya, Lesotho, Madagascar, Mauritius, Morocco, Namibia, Niger, Rwanda,

2. The Collaborative Africa Budget Reform Initiative (CABRI) is a professional network of senior budget officials in African Ministries of Finance and/or Planning. CABRI was officially launched on 14 May 2008 in Maputo, Mozambique. On 3 December 2009, CABRI became a legal and independent membership based organisation. See Appendix 1 for more details.

3. The survey also includes Asian and Pacific countries: Afghanistan, Bhutan, East Timor, Samoa and Solomon Islands. A summary of the results for these countries is presented in Appendix 3.

São Tomé and Príncipe, Sierra Leone, Republic of Sudan, Tunisia and Zimbabwe.[4] Building on a survey conducted by the OECD Development Centre on Latin America (Nieto-Parra et al., 2013), this analysis attempts to identify the main bottlenecks hindering effective infrastructure service delivery throughout the policy-making process.

In particular, the survey investigates the main modalities that characterise budgetary institutions, such as:

- degree of flexibility;
- transparency;
- sustainability;
- centralisation of decision, revenue collection and spending;
- participation of legislature;
- use of performance information/indicators.

The report is organised as follows: a first section presents the role of planning and budgeting in infrastructure spending in Africa. It emphasises the importance of a careful and rigorous selection of projects, the parallel question of prioritisation, and the role of multi-year planning. Section II reviews the various financial sources of infrastructure spending in Africa, and their relative importance for the different infrastructure sectors, before covering the issue of under *versus* over-spending. Section III describes the institutional architecture of public funds used to finance infrastructure spending, with three segmentations for the origins of public funds: *i)* general, earmarked or off-budget funds; *ii)* central *versus* local budgets, *iii)* budget *versus* specialised institutions. Finally, Section IV investigates the way governments use public funds to finance infrastructure, and in particular whether the criteria of efficiency, fiscal prudence and effectiveness are met in Africa.

4. The survey may be subject to various sources of bias: stated (as opposed to revealed) preferences, country-specific preferences affecting cross-country comparability, dominance of certain types of infrastructure in policy-making processes.

II. BUDGETING AND PLANNING OF INFRASTRUCTURE INVESTMENTS

The policy making process for infrastructure consists of four phases:[5]

1. planning and prioritisation;
2. execution;
3. operation and maintenance;
4. monitoring and evaluation.

The first section of the report focuses on the planning and prioritisation stage. This stage encompasses the budgetary process that will decide the allocation of resources to specific priorities,[6] after the selection of projects.

A first sub-section covers the process of selection with an emphasis on appraisal and the notion of value for money in infrastructure investments. The second sub-section presents the notion of prioritisation in infrastructure spending first in a general way and then by opposing regional/sectorial targets *versus* national objectives and development plans. In conclusion the third sub-section defines the role of multi-year budgeting and planning in infrastructure.

II.1. Selection of projects

The project planning phase is usually the most challenging (OECD, 2013). The effectiveness of infrastructure investment requires a careful selection of projects based on a rigorous appraisal. This complex and recurrent process aims at providing a comprehensive assessment of the investment (OECD, 2013).

Appraisal should ideally cover several criteria to assess both the desirability of the infrastructure investment ("*Should it be done?*") and its feasibility ("*Can it be done?*"). The set of criteria includes the technical, financial, economic, social, institutional, environmental and political aspects of the project (CABRI, 2010a). As such, appraisal represents both a useful toolkit

5. This definition is based on a survey conducted by the OECD Development Centre that attempts to identify the main bottlenecks hindering effective infrastructure service delivery throughout the policy-making process (see OECD, 2013).

6. This question of prioritisation is covered in sub-section I.2. (II.2)

and a challenge for decision makers due to the profusion of information needed to conduct a rigorous approach (CABRI, 2010a).

Concretely, the appraisal process compares all costs and benefits related to an investment project. The typical tools are cost-benefit (CBA) and cost-effectiveness analyses (CEA), depending on the type of projects and the definition of costs and benefits.[7] While CBA is used to ascertain whether benefits exceed costs, CEA compares the relative expenditure (costs) and outcomes (effects) of two or more courses of action. The typical caveats and constraints related to such analyses concern the way of estimating the impact of risk (International Transport Forum, 2011) and the choice of a measure for the project worth (CABRI, 2010a).

The use of CBA and/or CEA in the design and monitoring of infrastructure projects is quite low among the African countries surveyed (**question Q7B**): only 11 countries out of 22 report using these techniques. The selection of infrastructure projects seems not to be based on a careful and rigorous process of evaluation, and therefore needs improvement.

The appraisal of infrastructure projects should also include the consultation of the Ministry of Finance in order to ensure the feasibility of the projects through their fiscal sustainability, before committing the government to any infrastructure plan. The data reports that more than 75% of the countries surveyed consult systematically the Ministries of Finance to ensure a realistic financing of infrastructure projects before committing the government (**question Q5H**). Another type of consultation could be considered during the formulating stage of policies and infrastructure plans. Major actors of society (civil society, private sector, industry, etc.) should be extensively consulted to ensure the desirability of the investments and their adequacy with society's needs and objectives. However, this type of consultation is less widespread among the sample. Of the countries surveyed, only 50% have policies based on extensive consultation with major actors from civil society, private sector and industry (**question Q7F**). This situation needs to be improved as public consultation is a major element which is becoming increasingly relevant for most African countries in order to avoid unforeseen delays in project implementation (CABRI, 2010c).

The finality of appraisal is to ensure that the selected project will achieve **value for money**, by reviewing all the aspects already mentioned (economic, financial, environmental…). Box 1 below defines the concept of value for money which is actually essential to all investments decisions.

The economy criteria can be assessed through CBA or CEA, which needs to be improved considering the low number of countries that report using these tools in their selection process.

Regarding the criteria of efficiency in relation to selection of projects, the results are barely better. Eleven countries over the 22 in the sample have an objective of efficiency based on the "the maximum improvement in any physical indicator per dollar spent" (question **Q7A**).

7. CEA are preferred over CBA when it is not easy to measure cost and benefit in monetary terms directly, for instance in social infrastructure projects.

Concerning effectiveness, Section IV will emphasise that the use of public funds to finance infrastructure is globally effective among the countries surveyed (see questions **Q5**).

Box 1. Value for money: Definition

Value for money is an essential criterion to meet for any kind of investment. It is defined as the optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user's requirement. It can be assessed using the criteria of economy, efficiency and effectiveness.

Economy: Reducing the cost of resources used for an activity, with a regard for maintaining quality.

Efficiency: Increasing output for a given input, or minimising input for a given output, with a regard for maintaining quality.

Effectiveness: Successfully achieving the intended outcomes from an activity.

Source: Jackson, P. (2012).

II.2 Prioritisation

The prioritisation of projects[8] is part of the planning phase and forms the premise of the policy-making process in infrastructure. A better consistency of budget preparation/authorisation with development priorities could ensure higher outcomes (Dabla-Norris et al., 2011). The main constraint related to Prioritisation is that it is a fundamentally a political process (World Bank, 1998). This reaffirms the need for a careful and rigorous selection and appraisal of infrastructure projects, consistent with the resource implications over the life of the policy. This will ensure that the prioritisation of infrastructure investments is actually based on objective and measurable benefits for the economy that match available resources.

The data point to a reassuring situation. Of the countries surveyed, 82% report that the infrastructure projects which are implemented are those with higher priority (**question** Q5**F**).

The prioritisation of projects also occurs by comparing and analysing the feasibility and the desirability of:

- **Regional and sectorial plans,[9] as opposed to**
- **National and development plans**

8. The survey will highlight another kind of prioritisation between current expenditures (operating and maintenance) and capital investments (new investments).

9. Regional means local plans, defined within a country. Sectorial plans refer to infrastructure priorities.

In this case, prioritisation refers more to a choice between levels of action. Table 1 below illustrates that there is no deep opposition between regional/sectorial priorities and national plans, and that generally the different levels of infrastructure plans overlap.

Sectorial and national priorities are equally reported as key objectives by 19 countries. This result highlights an integrated vision of infrastructure spending at a macro level. On the contrary, local targets seem to be a lesser priority (with ten countries that quote them as key objectives), while the rationale for local infrastructure targets is that micro projects fit final users' needs better.

According to Table 1 below, the overlapping of priorities is widespread as only six countries report a unique priority (either infrastructure or national) while ten countries report the three levels as key objectives when financing infrastructure; and six countries report that expenditures are closely connected to national and infrastructure priorities.

Table 1. **Prioritisation of infrastructure spending**

Q1G: What are the key objectives when financing infrastructure? Expenditures closely connected to	
Local, Infrastructure and National priorities	Burundi, Chad, Gambia, Kenya, Lesotho, Madagascar, Mauritius, Morocco, Namibia, Sudan
Infrastructure and National Priorities	Benin, Botswana, Cabo Verde, Niger, Sierra Leone, Tunisia
Infrastructure priorities only	Cameroon, São Tomé and Príncipe, Zimbabwe
National priorities only	Democratic Republic of Congo, Djibouti, Rwanda

II.3. Multi-year budgeting and planning

The time horizon of public finances is more extended than the fiscal year in which the decisions are made (CABRI, 2008). This is typically the case for infrastructure projects the lifetime of which may lie between 1 or 2 years and 20 years. Budgeting infrastructure spending over several years is thus crucial to follow the life cycle of the project. But multi-year planning also requires ensuring the respect of fiscal discipline based on the yearly budget process and other medium-term resources while at the same time financing objectives defined on a longer time basis (World Bank, 1998; Le Houerou and Taliercio, 2002).

Question **Q5G** of the present survey asks about the preparation of internal multi-annual investment plans in infrastructure from line ministries. It appears that this practice is dominant in Africa, with 14 out of 22 countries reporting that they have multi-year budgets. Quite reassuringly, only three among them do not implement verification on whether their infrastructure plans are compatible with Medium-term Expenditure Plans (see question **Q5I**).

III. THE FINANCING OF AFRICAN INFRASTRUCTURE

This second section describes how infrastructure projects are being financed in Africa. It first details the different financial sources for funding infrastructure. It then analyses the question of over *versus* under-spending in financing African infrastructure.

III.1. The different sources of financing for infrastructure

III.1.1. An overview of the different sources

The sources of financing for infrastructure in Africa are various and numerous. As confirmed in the survey with 12 countries out of 22 considering that there are a high number of different fund sources for infrastructure (question **Q7E**).

The traditional distinction opposes public to private financing. However, an additional distinction includes official development assistance (ODA) "since infrastructure has been, and continues to be, a major business for development agencies" (Estache, 2010). The Public Sector infrastructure spending represents budget and off-budget spending (including state-owned enterprises and extra budgetary funds). External sources or non-government financing refer to ODA and non-OECD financiers (China, India and the Arab states) that generally propose concessional funds subject to conditions and to private sector participation that has been dominated by public-private partnerships (PPP) over the last years.[10]

Table 2 presents the respective shares of each source of financing for each infrastructure sector and by type of expenditure (Briceño-Garmendia, Smits and Foster, 2008).[11]

Around two thirds of infrastructure spending in Africa is financed through the public sector.[12] A similar domination of public over external funding appears for all infrastructure sectors except ICT. The irrigation sector relies only on public funds to finance current and capital investments.

10. Concessions and privatisations are other means of private participation in infrastructure.

11. Their study includes the following countries: Benin, Cameroon, Cabo Verde, Chad, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda and Zambia.

12. The Public sector finances 45% of total spending through operation and maintenance expenditures and an additional 20.8% through capital expenditures.

Table 2. **Infrastructure spending in Africa**

	Operation & maintenance	Capital expenditure					Total spending USD bill./yr
	Public sector (%)	Public sector (%)	ODA (%)	Non-OECD financiers (%)	Private sector (%)	Total (%)	
Irrigation	66.7	33.3	-	-	-	33.3	**0.9**
WSS*	40.8	14.5	15.8	2.6	27.6	60.5	**7.6**
ICT**	22.2	14.4	0.0	0.0	63.3	77.8	**9.0**
Power	60.3	20.7	6.0	9.5	4.3	39.7	**11.6**
Transport	48.1	27.8	11.1	6.8	6.8	51.9	**16.2**
Total (%)	**45.0**	**20.8**	**7.9**	**5.5**	**20,8**	**55,0**	**45.3**

Adapted from Briceño-Garmendia, Smits and Foster (2008) in World Bank (2010).
*WSS: Water Supply and Sanitation
**ICT: Information and Communication Technology
Non-OECD financiers are China, India and the Arab states.
The percentages are in terms of the total spending given in the last column.

Among external sources, the participation of the private sector is the highest with 20.8% of total infrastructure spending, occurring in financing capital expenditures. The rest of capital expenditures are financed by ODA and non-OECD financiers with respectively 7.9% and 5.5% of total spending. The WSS sector exhibits a similar ranking of sources. ODA is the second source of financing transport capital expenditures, followed by non-OECD financiers *ex-aequo* with the private sector. In the power sector, non-OECD financiers are the second source of financing, followed by ODA and the private sector.

It is noteworthy that current expenditures (operation and maintenance) taken as a whole are only funded through the public sector, while capital expenditures are dominated by external financing. Also notice that capital expenditures represent a larger share of total spending, illustrating the typical capital bias in infrastructure that favours new investments over the operating and maintenance expenditure. Here again, the pattern differs according to each infrastructure sector. For instance, the power and irrigation sector are not affected by the capital bias as their respective shares of operation and maintenance expenditures are both around 60%. On the contrary, the bias is even more marked for the ICT and the WSS sectors.

III.1.2. Private participation: Public-Private Partnerships (PPPs)

The rationale for private-sector involvement in infrastructure covers four dimensions (OECD, 2013):

- improving value for money in public service delivery, by delivering an equivalent quality of public services but at a lower cost;
- sharing risk to ensure that the public and private sectors support the risks for which they are better suited;
- introducing competitive pressures through tendering process;
- bringing in additional funds with the access to equity markets.

The degree of private financing for infrastructure projects and thus the final form of this participation depends on the level of risk transferred from the public to the private sector, the ownership of assets and the bundling of construction and operation (OECD, 2008; Engel et al., 2009). At the end of the scope, with the higher exposure to risk, privatisation allows the private entity to buy an equity stake in the state-owned utility and receive the associated residual returns.

Over recent years, the main form of private participation in financing infrastructure has been through public-private partnerships (PPPs). Box 2 below summarises a definition of PPPs (CABRI, 2010b).

Box 2. Public-Private Partnerships (PPP) in infrastructure

PPPs refer to arrangements in which the private sector supplies infrastructure assets and services that have traditionally been provided by the government.

Although there is no clear-cut definition of a PPP, most definitions include three key characteristics:

- *private execution and financing of public investment;*
- *an emphasis on both investment and service provision* by the private sector; and
- *risk transfer* from the government to the private sector.

PPPs appear to be particularly well suited to providing economic infrastructure, primarily for three reasons:

1. sound projects that address clear bottlenecks in the road, railway, ports, power and other key sectors are likely to have high economic rates of return and, therefore, to be attractive to the private sector;
2. the private sector can be made responsible not only for construction but also for service provision; and
3. to the extent that these services are supplied directly to final users, charging is both feasible and, from an efficiency standpoint, desirable.

Source: CABRI (2010b), "Ensuring Value for Money in Infrastructure in Africa, Report 2, Financing Infrastructure Projects".

Despite their growing use over the last two decades across developing countries in general and African countries in particular, there is still no consensus on whether or not PPPs in infrastructure are good or bad for developing countries (Mukhopadhyay, 2011; Patel & Bhattacharya, 2010; Joasiah et al., 2010; Estache, 2006; Estache & Wren-Lewis, 2009 and 2010; Jerome, 2008).

III.1.3. Other external sources

The other sources of non-government financing of infrastructure concern project funding from development partners, through grants that mainly finance "social" infrastructure (hospitals, schools and water services); and concessional loans that fund "economic" infrastructure (CABRI, 2010b).

Leaving aside the traditional debate on aid effectiveness, financing of infrastructure projects by development agencies and partners (either multilateral or bilateral) may suffer from the same weaknesses as public funding. Aid would prove to be inefficient in tackling issues related to weak implementation and management capacity, non-transparent procurement practices and inadequate attention to maintenance and operations.

Specific measures have been recommended by donors to improve project planning and execution during the construction phase. Lack of capacity in implementation and management is dealt with by providing technical assistance and administrative support in addition to financing. Donors also prefer to apply their own procedures rather than those of the beneficiary country. However, as seen in Table 2, current expenditures of operation and maintenance are financed exclusively through the public sector, leading to a deterioration of assets after the external sources of financing have delivered the infrastructure.

III.2. Over *versus* under-spending

The issues of under and over-spending in infrastructure are analysed in questions **Q1A** to **Q1F**. Under-spending concerns a situation in which spending is actually below the target indicated in the planning budget, while over-spending refers to an actual disbursement that is over the target.

Out of the 22 surveyed countries, 15 report an under-spending in infrastructure. Among them, only three (DRC, Madagascar and São Tomé and Príncipe) do not have corresponding reforms already in place and/or in the pipeline, meaning that this specific issue is generally identified by governments and that there is a will to improve it.

The questionnaire then asks respondents why there is under/over-spending in infrastructure projects.[13] Table 3 below synthesises the answers. The most quoted reason is the lack of resources, reported by six countries.[14] The second main reason is a lack of capacity in the earlier stages of infrastructure projects. Coupled together, they lead to a situation where improper objectives match inappropriate resources. Better design and project definitions are

13. Notice that even those that do not report one or the other issue can answer.

14. Rwanda is classified in this first reason but reports actually an issue on the predictability of resources from donors.

therefore needed to state realistic targets, for instance through Cost-Benefit (BBA) and/or Cost-Effectiveness Analyses (CEA). The first section showed that only 10 countries out of 22 use CBA and/or CEA to design and monitor their infrastructure projects **(Q7B**). Concerning the matching of targets with resources, question **Q5E** illustrates this is a critical issue as infrastructure projects are designed to match the available funds at the planning stage only in 10 of 22 countries.

Table 3. **The reasons for under-spending**

Q1B/C: Why do you think there is under-spending in infrastructure projects?	
Lack of resources	DRC, Gambia, Madagascar, São Tomé and Príncipe, Sudan, Zimbabwe (Rwanda: unpredictability of Donor Aid resources)
Lack of capacity in project planning, design and definition	Benin, Cameroon, Kenya, Lesotho, Mauritius
Lack of capacity in implementation	Namibia, Burundi , Lesotho
Legal issues and procurement	Benin, Kenya, Mauritius, Niger

In Sierra Leone, the issue of under-spending is related to the post-conflict situation that paid more attention to rebuilding social rather than economic infrastructure. But a shift in trend has been occurring since 2007 with a greater emphasis on roads, water and energy.

Botswana, Cabo Verde, Morocco and Tunisia suffer from an over-spending in infrastructure. For Cabo Verde and Morocco, over-spending relates to past and on-going large infrastructure projects at the national level. In Botswana and Tunisia, over-spending stems from a lack of proper project planning and a correct evaluation of costs (to prevent overruns), and issues in legal and procurement frameworks that prolong the execution phase (with the corollary issues of exchange rate and inflation impact).

These four countries already have reforms on-going or foreseen to avoid over-spending, highlighting the willingness of governments to tackle this issue.

Djibouti and Sudan both report issues of under AND over-spending. For Sudan, the former is due to a lack of sufficient resources and the latter occurs in some projects due to a long period of implementation, price escalation of materials and other delays for security reasons. Chad and Kenya report that their infrastructures are affected by neither under or over-spending in infrastructures.

IV. INSTITUTIONAL ARCHITECTURE FOR FINANCING INFRASTRUCTURE

As shown in Table 2, public sector financing represents the larger source of funds for infrastructure projects. This Section thus details the way in which governments use the different sources of public funds. The first sub-section presents the question of revenue mobilisation and the associated issue of managing deficits.

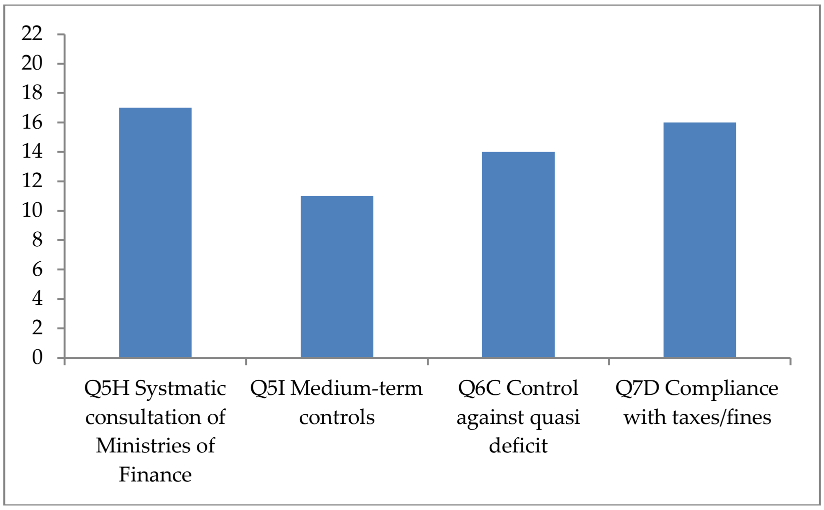
IV.1. Revenue mobilisation and financing through deficit

Revenue mobilisation is actually the first predictable and sustainable source of financing for development and creates budgetary space to finance priority expenditures (Banque de France, 2011). As already stated in Section I, infrastructure projects generally last more than the fiscal year in which the decisions are made, creating a need to manage the financing through deficit to prevent debt from accumulating.

Question **Q1G** first investigates these notions of revenue mobilisation and their adequacy with targets, by asking whether closely linking expenditures to revenues is a key objective when financing infrastructure. Indeed, one of the main issues in financing infrastructure is the feasibility of the project that relies on the availability and mobilisation of funds. Ten countries out of the 22 surveyed report linking revenues to expenditures as a key objective, emphasising that the question of revenue mobilisation is not widely taken into account in Africa.

However, as Section IV will review, other modalities of revenue mobilisation and the management of financing through deficits have better indicators in Africa, as summarised in Figure 1 below.

Figure 1. **Revenue mobilisation**



IV.2. The institutional architecture of public funds

After reviewing the different potential sources of infrastructure financing in the previous sub-section, here we detail the ways in which public funds for infrastructure are used among the 22 African countries of the survey. The survey only asks about public funds which are relevant in a framework where two thirds of infrastructure spending is financed through public funds.

The survey investigates three axes of segmentation to distinguish between the origins of public funds.

1. general, earmarked and off-budget funds (**questions Q2A to Q2F**)

2. central *versus* local funds (**questions Q3A to Q3F**)

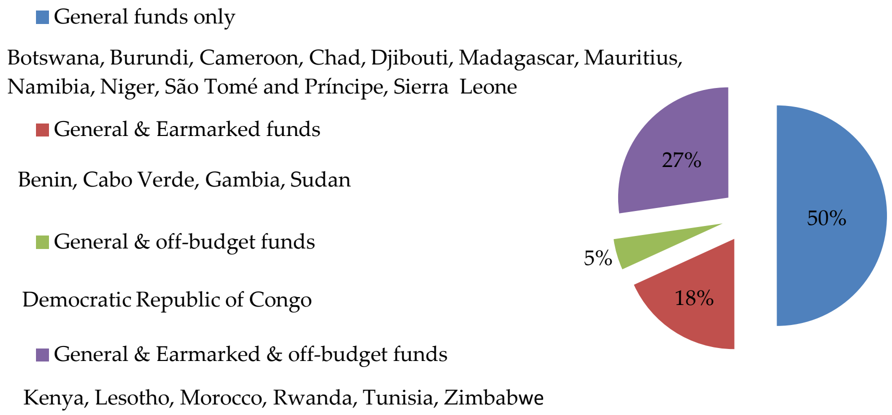
3. budget *versus* specialised institutions (**questions Q4A to Q4F**)

IV.2.1 General, earmarked and off-budgets funds

General funds are defined in the budget contrary to off-budget funds that are special funds owned by the government but are not part of the budget. Earmarked funds are attached to a requirement that devotes a source of revenue to a specific public expenditure.

Figure 2 summarises the origins of public funds according to this distinction. All the countries in the survey finance infrastructure through general funds in whole or in part, but half of the countries have only this source of funds. The use of off-budget funds is the scarcer one (7 countries out of 22). The use of earmarked funds is widespread with ten countries reporting this source as a way to finance infrastructure.

Figure 2. **Distribution between general, earmarked and off-budget funds**



All the surveyed countries report an increasing amount of financing through general funds over the last ten years. All the countries also describe as positive the functioning of this financing. Nonetheless, 15 countries report the existence of on-going or foreseen reforms to improve the financing through general funds. And all countries except two (Botswana and Niger) would also make proposals for reforms. This emphasises the fact that the increasing amounts of money provided by general funds are being given particular attention by governments in order to ensure the efficiency and effectiveness of expenditures.

The question is whether the predominance of this source of funds is a positive characteristic or not. The African road sector is a typical example of the debate on whether or not funds should be earmarked to finance infrastructure spending. Proponents of earmarked funds claim that this scheme reduces bureaucracy (and corruption), leads to speedy completion of projects, and reduces construction costs (Beuran, Castaing and Rablland, 2013). Earmarked funds are also supposed to increase stability in the sector by preventing a reallocation of resources during the project process due to a recession episode for instance that could lead to a disruption in the execution of the infrastructure investment.

As an illustration of the positive use of earmarked funds, a large number of countries (ten) also use them in addition to general funds to finance infrastructure spending. Among them, eight countries report an increasing trend in the amount of financing through this specific kind of fund over the last ten years. The same eight countries describe as positive the functioning of financing infrastructure through earmarked funds. Nevertheless, they still have ongoing and/or foreseen reforms to improve this source of financing.

Lesotho and Sudan do not describe the functioning of earmarked funds as positive but they are also the only two countries without an increasing amount of financing through this specific source.[15] Only Sudan has on-going or foreseen reforms to improve the functioning of earmarked funds as a source of infrastructure financing.

Namibia and Niger do not use earmarked funds to finance infrastructure but consider as positive the functioning of this source of financing. This belief is specifically illustrated in Namibia where reforms are ongoing and/or foreseen to improve the financing of infrastructure through earmarked funds.

Off-budget funds are rarely used for infrastructure spending in Africa as only seven countries out of the 22 surveyed finance infrastructure through government funds not reported in the budget. Over the last ten years, the trend in the amount of financing infrastructure through off-budget funds has been increasing in four out of the seven countries.[16] Yet, only three of them (Morocco, Tunisia and Zimbabwe) describe as positive the functioning of off-budget infrastructure financing. Among the remaining four countries that use off-budget funds but consider its functioning as negative, only DRC has on-going and/or foreseen reforms to improve it. Among the other countries that do not actually finance infrastructure through off-budget funds, Cameroon, Djibouti and Namibia consider off-budget funds as positively functioning and also have reforms in the pipeline to improve this source of financing.

Whatever the composition of the portfolio of fund sources, general funds are mainly used to finance new investments. Maintenance expenditures are financed through general funds in only six countries (Benin, Madagascar, Morocco, Rwanda, Sierra Leone and Zimbabwe), while current expenditures are even less quoted as a destination item for general funds (Burundi, Namibia and Sierra Leone).

Similar patterns appear for earmarked funds even though the pre-eminence of new investments is less pronounced. Six countries out of the ten that use earmarked funds to finance infrastructure dedicate these funds to new investments. Rwanda also used earmarked funds to finance maintenance expenditures, as well as three other countries.[17] While Djibouti does not use earmarked funds to finance infrastructure, it would potentially dedicate them to financing maintenance. Namibia and São Tomé and Príncipe also would use earmarked funds to finance current expenditures.

Among the seven countries that finance infrastructure through off-budget funds, new investments and maintenance are equally quoted as destination items.[18] Among the countries that actually use off-budgets funds for infrastructure, only Kenya dedicates this source of financing to current expenditures. However, if we include those countries that do not effectively rely on off-budget funds (but yet answer question **Q2F**), the distribution of funds between the different investments puts new investments and current expenditures on top: Cameroon and São Tomé and Príncipe would allocate off-budget funds to new investments and Djibouti and Namibia to current expenditures.

15. Lesotho reports a stable trend; Kenya and Rwanda a decreasing one.

16. Negative for Kenya and stable for Lesotho.

17. Lesotho does not report to what kind of expenditures it dedicates earmarked funds.

18. DRC and Morocco for new investments; Tunisia and Zimbabwe for maintenance; Rwanda for both.

The distribution of funds between the different types of infrastructure spending illustrates quite well the issue of a capital bias that disfavours operation expenditures in infrastructure against more "visible" investments.[19] It emphasises the issue of a lack of resources for maintenance that hampers the good functioning and delivery of infrastructure services in Africa. Institutional reforms are needed to place more emphasis on current expenditures and maintenance rather than on new investments.

IV.2.2 Central versus local funds

The opposition between central and local funds rests upon the idea that local budgets may be more relevant to finance infrastructure projects as they peg more closely to local priorities. However, the lack of available resources at the local level may hamper the effectiveness of this source of financing (World Bank, 2010); and in particular in developing countries (Glaeser, 2013). Despite the expectation that decentralisation of public investments should deliver greater efficiency in the provision of public goods and services, empirical evidence points to difficulties in achieving this objective (de Mello, 2010). This is typically the case in Burundi where resource allocation to local budgets is too weak to finance decentralised infrastructure (**question Q7L**). Centralisation of decision-making powers during budget formulation can also be preferred to ensure fiscal discipline (CABRI, 2008).

The great majority of the surveyed countries (12) finance their infrastructure spending through a mix between central and local budgets. The ten remaining countries use only central budgets as a source of funds for infrastructure investments.

Over the last ten years, the trend in the amount of financing through central AND local budgets has been increasing in almost all countries. Decreasing and stable trends have concerned financing through local budgets only and happened in four countries: Botswana, Madagascar and Zimbabwe (decreasing), and Lesotho (stable).

The functioning of each mode of financing is described as positive as a whole. Only Botswana, Madagascar and Zimbabwe report a negative functioning for local budgets that is consistent with the decreasing trend highlighted in the previous question.

All countries except three[20] have on-going and foreseen reforms to improve financing through both central and local budgets. While considered as positively functioning globally, the two modes of financing may still be improved so as to reach the highest levels in effectiveness and efficiency in delivery infrastructure items.

In 18 countries out of 22, central budget funds finance new investments. The exceptions are Namibia where central budgets finance current expenditures, Sierra Leone where central

19. This is an issue typical of the African infrastructure sector as will be showed in the following analyses of central *versus* local funds, and budget *versus* specialised institutions.
20. Madagascar and São Tomé and Príncipe have no reforms for the two modes of financing; Sierra Leone has reforms for financing through central budgets only.

budgets finance maintenance, current expenditures and new investments and Zimbabwe where central funds are used to ensure maintenance needs. Note that Zimbabwe reports maintenance for both central and local budget use. Apart from Sierra Leone and Zimbabwe, maintenance is financed only through local budgets and in only four countries (Burundi, Kenya, Morocco and São Tomé and Príncipe). In the other countries that finance infrastructure through local budgets, new investments again constitute the bulk of expenditures.

The capital bias against current and maintenance expenditures highlighted in the previous sub-section on the distinction between general funds *versus* earmarked and off-budget funds is confirmed here.

IV.2.3. Budget versus specialised institutions

The last opposition in funds source for infrastructure spending investigated in the survey concerns financing through:

- Budget institutions such as the Ministries of Finance or Infrastructure as opposed to
- Specialised institutions, defined in the survey as state-owned-company, regulatory agency, external board fund to the Ministry of Finance/Infrastructure.

Djibouti, Morocco, Rwanda, Sierra Leone finance infrastructure spending through specialised institutions only. The rest of the countries all use budget institutions with a similar share between budget only (nine countries) and a budget-specialised institutions mix (nine countries). Table 4 below presents the distribution of countries according to each composition of fund sources.

Table 4. **Budget *versus* specialised institutions**

Q4A: Is infrastructure financed through budget institutions and/or specialised institutions?	
Budget institutions only	Benin, Botswana, Chad, Lesotho, Madagascar, Namibia, Niger, São Tomé and Príncipe, Tunisia
Specialised institutions only	Djibouti, Morocco, Rwanda, Sierra Leone
Budget AND specialised Institutions	Burundi, Cameroon, Cabo Verde, DRC, Gambia, Kenya, Mauritius, Sudan, Zimbabwe

Over the last ten years, the trend in the amount to finance infrastructure through budget and specialised institutions is globally increasing, the two exceptions being Kenya with a decreasing trend for budget funds, and DRC with also a decreasing trend for specialised institutions.

Out of 22 countries, 16 describe as positive the functioning of financing infrastructure through budget and specialised institutions. The three exceptions concern Djibouti and DRC for specialised institutions and Kenya for budget, consistent with the decreasing trend in the amount to finance infrastructure for the last two.[21] Although Kenya has a negative functioning of financing infrastructure through specialised institutions, and is the only country without on—going or foreseen reforms to improve it, all the other countries, on the contrary, are undertaking such reforms or have these in the pipeline.

Whatever the source of financing, new investments are once again the first destination items. Burundi and Kenya finance maintenance through specialised budgets, while Benin and Tunisia use budget institutions. Finally, Zimbabwe's budget and specialised institutions both finance maintenance. Namibia, Rwanda and Sierra Leone are the only countries to report the financing of current expenditures.

Here again the capital bias that favours new investments against current and maintenance operations is emphasised.

21. DRC and Kenya appear regularly as exceptions in the report. Appendix 4 provides a specific summary of these countries' situations.

V. ROLE OF GOVERNMENTS IN THE USE OF PUBLIC FUNDS

This last section questions how the role of governments should be evaluated in the use of public funds for infrastructure financing. Three specific notions are under consideration for evaluation in the survey:

1. **The effectiveness** of governments in using public funds for infrastructure financing, which compares the actual achievements to the initial targets defined in the infrastructure projects.
2. **Fiscal prudence** which measures whether fiscal rules related to infrastructure financing are appropriate to support and achieve the project objectives without causing a fiscal crisis.
3. **The efficiency** of governments in using public funds for infrastructure financing, which compares the actual achievements to the initial resources, devoted to the infrastructure projects.

V.1. Is public financing of infrastructure effective in Africa?

As explained earlier, the notion of effectiveness measures the differences between the objectives targeted and the results actually achieved.

The first way to achieve effectiveness is therefore to state credible, sustainable and quantifiable objectives in the first stages of the project. Defining precise and quantifiable targets provides tools and indicators to measure the degree of effectiveness of public funds. Measuring effectiveness then stems from monitoring the progress in the fulfilment of the objectives.

In these respects, among the 22 surveyed countries, the use of public funds to finance infrastructure is globally effective. In 17 countries, the national infrastructure policy is formulated in terms of specific targets against which achievements in the use of funds can be measured (question **Q5C**). The monitoring of target achievements is quite widespread in Africa as 14 countries out of 22 in the survey report using this process (question **Q5D**). Moreover, the great majority of countries (with 18 out of 22) primarily implement the infrastructure projects with the highest priority, meaning that the most important targets are supposed to be achieved first (question **Q5F**).

The effectiveness of governments in using public funds to finance infrastructure is also questioned through the existence of alternative means to achieve the same objectives. To some extent, the effectiveness of this financing mode is weakened according to the answers to questions **Q5A** and **Q5B**. Only seven countries consider that funds for financing infrastructure based on public resources could not be available through other means (question **Q5A**) and 16 countries think the same objectives could have been achieved through policy reforms (question **Q5B**). However, this last point is not a concrete re-assessment of public action in infrastructure: it emphasises the fact that governments may have other means at their disposal than direct funding to achieve infrastructure targets.

Globally, governments of African countries have an effective use of public funds to finance infrastructure. Among them, Benin, Madagascar, Namibia, Niger, Rwanda and Sierra Leone perform the best while Kenya and Zimbabwe report no positive indicator of effectiveness as measured in the survey.

V.2. Does public financing of infrastructure in Africa follow the rules of fiscal prudence?

Fiscal prudence policies aim at maintaining proper balance between borrowing, expenditure and saving in order to support economic growth and achieve other social objectives in a sustainable way.

Fiscal prudence is assessed through seven questions in the survey, classified in three larger modalities as presented in Table 5 below:

Table 5. **Fiscal prudence**

Fiscal Prudence modalities	Questions
Centralisation of revenue collection	**Q6D**: Is all revenue collection in infra carried out by the same authority?
Generalisation of rules	**Q6A**: Are all the funds sources subject to the same fiscal discipline?
	Q6B: Are earmarked and off-budget funds allocation rules required to be as close as possible to those for budget funds?
	Q6E: Do national procurement laws apply to all infrastructure funds?
Controls and monitoring	**Q6C**: Is infrastructure spending subject to control to avoid quasi-fiscal deficit?[22]
	Q6F: Is infrastructure spending subject to audit?
	Q6G: Is infrastructure spending subject to ex-post reporting?

The centralisation of revenue collection is dominant in the African countries of the survey with 15 countries out of 22 having all revenue collection carried out by the same authority. It is a first step towards ensuring fiscal prudence as in one snapshot, the authority in charge knows what the total available resources are.

22. Central bank imbalances between costs and revenues create deficits often not reflected in the budget.

The second modality of fiscal prudence is the application of the same laws and fiscal discipline to all sources of funding. Here again, African countries apply fiscal prudence rules widely. Only three countries do not impose the same fiscal discipline on all the fund sources and only seven countries out of 22 do not require allocation rules for earmarked and off-budget funds as close as possible to those for budget funds. Finally, 18 countries out of 22 apply national procurement laws to all infrastructure funds.

The last modality of fiscal prudence concerns the controls imposed on infrastructure spending. Also on this modality African countries globally report good practices. Indeed, infrastructure spending is subject to control to avoid quasi-fiscal deficit in 14 countries out of 22, to audit in 19 countries and to *ex post* reporting in 18 countries.

Globally in Africa, the rules of fiscal prudence are well established but they could be improved in four countries: Chad, the Democratic Republic of Congo and São Tomé and Príncipe report only three modalities out of the seven considered and Kenya has none of them. The best practices are found in Djibouti, Gambia, Madagascar, Mauritius, Niger and Sudan with the seven modalities encountered and in Zimbabwe with six modalities.

V.3. Is public financing of infrastructure efficient in Africa?

The notion of efficiency in the use of public funds for infrastructure financing compares the results of the spending to the initial resources mobilised for the said infrastructure.

The role of the government here is therefore to first provide adequate resources to achieve the infrastructure targets and to design the projects properly so as to ensure their efficiency. During the different phases of the project, the role of the government is also to gather information on whether and how the funds are actually used. This monitoring exercise is needed in order to adapt the subsequent spending to the resources still available and to ensure delivery of the highest priority items.

Globally, governments of African countries are efficient in the use of public funds for infrastructure spending even if the funds spent for infrastructure are close to those collected in only five countries (question **Q7I**). This specific result confirms the alarming situation regarding the match between available resources and the definition of objectives in the planning stage illustrated in question **Q5E**: infrastructure projects are designed to match the available funds at the planning stage only in 10 out of 22.

Other aspects of efficiency are however present in half or more of the surveyed countries. For instance, the monitoring of expenditures, information on available resources and the adaptation of the remaining resources to the core objectives are well established. It is relatively easy to track expenditures by category to identify cost overruns and/or issues in delivery for 16 countries out of 22 (question **Q7H**). Half of the surveyed countries use accrual-based information to report investments expenditures (question **Q7J**). This method helps to improve effectiveness as it allows considering money as an expense even if it is not actually paid. Consequently, it prevents over-spending when using money not already paid but intended for another expense.

In 18 countries, even when funds are insufficient for the project, the highest priority items are included so as to meet the main objectives with the available resource (question **Q7G**).

Seventeen countries integrate all public funds in infrastructure in the public finance system (question **Q7C**). This is a source of efficiency as it allows knowing in one snapshot what the total available resources are to direct funds to the achievement of infrastructure projects' targets.

Gambia, Madagascar, Rwanda and Tunisia perform the best whereas Kenya has the worst measures here again.

The survey also asked directly what the major sources of inefficiency were in the use of public funds for infrastructure spending (**Q7K**, see Table 6). Inattention to maintenance and the issue of hidden costs[23] were quite equally reported by respectively 17 and 16 countries. Failure to spend budgeted funds is quoted by 11 countries. Nine countries quote the three sources as major, while Sudan[24] and Tunisia do not report any of the three.

Table 6. **Sources of inefficiency**

Q7K: What are the major sources of inefficiency in infrastructure?	
Inattention to maintenance	Botswana, Benin, Burundi, Cameroon, Cabo Verde, Chad, Djibouti, Gambia, Kenya, Madagascar, Mauritius, Morocco, Rwanda, São Tomé and Príncipe, Sierra Leone, Zimbabwe
Failure to spend budgeted funds	Benin, Burundi, Cameroon, Cabo Verde, Kenya, Lesotho, Madagascar, Mauritius, Morocco, São Tomé and Príncipe, Zimbabwe
Hidden costs	Botswana, Benin, Burundi, Cameroon, Cabo Verde, Djibouti, Gambia, Kenya, Lesotho, Madagascar, Mauritius, Morocco, Namibia, Sierra Leone, Tunisia, Zimbabwe

The issue of maintenance is long lasting and common to all infrastructure sectors in Africa. The legacy of underfunding maintenance is resulting in the need for rehabilitation of about 30% of a typical African country's infrastructure assets (World Bank, 2010). Although identified for a while, the issue of proper maintenance is crowded-out by a capital bias that favours new and visible investments.

The issue of hidden costs requires improvements in different stages of the infrastructure plan. Under-pricing should be avoided thanks to more attention in the planning and design phases of the project, while under-collection and excessive technical losses relate to the execution stage of the project.

23. Hidden costs stand for: *i)* under-pricing where charging is below economic costs of the goods; *ii)* under-collection where bills are never sent or allowed to go unpaid; *iii)* excessive technical losses such as leaks, thefts).

24. In Sudan, the main issue is an insufficient availability of resources inherited from the post-conflict situation.

VI. CONCLUSION

Public financing of infrastructure accounts for two thirds of the total amount of infrastructure spending in Africa. Given the crucial role of infrastructure for economic development, growth and poverty reduction, the report used a qualitative survey implemented in 22 African countries to ask whether or not budgetary processes and institutions in Africa are hampering infrastructural development.

The key findings of the report are the following:

1. **The selection of projects could be improved. In particular the process of appraisal needs a more extensive use of Cost-Benefit and/or Cost-Effectiveness Analyses; the selection of projects is not sufficiently based on the improvements of physical indicators; civil society is generally not consulted.**

As highlighted in numerous reports and papers, the selection phase of an infrastructure project is crucial to ensure its viability. The selection of a project should ideally rely on a rigorous and careful appraisal of the investment that compares its specific attributes between costs and benefits. In the same vein, the selection should be based on objective measurements and objectives. The selection should also integrate a consultation of all the economic and social actors of the society in order to ensure the desirability of a project.

These particular points still need to be improved in Africa according to the survey. Fewer than half of the countries surveyed report using Cost-Benefit Analysis and/or Cost-Effectiveness Analysis in their selection and design process of infrastructure projects. Only 50% of the surveyed countries select their infrastructure projects with a view to obtaining the maximum improvement in any physical indicator per dollar spent. Finally, the same low proportion of countries has an extensive consultation with civil society and the private sector to exchange about infrastructure policies.

2. **Highest priority projects are implemented first and the different plan levels (national, sectorial, local) generally overlap even though local objectives are given less priority**.

The concept of prioritisation is widely understood as the great majority of the surveyed countries report implementing the highest priority projects first. Concerning prioritisation between different plan levels (national, sectorial, regional), the results show that there is no deep opposition between regional/sectorial priorities and national plans, and that they generally overlap. Yet the survey yet shows that local priorities are lagging behind, possibly due to a lack of resources at the decentralised level.

3. **The sources of finance infrastructure are various and numerous, but public funds represent the bulk of it. The growing trend in the amounts spent over the last ten years is consistent with the overall positive functioning of this mode of financing. The main challenge is now to circumvent the capital bias that tends to favour new investments over operation and maintenance expenditures.**

Public funds are mostly from general and central funds and transit through budget institutions. They mainly finance new investments in the survey. This illustrates the typical capital bias issue that tends to disfavour operation and maintenance expenditures against more "visible" investments.

Public sector financing in Africa is globally described as positively functioning, with a general increasing trend in the amounts spent over the last ten years. Nonetheless, there is a clear willingness to achieve even more efficient and effective financing of infrastructure through on-going and/or foreseen reforms.

4. **Regarding how African governments use public funds for infrastructure financing, the survey underlines the fact that their action is overall effective, efficient and subject to the rules of fiscal prudence**.

The majority of the countries surveyed show a close link between the initial infrastructure projects' objectives and the actual realisations, thanks to statements of credible and quantifiable targets and the monitoring of their achievement in national infrastructure policy.

Effectiveness in infrastructure spending in Africa stems from three modalities according to the survey. First, the formulation of infrastructure policy in terms of specific targets against which achievements in the use of funds can be measured. Second, the monitoring of targets achievements. Third, the implementation of highest priority projects.

Efficiency in infrastructure spending in Africa is related to the monitoring of expenditures, the control of information on available resources and the adaptation of the remaining resources to the core objectives

Finally, fiscal prudence rules are found in the centralisation of revenue collection by the same authority, the application of the same fiscal rules to all the sources of funds and the use of controls and audits.

5. **Despite the general optimistic situation described above, some specific aspects deserve more attention in order to achieve greater value for money in infrastructure spending. In the planning stage, a careful use of economic, financial, social and environmental appraisal would ensure the feasibility and the desirability of the projects. Inefficiencies related to the inadequate attention to maintenance require a change in political objectives for infrastructure spending at the planning and budgeting phases**.

As already emphasised, the selection and design stages of infrastructure projects deserve more attention so as to balance properly targets and resources. These stages are moreover essential in order to provide better estimates that will prevent under-pricing. In particular, developing the use of Cost-Benefit Analysis and/or Cost-Effectiveness Analysis is a crucial need.

As inattention to maintenance is described as the major source of inefficiency in infrastructure spending, a greater emphasis on this specific expenditure is needed to circumvent the capital bias hampering all infrastructure sectors in Africa.

The other major source of inefficiency is related to hidden cost issues and requires stronger capacities in the collection process and in controlling the execution/construction stages.

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APPENDIX 1: ABOUT CABRI

The Collaborative Africa Budget Reform Initiative (CABRI) is a professional network of senior budget officials of African Ministries of finance and/or Planning. CABRI was officially launched on 14 May 2008 in Maputo, Mozambique. On 3 December 2009, CABRI became a legal and independent membership-based organisation.

CABRI aims to promote efficient and effective management of public finances in Africa. Specifically, the network seeks to:

- support senior budget officials in the management of public finance systems by developing appropriate approaches, procedures and practices;
- advance the development of member states by building capacity and promoting training and research in the field of public finance management in particular from a practitioner's perspective; and
- develop and promote common African positions on budget-related issues of interest to Africa.

APPENDIX 2: QUESTIONNAIRE

OECD Development Centre Survey on PFM in Infrastructure (2011)

The questionnaire should be completed by the Ministry of Finance. In addition, if necessary, the document can be complemented with input from other key ministries such as Infrastructure, Energy, Water and Sanitation, Transport and Telecommunications.

Survey Respondent
Country:
Name:
Title:
Institution:
Email:
Telephone:

Objectives of the questionnaire

The aim of this OECD Development Centre-CABRI questionnaire is to have a better understanding of the role of budgetary institutions in infrastructure in Africa. The results will: *i)* be shared at the OECD Development Centre-Development Finance Network (DeFiNe) Global Forum on Development, taking place in Paris in 2011; *ii)* be shared at an interactive seminar during CABRI meetings in 2012; and *iii)* lead to a joint OECD Development Centre-CABRI publication. The survey is sent for completion to members of the OECD Development Centre Governing Board (Cabo Verde, Egypt, Mauritius, Morocco, Senegal, South Africa) and CABRI established partners on infrastructure (Rwanda, Mozambique).

This work comes under the broader OECD Development Centre framework on the cross-regional analysis of public policies related to infrastructure and the interactions among major actors in the infrastructure policy-making process (PMP). It also extends the 2008 OECD/CABRI Budgetary Practices and Procedures Survey in African countries and the on-going work of CABRI on capacity building in Private-Public Partnership (PPP) units at Finance ministries in Africa.

Problem statement

CABRI, OECD, IMF and World Bank's work on budgetary practices and procedures across different regions in the world have highlighted their complex and heterogeneous role in fiscal consolidation. This work aims at extending that analytical framework by focusing on how institutions shape the infrastructure cycle's policy making process which is characterised by timelines that exceed both budgetary and political cycles.

Budgetary institutions are often characterised by their degree of flexibility, transparency, centralisation, legislative participation, and use of performance information and sustainability. How does this budgetary setting relate to public investment in infrastructure which has been increasing in Africa since the 2000s? Key issues that deserve special attention are financing from general *versus* earmarked funds and off-budgets funds, expenditure from central *versus* local budgets and the use of government departments, specialised agencies (for example, a regulatory agency or public utility). We also explore how the role of the government can be evaluated in the use of public funds for infrastructure financing in terms of effectiveness, fiscal prudence and efficiency.

The questionnaire is organised as follows:

Section 1. How should the role of government be organised in the use of public funds for infrastructure financing?

Q1. Over-spending and under-spending in infrastructure
Q2. General, earmarked *versus* off-budget funds
Q3. Central *versus* local funds
Q4. Budget *versus* specialised institutions

Section 2. How should the role of the government be evaluated in the use of public funds for infrastructure financing?

Q5. Effectiveness
Q6. Fiscal prudence
Q7. Efficiency

SECTION 1: HOW SHOULD THE ROLE OF GOVERNMENT BE ORGANISED IN THE USE OF PUBLIC FUNDS FOR INFRASTRUCTURE FINANCING?

Q1: Over-spending and under-spending
Over-spending: above the target indicated in the budget or specialised institution.
Under-spending: below the target indicated in the budget or specialised institution.
NA: Non applicable.

Q1A: During the last 10 years has there been under-spending in infrastructure?

Yes ☐ No ☐ NA ☐

Q1B: During the last 10 years has there been over-spending in infrastructure?

Yes ☐ No ☐ NA ☐

Q1C: Why do you think there is over-spending in infrastructure projects?

Q1D: Why do you think there is under-spending in infrastructure projects?

Q1E: Are there reforms already in place and/or in the pipeline to avoid over-spending in infrastructure projects?

Yes ☐ No ☐ NA ☐

Q1F: Are there reforms already in place and/or in the pipeline to avoid under-spending in infrastructure projects

Yes ☐ No ☐ NA ☐

Q1G: What are the *key* objectives when financing infrastructure?

Expenditures closely connected to revenues	Yes ☐	No ☐	NA ☐
Expenditures closely connected to local priorities	Yes ☐	No ☐	NA ☐
Expenditures closely connected to national priorities	Yes ☐	No ☐	NA ☐
Expenditures closely connected to infrastructure priorities	Yes ☐	No ☐	NA ☐

Q2: General *versus* earmarked and off-budget funds
General funds: on the budget.

Earmarked funds: requirement that a source of revenue be devoted to a specific public expenditure.
Off-budget funds: special funds owned by the government that are not part of the budget.

Q2A: Is infrastructure financed through general, earmarked and/or off-budget funds?

General funds: Yes ☐ No ☐ NA ☐

Earmarked funds: Yes ☐ No ☐ NA ☐

Off-budget funds: Yes ☐ No ☐ NA ☐

Q2B: Please indicate what has been the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds?

General funds Increasing ☐ Decreasing ☐ Stable ☐

Earmarked funds Increasing ☐ Decreasing ☐ Stable ☐

Off-budget funds Increasing ☐ Decreasing ☐ Stable ☐

Q2C: Would you describe as positive the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds?

General funds: Yes ☐ No ☐ NA ☐

Earmarked funds: Yes ☐ No ☐ NA ☐

Off-budget funds: Yes ☐ No ☐ NA ☐

Q2D: Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?

General funds: Yes ☐ No ☐ NA ☐

Earmarked funds: Yes ☐ No ☐ NA ☐

Off-budget funds: Yes ☐ No ☐ NA ☐

Q2E: Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?

General funds: Yes ☐ No ☐ NA ☐

Earmarked funds: Yes ☐ No ☐ NA ☐

Off-budget funds: Yes ☐ No ☐ NA ☐

Q2F: Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or to investment?

General budget: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Earmarked budget: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Off-budget funds: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Q3: Central *versus* local budgets

Q3A: Is infrastructure financed through central and/or local budgets?

Central budget: Yes ☐ No ☐ NA ☐

Local budget: Yes ☐ No ☐ NA ☐

Q3B: Please indicate what has been the trend over the last 10 years in the amount of financing through central and/or local budgets?

Central budget Increasing ☐ Decreasing ☐ Stable ☐

Local budget Increasing ☐ Decreasing ☐ Stable ☐

Q3C: Would you describe as positive the functioning of the financing of infrastructure through central and/or local budgets?

Central budget: Yes ☐ No ☐ NA ☐

Local budget: Yes ☐ No ☐ NA ☐

Q3D: Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?

Central budget: Yes ☐ No ☐ NA ☐

Local budget: Yes ☐ No ☐ NA ☐

Q3E: Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?

Central budget: Yes ☐ No ☐ NA ☐

Local budget: Yes ☐ No ☐ NA ☐

Q3F: Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or to investment?

Central budget: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Local budget: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Q4: Budget institutions *versus* specialised institutions

Budget institution: Ministry of Finance/Infrastructure

Specialised institutions: State-owned-company, regulatory agency, external board fund to the Ministry of Finance/Infrastructure.

Q4A: Is infrastructure financed through budget institutions and/or specialised institutions?

Budget institution: Yes ☐ No ☐ NA ☐

Specialised institution: Yes ☐ No ☐ NA ☐

Q4B: Please you indicate what has been the trend over the last 10 years in the amount of financing through budget and/or specialised institutions?

Budget institution Increasing ☐ Decreasing ☐ Stable ☐

Specialised institution Increasing ☐ Decreasing ☐ Stable ☐

Q4C: Would you describe as positive the functioning of the financing of infrastructure through budget institutions and/or specialised institutions?

Budget institution: Yes ☐ No ☐ NA ☐

Specialised institution: Yes ☐ No ☐ NA ☐

Q4D: Are there on-going or foreseen reforms to improve the financing of infrastructure through budget and/or specialised institutions?

Budget institution: Yes ☐ No ☐ NA ☐

Specialised institution: Yes ☐ No ☐ NA ☐

Q4E: Would you suggest reforms to improve the financing of infrastructure through budget and/or specialised institutions?

Budget institution: Yes ☐ No ☐ NA ☐

Specialised institution: Yes ☐ No ☐ NA ☐

Q4F: Is financing of infrastructure through budget and/or specialised institutions dedicated to current expenditure and/or to investment?

Budget institution: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

Specialised institution: Current expenditure ☐ New investment ☐ Maintenance ☐ NA ☐

SECTION 2: HOW SHOULD THE ROLE OF THE GOVERNMENT BE EVALUATED IN THE USE OF PUBLIC FUNDS FOR INFRASTRUCTURE FINANCING?

Q5: Effectiveness

Q5A: Could funds for financing infrastructure based on public resources be available through other means (for example, private companies' investment)?

Yes ☐ No ☐ NA ☐

Q5B: Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example, removal of subsidies)?

Yes ☐ No ☐ NA ☐

Q5C: Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?

Yes ☐ No ☐ NA ☐

Q5D: Is there monitoring of target achievement in national infrastructure policy?

Yes ☐ No ☐ NA ☐

Q5E: Are the infrastructure projects designed to match the available funds at the planning stage?

Yes ☐ No ☐ NA ☐

Q5F: Are the infrastructure projects which are implemented those with higher priority?

Yes ☐ No ☐ NA ☐

Q5G: Do line ministries prepare internal multi-annual investment plans in infrastructure?

Yes ☐ No ☐ NA ☐

Q5H: Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?

Yes ☐ No ☐ NA ☐

Q5I: Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?

Yes ☐ No ☐ NA ☐

Q6: Fiscal prudence

Q6A: Are *all* public funds used to finance infrastructure subject to the same fiscal discipline?

Yes ☐ No ☐ NA ☐

Q6B: Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?

Yes ☐ No ☐ NA ☐

Q6C: Is infrastructure spending subject to control to avoid quasi-fiscal deficit?

Yes ☐ No ☐ NA ☐

Q6D: Is *all* revenue collection in infrastructure carried out by the same authority?

Yes ☐ No ☐ NA ☐

Q6E: Do national procurement laws apply to all infrastructure funds?

Yes ☐ No ☐ NA ☐

Q6F: Is infrastructure spending subject to audit?

Yes ☐ No ☐ NA ☐

Q6G: Is infrastructure spending subject to ex-post reporting?

Yes ☐ No ☐ NA ☐

Q7: Efficiency

Q7A: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?

Yes ☐ No ☐ NA ☐

Q7B: Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?

Yes ☐ No ☐ NA ☐

Q7C: Are *all* public funds for infrastructure integrated into the public finance system?

Yes ☐ No ☐ NA ☐

Q7D: Are there issues of lack of compliance with taxes and/or fines related to infrastructure?

Yes ☐ No ☐ NA ☐

Q7E: Do you consider there to be a high number of different fund sources for infrastructure?

Yes ☐ No ☐ NA ☐

Q7F: Are policies based on extensive consultation with major actors (civil society, private sector, industry...)?

Yes ☐ No ☐ NA ☐

Q7G: Does the method of fund allocation prioritise items within a project, so that when funds are not sufficient to cover the whole project, the highest priority items are included?

Yes ☐ No ☐ NA ☐

Q7H: Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?

Yes ☐ No ☐ NA ☐

Q7I: Are funds for infrastructure spent close to where they are collected?

Yes ☐ No ☐ NA ☐

Q7J: Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?

Yes ☐ No ☐ NA ☐

Q7K: What are the major sources of inefficiency in infrastructure?
Hidden costs stand for 1) under-pricing where charging is below economic costs of the goods; 2) under-collection where bills are never sent or allowed to go unpaid; 3) excessive technical losses such as leaks, thefts)

Inattention to maintenance	Yes ☐	No ☐	NA ☐
Failure to spend budgeted funds	Yes ☐	No ☐	NA ☐
Hidden costs	Yes ☐	No ☐	NA ☐

Thank you for taking the time to answer this questionnaire.

APPENDIX 3: ASIAN COUNTRIES SUMMARIES

The survey is not restricted to African countries and also includes 6 Asian and Pacific countries: Afghanistan, Bhutan, Samoa, Solomon Islands, Timor-Leste, Vanuatu.

Appendix 3 synthetises the main differences in answers compared to the African sample in respect with the outline of the report. The Asian & Pacific countries differ weakly from the African countries in the sample. The main differences concern:

- key objective
- the reasons of under-spending
- Whether infrastructure investments are financed through
  - Central or local budgets
  - Budget or specialised institutions
- The types of infrastructure investments financed through public funds
- The closeness of allocation rules for earmarked and off-budget funds compared to other budget funds
- The closeness between spending and collection
- The use of accrual-based information on the progress of infrastructure projects to report investment expenditures

Planning and Budgeting

Question		Answer	
Selection			
		Asia	**Africa**
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	Yes for 2 country over 6	Yes for 10 countries over 22
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	Yes for 4 countries over 6	Yes for 11 countries over 22
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes for 5 countries over 6	Yes for 17 countries over 22
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	Yes for 4 countries over 6	Yes for 11 countries over 22
Prioritisation			
Q1G	What are the key objectives when financing infrastructure?	National priorities	Sectoral & national priorities
Multi-year planning			
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	Yes for 4 countries over 6	Yes for 14 countries over 22
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	Yes for 4 countries over 6	Yes for 17 countries over 22

Sources and Use of public funds for infrastructure financing

1. *Over versus under-spending*

Question		Answer	
		Asia	**Africa**
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending	Under-spending
Q1B	Why do you think there is under-spending in infrastructure projects?	Lack of capacity	Lack of resources
Q1C	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	Yes in 3 countries over 6	Yes in 14 countries over 22

2. *General, earmarked versus off-budget funds*

Question		Answer	
		Asia	**Africa**
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General funds	General funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Increasing	Increasing
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes	Yes
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes	Yes
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes	Yes
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	Current expenditures and maintenance	New investments

3. *Central versus Local budgets*

Question		Answer	
		Asia	**Africa**
Q3A	Is infrastructure financed through central and/or local budgets?	Central budgets only	Central and local budgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing	Increasing
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes	Yes
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes	Yes
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes	Yes
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Maintenace, current expnditures	New investments

4. *Budget institutions versus specialised institutions*

Question		Answer	
		Asia	Africa
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget (4/6) Specialised insitutions (1/6) Both: 1/6	Budget (9/22) Specialised insitutions (4/22) Both: 9/22
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing	Increasing
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes	Yes
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes	Yes
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes	Yes
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Maintenace, current expnditures	New investments

Role of government in using public funds for infrastructure financing

1. *Effectiveness*

Question		Answer	
		Asia	Africa
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	Yes	Yes
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	Yes	Yes
Q5F	Are the infrastructure projects which are implemented those with higher priority?	Yes	Yes

2. *Fiscal prudence*

Question		Answer	
		Asia	**Africa**
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	No	Yes
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	Yes	Yes
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	Yes	Yes
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes	Yes
Q6F	Is infrastructure spending subject to audit?	Yes	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	Yes	Yes

3. *Efficiency*

Question		Answer	
		Asia	**Africa**
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	Yes	Yes
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	Yes	Yes
Q7I	Are funds for infrastructure spent close to where they are collected?	No	Yes
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	No	Yes
Q7K	What are the major sources of inefficiency in infrastructure?	Inattention for maintenance (5/6) Failure to spend budgeted funds (4/6) Hidden costs (4/6)	Inattention for maintenance (17/22) Hidden costs (16/22) Failure to spend budgeted funds (11/22)

AFGHANISTAN

Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	Yes
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	Yes
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	Yes
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	National priorities
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	NA
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	Yes

Sources and Use of public funds for infrastructure financing

1. *Under versus Over-Spending*

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending
Q1B	Why do you think there is under-spending in infrastructure projects?	War totally destroyed infrastructure.
Q1C	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	NA

2. *General, earmarked versus off-budget funds*

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General and earmarked funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Decreasing for earmarked funds
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes for earmarked funds
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for general funds
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for general, earmarked and off-budget funds
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	New investments for general funds

3. *Central versus Local budgets*

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central budget
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	New investments

4. *Budget institutions versus specialised institutions*

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	New investments

Role of government in using public funds for infrastructure financing

1. *Effectiveness*

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	Yes
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	No
Q5F	Are the infrastructure projects which are implemented those with higher priority?	Yes

2. *Fiscal prudence*

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	No
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	NA
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	Yes
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	Yes

3. *Efficiency*

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	Yes
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	Yes
Q7I	Are funds for infrastructure spent close to where they are collected?	Yes
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	NA
Q7K	What are the major sources of inefficiency in infrastructure?	Failure to spend budgeted funds

BHUTAN

Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	No
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	Yes
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	Yes
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	National priorities
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	Yes
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	Yes

Sources and Use of public funds for infrastructure financing

1 *Under versus Over-Spending*

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending
Q1B	Why do you think there is under-spending in infrastructure projects?	lack of manpower and capacity, lots of administrative requirements, geopolitical situations
Q1C	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	Yes

2. *General, earmarked versus off-budget funds*

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Increasing
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	Current expenditures

3. Central versus Local budgets

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central budgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	NA
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Current expenditures

4. Budget institutions versus specialised institutions

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget institutions
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	NA
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Current expenditures

Role of government in using public funds for infrastructure financing

1. Effectiveness

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	Yes
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	Yes
Q5F	Are the infrastructure projects which are implemented those with higher priority?	Yes

2. Fiscal prudence

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	NA
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	Yes
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	Yes
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	NA

3. Efficiency

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	No
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	Yes
Q7I	Are funds for infrastructure spent close to where they are collected?	NA
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	NA
Q7K	What are the major sources of inefficiency in infrastructure?	Failure to spend budgeted funds

SAMOA

Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	No
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	No
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	No
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	Local, national and infrastructure priorities
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	Yes
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	No

Sources and Use of public funds for infrastructure financing

1. Under versus Over-Spending

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending
Q1D	Why do you think there is under-spending in infrastructure projects?	This is answered mainly with reference to the water and sanitation sectors. The project design is usually overambitious with regard to timeframes and the management of infrastructure projects requires technically capacity for planning and managing large tenders, which is not usually available. Most large projects depend on external TA and so limited local capacity is developed.
Q1F	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	Yes

2. General, earmarked versus off-budget funds

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General and off-budget funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Increasing for general Decreasing for off-budget
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes for general No for off-budget
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	NA
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for general No for off-budget
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	New investments for both

3. Central versus Local budgets

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central budgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	NA
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Central budgets finance all types of investments

4. Budget institutions versus specialised institutions

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Specialised institutions
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Specialised institutions finance all types of investments

Role of government in using public funds for infrastructure financing

1. *Effectiveness*

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	No
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	No
Q5F	Are the infrastructure projects which are implemented those with higher priority?	No

2. *Fiscal prudence*

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	No
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	No
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	No
Q6E	Do national procurement laws apply to all infrastructure funds?	No
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	No

3. *Efficiency*

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	Yes
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	Yes
Q7I	Are funds for infrastructure spent close to where they are collected?	No
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	No
Q7K	What are the major sources of inefficiency in infrastructure?	Inattention to maintenance Failure to spend budgeted funds Hidden costs

SOLOMON ISLANDS

Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	Yes
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	Yes
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	Yes
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	Local, national and infrastructure priorities
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	Yes
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	Yes

Sources and Use of public funds for infrastructure financing

1. *Under versus Over-Spending*

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending
Q1D	Why do you think there is under-spending in infrastructure projects?	Inadequate institutional capacity Lack of local vendors & project design reports Sub-optimal planning process
Q1F	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	Yes

2. *General, earmarked versus off-budget funds*

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General and off-budget funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Increasing for both
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes for both
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for both
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for general funds No for off-budget funds
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	General funds finance Current expenditure and Maintenance; off-budget funds finance New investment and Maintenance

3. Central versus Local budgets

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central budgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Current expenditure, Maintenance

4. Budget institutions versus specialised institutions

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget institutions
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Budget institutions finance all types of investments.

Role of government in using public funds for infrastructure financing

1. Effectiveness

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	No
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	Yes
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	Yes
Q5F	Are the infrastructure projects which are implemented those with higher priority?	Yes

2. *Fiscal prudence*

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	NA
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	No
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	Yes
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	NA

3. *Efficiency*

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	Yes
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	Yes
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	No
Q7I	Are funds for infrastructure spent close to where they are collected?	No
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	No
Q7K	What are the major sources of inefficiency in infrastructure?	Inattention to maintenance Failure to spend budgeted funds Hidden costs

TIMOR-LESTE

Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	NA
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	Yes
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	Yes
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	Yes
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	Local, national and infrastructure priorities
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	Yes
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	Yes

Sources and Use of public funds for infrastructure financing

1. Under versus Over-Spending

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Under-spending
Q1D	Why do you think there is under-spending in infrastructure projects?	Inadequate institutional capacity Lack of local vendors & project design reports Sub-optimal planning process
Q1F	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	Yes

2. General, earmarked versus off-budget funds

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General and earmarked funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Decreasing for general Increasing for earmarked
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes for both
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for both
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	Yes for both
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	General funds finance all investments; earmarked funds only new investments

3. Central versus Local budgets

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central budgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Stable
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes for central and local budgets
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes for central and local budgets
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Central budgets finance all types of investments

4. Budget institutions versus specialised institutions

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget and specialised institutions
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Decreasing for budget Increasing for specialised institutions
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes for both
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes for both
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes for both
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Budget institutions finance all types of investments. Specialised institutions finance new investments

Role of government in using public funds for infrastructure financing

1. Effectiveness

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	Yes
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	Yes
Q5D	Is there monitoring of target achievement in national infrastructure policy?	Yes
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	Yes
Q5F	Are the infrastructure projects which are implemented those with higher priority?	Yes

2. *Fiscal prudence*

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	Yes
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	Yes
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	No
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	Yes

3. *Efficiency*

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	Yes
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	No
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	Yes
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	No
Q7I	Are funds for infrastructure spent close to where they are collected?	No
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	No
Q7K	What are the major sources of inefficiency in infrastructure?	Inattention to maintenance Failure to spend budgeted funds Hidden costs

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Planning and Budgeting

Question		Answer
Selection		
Q7B	Are infrastructure projects designed and monitored based on cost-benefit (CBA) and/or cost-effectiveness analyses (CEA)?	No
Q7A	Efficiency: Are infrastructure projects selected to obtain the maximum improvement in any physical indicator per dollar spent?	No
Q5H	Is the Ministry of Finance systematically consulted before committing the government to infrastructure plans to ensure that the infrastructure project can be realistically financed?	No
Q7F	Are policies based on extensive consultation with major actors (civil society, private sector, industry, etc.)?	No
Prioritisation		
Q1G	What are the key objectives when financing infrastructure?	NA
Multi-year planning		
Q5G	Do line ministries prepare internal multi-annual investment plans in infrastructure?	No
QEI	Is there verification on whether infrastructure plans are compatible with Medium-term Expenditure Plans?	No

Sources and Use of public funds for infrastructure financing

1. Under versus Over-Spending

Question		Answer
Q1A	During the last 10 years has there been under/over-spending in infrastructure?	Over-spending
Q1C	Why do you think there is under-spending in infrastructure projects?	The balance sheet of the Government is far larger than the revenue it collects in order to maintain the said infrastructure.
Q1E	Are there reforms already in place or in the pipeline to avoid under-spending in infrastructure projects?	No

2. General, earmarked versus off-budget funds

Question		Answer
Q2A	Is infrastructure financed through general, earmarked and/or off-budget funds	General funds
Q2B	Please indicate the trend over the last 10 years in the amount of financing through general, earmarked and/or off-budget funds	Increasing for general funds Decreasing for the other 2
Q2C	Would you describe the functioning of the financing of infrastructure through general, earmarked and/or off-budget funds as positive?	Yes for general funds No for the other 2
Q2D	Are there on-going or foreseen reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	No for all
Q2E	Would you suggest reforms to improve the financing of infrastructure through general, earmarked and/or off-budget funds?	No for all
Q2F	Is financing of infrastructure through general, earmarked and/or off-budget funds dedicated to current expenditure and/or investment?	General funds finance current expenditures and maintenance

3. *Central versus Local budgets*

Question		Answer
Q3A	Is infrastructure financed through central and/or local budgets?	Central bidgets
Q3B	Please indicate the trend over the last 10 years in the amount of financing through central and/or local budgets?	Increasing for central budgets Decreasing for local budgets
Q3C	Would you describe the functioning of the financing of infrastructure through central and/or local budgets as positive?	Yes for central budgets No for local budgets
Q3D	Are there on-going or foreseen reforms to improve the financing of infrastructure through central and/or local budgets?	Yes for central budgets No for local budgets
Q3E	Would you suggest reforms to improve the financing of infrastructure through central and/or local budgets?	Yes for both
Q3F	Is financing of infrastructure through central and/or local budgets dedicated to current expenditure and/or investment?	Central budgets finance current expenditures and maintenance Local budgets finance maintenance

4. *Budget institutions versus specialised institutions*

Question		Answer
Q4A	Is infrastructure financed through budget institutions and/or specialised institutions?	Budget institutions
Q4B	Please indicate the trend over the last 10 years in the amount of financing budget institutions and/or specialised institutions?	Increasing for budget institutions Decreasing for specialised institutions
Q4C	Would you describe the functioning of the financing of infrastructure through budget institutions and/or specialised institutions as positive?	Yes for budget institutions No for specialised institutions
Q4D	Are there on-going or foreseen reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes for budget institutions No for specialised institutions
Q4E	Would you suggest reforms to improve the financing of infrastructure through budget institutions and/or specialised institutions?	Yes for budget institutions NA for specialised institutions
Q4F	Is financing of infrastructure through budget institutions and/or specialised institutions dedicated to current expenditure and/or investment?	Budget institutions finance current expenditures and maintenance

Role of government in using public funds for infrastructure financing

1. *Effectiveness*

Question		Answer
Q5A	Could funds for financing infrastructure based on public resources be available through other means (for example: private companies' investments)?	Yes
Q5B	Could the objectives attained on infrastructure through the use of public funds be achieved through policy reforms (for example: removal of subsidies)?	NA
Q5C	Has national infrastructure policy been formulated in terms of specific infrastructure targets against which achievement in the use of funds can be measured?	No
Q5D	Is there monitoring of target achievement in national infrastructure policy?	No
Q5E	Are the infrastructure projects designed to match the available funds at the planning stage?	No
Q5F	Are the infrastructure projects which are implemented those with higher priority?	No

2. Fiscal prudence

Question		Answer
Q6A	Are all public funds used to finance infrastructure subject to the same fiscal discipline?	Yes
Q6B	Are earmarked and off-budget funds required to adopt allocation rules as close as possible to those for other budget funds?	NA
Q6C	Is infrastructure spending subject to control to avoid quasi-fiscal deficit?	Yes
Q6D	Is all revenue collection in infrastructure carried out by the same authority?	No
Q6E	Do national procurement laws apply to all infrastructure funds?	Yes
Q6F	Is infrastructure spending subject to audit?	Yes
Q6G	Is infrastructure spending subject to ex-post reporting?	Yes

3. Efficiency

Question		Answer
Q7C	Are all public funds for infrastructure integrated into the public finance system?	No
Q7D	Are there issues of lack of compliance with taxes and/or fines related to infrastructure?	No
Q7E	Do you consider there to be a high number of different fund sources for infrastructure?	No
Q7G	Does the method of fund allocation prioritise items within a project so that when funds are not sufficient to cover the whole project, the highest priority items are included?	No
Q7H	Is it easy to track expenditures by category to know when a spending unit has not delivered or has overrun the cost?	No
Q7I	Are funds for infrastructure spent close to where they are collected?	No
Q7J	Is accrual-based information on the progress of infrastructure projects used to report investment expenditures?	Yes
Q7K	What are the major sources of inefficiency in infrastructure?	Inattention to maintenance Hidden costs

APPENDIX 4: FOCUS ON THE DEMOCRATIC REPUBLIC OF CONGO AND KENYA

Among the 22 countries surveyed, DRC and Kenya appears as regular exceptions through the different data sections. This appendix summarises their specificities.

DRC

Regarding the functioning of the system as a whole, DRC performs relatively bad as opposed to the other countries in the survey. Focusing on the role of governments in the use of public funds, public spending in infrastructure in DRC seems not neither effective nor efficient: the data report only 2 positive indicators for section 5 in the survey and none for section 7. A similar alarming situation appears for fiscal prudence with only 3 positive indicators.

Other specificities for this country concern particular characteristic related to:

- the absence or presence of reforms to circumvent respectively under-spending and the improvement of off-budgets' functioning,
- the negative functioning of specialised institutions, associated with a decreasing trend in the amounts spent through these institutions.

Kenya

The situation of Kenya regarding how governments use of public funds to finance infrastructure is even worse than the DRC's results. Whether it concerns effectiveness, efficiency or the use of fiscal prudence, the country does not report any positive indicator.

Here again, the country appears also as an exception on specific points of the survey:

- There seems to be neither under nor over-spending
- The functioning of budget institutions is considered as negative, and associated with a decreasing trend in the amounts spent through this source of financing.
- The absence of reforms to improve the negative functioning of specialised institutions

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