HIGH LEVEL PANEL ON INFRASTRUCTURE

RECOMMENDATIONS TO G20 – FINAL REPORT

- Submission to the G20 - 26 OCTOBER 2011 -

Cover note from the Chairman of the High Level Panel on Infrastructure Investment

The Development agenda is at the core of the G20 priorities. It is an essential part of the global economic agenda, promoting a shared and inclusive economic growth and reducing poverty, inequality and unemployment. The role of infrastructure is critical for this agenda to be fulfilled, especially for the low income countries (LICs), in particular those of Sub-Saharan Africa.

It has a been a privilege for all the members of The High Level Panel (HLP) on Infrastructure Investment and for me, as the Chair, to be mandated by the G20 Heads of State and Government at their meeting in Seoul in 2010, to work with the Multilateral Development Banks (MDBs) to identify how to foster infrastructure investment in the developing world, with a focus on (i) LICs and (ii) on increasing investment flows from the private sector (including Sovereign Wealth Funds). The emphasis the HLP has rightly put on private sector funding should not lead one to underestimate the important and legitimate contribution that the public sector should and will continue to play in funding infrastructure projects. This is all the more important as unlocking further resources from the private sector, as advocated in our report, may take time and continued public funding will remain essential for the LICs in the meantime. MDBs have a key role to play in ensuring this.

The HLP is an innovation in terms of involving the private sector in G20 discussions. The HLP members believe this innovation has served its purpose well and would encourage the approach to be extended to other areas of common interest for the G20 countries and the private sector.

The HLP recommendations are the result of an active dialogue with many stakeholders, starting with the MDBs. We believe that initiating and developing a dialogue with the MDBs has been a major feature of the HLP's work. The MDBs Action Plan was largely the result of that demanding but constructive dialogue and its content is welcomed by the HLP. We hope that the dialogue will continue, in one form or another, as it will be key to deliver the required changes.

Before summarising our recommendations, I would like to thank all the G20 countries, with a particular mention for France, the G20 chair in 2011, and Korea which was a driving force behind the establishment of the HLP. Their continued support, involvement and commitment, were invaluable to the HLP

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The HLP recommendations are organised around three areas, each corresponding to key issues that must be tackled to produce a step-change in infrastructure investment:

1/ Ensuring a strong and sustainable supply of bankable projects

Our fundamental belief as HLP is that appropriate funding could be made available for bankable projects in LICs. The constraint is less one of funding than an insufficient pipeline of bankable projects. To build such a pipeline, the availability of appropriate local capabilities is key; there are many examples across the world of how local capabilities, when available through dedicated project units, have made and are making a significant difference.

Thus, our report includes several recommendations to contribute to building these capabilities. We support the proposals included in the MDB action plan such as developing regional expert networks. One specific recommendation I would like to highlight is the establishment of a Fellowship programme involving the LICs, which would be supported and managed by the private sector. This programme will aim at training individuals from LICs and provide them with experience in leading G20 companies. Several HLP members have already committed that their companies would participate to such a programme and we have received positive indications from other major institutions across the G20.

Success in infrastructure investment, especially for Public Private Partnerships (PPPs) (which are generally very complex legally, financially and technically), **is dependent on well designed projects i.e. on effective project preparation**.

The inadequacy and complexity of project preparation is a significant constraint for infrastructure development, particularly in LICs. We have noted the existence of numerous preparation funds whose contribution is constrained by their limited individual size and/or a pre-allocation of funds imposed on them. This has also been highlighted by the MDBs in their Action Plan.

We recommend that the size and range of project preparation facilities should be reviewed, with the view to restructuring them on a more sustainable basis including the provision of additional resources if needed. Greater emphasis should also be placed on the ability to recover the costs of project preparation. This would allow grants and public funding to be used more selectively and effectively.

It is also important to make it easier for investors to access information. Therefore, we welcome the proposals included in the MDB Action Plan regarding the creation of information marketplaces, initially starting with Africa (Sokoni), and the expansion of the Africa Infrastructure Country Diagnostic (AICD) to other regions.

2/ Contributing to building an enabling environment

The private sector will not 'invest in the dark'. That is why the HLP has insisted on the central role of an enabling environment for facilitating infrastructure project financing in developing countries. Establishing such an environment requires a long term perspective, but concrete measures are needed in the short term to demonstrate progress. The HLP is supportive of the role to be played by MDBs in helping developing countries and LICs in particular to improve, among others, their legal and regulatory frameworks.

MDBs also need to adjust the way they are operating in order to effectively support infrastructure investment, notably in the context of PPPs, and of increased private sector's involvement. More flexibility will need to be introduced in the MDBs' procurement policies to accommodate the complex and most often multi-stage procurement that typically characterises most PPP structures. The HLP welcomes the work already underway amongst MDBs' Heads of procurement in this respect and calls for this work to deliver results over the coming months.

Another important area of change is the need for better coordination between MDBs and with bilateral and national development agencies. The HLP is advocating **the introduction of a 'lead bank' approach** when several MDBs or development agencies are involved, in order to streamline procedures. This will reduce significantly the burden for developing countries with limited capacity of dealing with a large number of donors with multiple processes. To achieve these changes, the HLP members believe in the value of testing them through **pilot projects**.

Finally, due consideration should be given to introducing more flexibility in the analysis of debt sustainability, to take into account the investment-growth nexus. This could be done by including efficiency of public investments amongst the indicators used to set debt limits. There is also a need for increased consistency of rules in relation to non-concessional borrowing policies. Finally a specific methodology should be developed for debt limits for transformational regional projects.

3/ Making funding available under appropriate terms

Across developing countries, even where the enabling environment has improved, the challenge of mobilising financing for infrastructure projects remains acute. Decisive actions by the G20 could lead to significant improvements: **given its long term nature, infrastructure in developing countries could potentially represent an attractive asset class for the private sector provided its perceived risks could be effectively mitigated.**

The HLP believes risk mitigation is an area where there is room for further innovation and experimentation. MDBs and more generally public sources of funding, have a critical role to play in better using their capital in order to "crowd in" substantially more private capital. In addition to stepping up syndication activities to include private sector banks as part of lending consortia, MDBs should aim at allocating a substantially larger share of their balance sheets to risk mitigation products rather than to direct loans to the infrastructure sector.

To make this happen, some adjustment to the culture of MDBs will be required, moving from a lending culture to an enabling culture, from an emphasis on balance sheet growth to one on "crowding in" private sector capital. In this respect, the HLP welcomes the suggestions in the MDBs Action Plan to suitably modify their internal incentives. The HLP also urges the MDBs to review their existing suite of risk mitigation products, in the light of each others' experience. Enhanced risk mitigation instruments could be used to mobilize resources from long-term investors such as the SWFs or the domestic pension funds. New approaches should be tested through **pilots** and, from this perspective, the HLP welcomes the pilot initiative from the Asian Development Bank with the ASEAN countries, to create an Asia Infrastructure Fund which aims at enhancing private sector participation in infrastructure investment through the use of credit enhancement mechanisms. Based on the results from this initiative and other guarantee funds, the G20 should consider extending the approach to other regions.

The HLP believes that the actual risk of infrastructure projects in LICs and MICs is frequently lower than the perceived risk amongst foreign providers of capital. Initiatives to share and disseminate information about the track record of successful past projects should be vigorously pursued.

In addition, the HLP would like to point out the vital role that **domestic financial intermediaries** (including sub-regional development banks) given their better appreciation for local risks, and **local capital markets** can play in closing the gap between actual and perceived risk. These institutions also complement effectively the facilitating role played by MDBs for infrastructure financing. The HLP urges support for enhancing the skills and processes of appropriate local financial companies, development banks and commercial banks in LICs and MICs.

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In line with the mandate received from the G20, **the HLP has asked the MDBs to collectively identify exemplary regional projects, illustrating the bottlenecks and challenges raised in their Action plan.** The identification process which the MDBs led working closely with the relevant institutions and regional actors of LIC/MIC development, has been driven by a set of six criteria (Regional integration, Degree of political support, Potential transformational impact including on sustainable development, Maturity, Institutional capacity and Attractiveness for the private sector).

The HLP welcomes the disciplined process that led to identifying eleven exemplary projects supported by the relevant constituencies in the different regions. The G20 countries must now consider further whether and how to support progress in implementing these projects, starting with their preparation. In doing so, special attention should be paid to the design of the roadmap for implementation of these projects. One approach to consider is to segment and phase these projects when appropriate. And the implementation process should be carefully monitored with all relevant stakeholders involved.

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Infrastructure investment is a key driver of sustainable, inclusive growth. This is true both for the developed and the developing worlds. As such, finding ways to foster a significant increase in infrastructure investment in the developing world, especially in the LICs, should be a key priority for the G20, at a time when the world economy is badly in need of growth.

Infrastructure development is by its very nature a long term endeavour. Therefore, it is important that, in the context of the wider development agenda of the G20, the G20 maintains its current focus on this issue.

The HLP believes there is a unique opportunity for the G20 leaders here to take decisive action and calls upon the G20 Leaders to consider positively their recommendations as well as the proposals from the MDBs Action Plan, and to make sure that any decisions made are followed up. Several billion poor people across the developing world expect no less from the G20 leaders.

Tidjane Thiam

Chairman of the HLP

HIGH LEVEL PANEL ON INFRASTRUCTURE

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RECOMMENDATIONS TO G20

26 October 2011

High Level Panel on Infrastructure (HLP) – Recommendations to G20

1. The Development agenda is at the core of the G20 priorities, as an essential part of the global economic agenda, promoting a shared and inclusive economic growth, conducive to sustainable development, and reducing poverty, inequality and unemployment.

2. Infrastructure investments have a major and direct impact on catalysing economic growth and reducing deprivations that retard human development. Water and sewage systems are necessary for irrigation and food security and contribute to limiting the spread of water borne diseases, including diarrhea and cholera. Energy, and in particular power generation (electricity production) transmission and distribution systems, is essential for the delivery of health and education services. Transport (including roads, railways, ports and airports) and telecommunication networks provide access to local markets and global information that expands opportunities and human capabilities. This central role of infrastructure is even more critical in meeting the needs of low income countries (LICs) and, in particular, those of Sub-Saharan Africa that are at the heart of G20 concerns.[1]

3. Developed and emerging countries have already achieved major progress in infrastructure investments in LICs. For example, it is estimated that foreign direct investment (FDI) in Africa increased from $9 billion in 2000 to $62 billion in 2008 – almost as large as the flow into China, in terms of GDP proportions.[2]

4. The High Level Panel (HLP) on Infrastructure is an innovation of the G20. Its creation at the G20 Seoul Summit was based upon the understanding that private sector involvement is essential to enhancing infrastructure provisioning. The HLP is composed of 17 global leaders, both from the public sector and the private sector, with diverse range of talents and worldwide experience in infrastructure projects. They have been selected for their expertise and professionalism in private investment and infrastructure development, with the objective to form a panel which would be as representative as possible of G20 diversity.[3]

5. As mandated by the G20 Leaders in Seoul in November 2010, the Panel has prepared recommendations for the Cannes G20 Summit in November 2011, "*in order to scale up and diversify financing for infrastructure needs, including from public, semi-public and private sector sources, and identify, with multilateral development banks, a list of concrete regional initiatives*".

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[1] While the infrastructure gaps between developed countries and LICs are huge, the infrastructure deficiencies in Sub-Sahara Africa are very substantial even relative to other LICs: Sub-Sahara Africa's total road density is only 53% of other LICs while paved road density is 50%, electricity coverage is 47%, improved water source in rural areas is 67% and in mobile phone density, largely in the hands of the private sector, Sub-Sahara Africa is 75% of other LICs, Source: World Bank (2011) *World Bank Development Indicators*, Washington, DC.

[2] McKinsey Global Institute, *Lions on the Move: the progress and potential of African economies*, June 2010.

[3] Especially in public infrastructure investment, public finance and economics, sovereign wealth fund investment criteria, public private partnerships, project finance, innovative finance, and risk management. HLP members come from international financial services institutions, financial advisory firms, private equity funds, bilateral development agencies, universities, industry and services businesses or regulatory authorities in these sectors.

6. The following recommendations have been based on an active dialogue with a range of stakeholders, including non-governmental organisations, on ways to accelerate infrastructure provisioning in developing countries and LICs in particular. They have taken into account the current fiscally constrained environment that reduces the availability of equity and debt funding to developing countries, but also the unmet needs in infrastructure in developing countries and LICs in particular and the opportunities for the private sector in building LICs and MICs infrastructure.[4] Special attention has also been paid to sustainable development concerns.

7. In this context, the HLP has conducted extensive exchanges with the Multilateral Development Banks (MDBs) under the leadership of the World Bank, as these banks are key agents in effecting the needed policy changes in cooperation with the developing countries governments. The MDBs have developed an Action Plan to catalyse the increases in private sector participation needed to accelerate infrastructure investments. The Panel welcomes this Action Plan which it supports wholly as a key step forward in fostering an increased level of investments in infrastructure from both public and private sources in the developing world. In this context, the Panel believes that the MDBs need to consider doing more. This involves contemplating and exploring innovative financing approaches to further leverage their capital to support infrastructure investments. An increased level of private sector funding will enable the MDBs to devote a higher portion of their resources to much needed traditional public investment in infrastructure, notably in the social sector[5], particularly in LICs.

8. The HLP believes that, beyond its recommendations developed below, a major point has been the active and constructive dialogue that has been initiated and developed with the MDBs. The quality of the exchanges is reflected both in the HLP report and in the MDBs Action Plan.

9. Continuity of public infrastructure financing at the national and international levels is crucial to maintaining the momentum of growth and development in developing countries and LICs in particular. Public sources will and should continue to fund a material portion of infrastructure investments. What we suggest is to mobilize private capital to increase and accelerate the total amount of investments in infrastructure, over and beyond what the MDBs and Governments can do.

[4] Investment in infrastructure will not only meet the short term goals of employment and income generation, but will also ensure that these outlays are recovered through tolls and other service charges over the medium term. Public private partnership (PPP) infrastructure investments will thereby be largely financed by self-liquidating debt. Once operational, these infrastructure investments will also serve to enhance the operational efficiency of the entire economy. The resulting productivity and income gains will correspondingly improve the public sector's balance sheet and the economy's overall debt sustainability.

[5] Social infrastructure refers to those facilities that support the delivery of education, health care, social welfare and community development services.

Ensuring a strong supply of bankable projects

10. The HLP believes that adequate funding could be made available for bankable projects in LICs. The key constraint is therefore less funding than the lack of a strong pipeline of bankable projects. We recommend building local capability to prepare bankable projects by:

   - The use in developing countries of local PPP units to concentrate expertise and improve coordination;
   - Establishing a fellowship programme supported and managed by the private sector - we are ready to launch this immediately - and inviting the G20 to work to agree a further programme of pro-bono support from the private sector;
   - Supporting the proposal made in the MDBs Action Plan to establish regional practitioner networks to support capacity-building;
   - Developing standards for PPP documentation based on existing good practice which would allow developing countries to prepare materials of the right quality at lower cost.

11. To support the development of a strong bankable pipeline, the availability of local resources to drive the preparation, launch and management of infrastructure projects is essential. The HLP therefore encourages the establishment of local PPP units as a focal entity to support the development of PPPs. The creation of PPP units in countries contributes to gathering expertise and helps with coordination amongst public entities. These PPP units need to be designed to provide the trained staff to structure and manage PPPs. As an example, India has developed a set of strong public sector lead PPP units that both develop and manage India's large volume of PPP projects. The envisaged PPP units should have the capacity to advise governments on feasible structures to achieve these objectives. In Brazil, BNDES launched in joint venture with 8 commercial banks a special purpose company named Estruturadora Brasileira de Projetos (EBP) to structure and develop bankable infrastructure projects through concessions or PPPs, given the priorities established by the government, at federal, state or municipal level. EBP provides project structuring services, assures study and modelling compliance with the Government recommendations and assists public administration in all bidding stages. EBP is a full equity company and the expenditure is repaid by the investor that wins the bid, if successful[6], helping to overcome some constraints of a state owned bilateral development bank, such as hiring technical consultancy directly at tight time schedules, besides sharing the financial risks.

12. In order to contribute to enhancing local capabilities, the HLP advocates the creation of a G20 fellowship program involving LICs, especially in Africa, and private sector companies in G20 countries engaged in PPP's (such as financiers, concessionaires, contractors and operators), to help strengthen PPP units, supervision capacity and private sector expertise in LICs. Such an exchange program, especially designed for local project teams, would aim at training individuals from LICs and provide them with experience from G20 countries. LICs would send an individual for training at private sector institutions in G20 countries for a one-year period. In exchange, individuals from G20 countries with PPP experience would be sent to LICs to work in public and private institutions for a one-year period. Each participating G20 country would be responsible for identifying private sector companies that are involved in infrastructure, project finance, capital markets development, construction or infrastructure operation activities and inviting them to participate in this program. Banks,

[6] EBP is reimbursed only if the structured project is approved by the public administrator, and the private partner is contracted. The Government's private sector partner is the party that reimburses EBP's expenses.

private equity firms, concessionaires, contractors and operators would form the core institutions at the outset, although other institutions could be included as the program evolves, notably for consulting, audit, or law firms. Several institutions, notably those which CEOs have been involved in the HLP such as Macquarie, Prudential plc or PCL, have already committed to taking part in this initiative that would appeal to both Corporate Social Responsibility (CSR) and business objectives. There will be a need for an existing institution to help manage this program. Discussions are held with various institutions including the World Bank and the Indian Infrastructure Development Finance Company (IDFC), which already provides capacity-building training material for PPP design for LICs professionals and which is volunteering to manage this program.

13. The success of infrastructure project preparation depends significantly on the quality of the staff involved in these projects. Considering the lack of professional business environment in the process of investment, the key issue for infrastructure projects for developing countries and LICs in particular is to gather professional resources to manage the project preparation: lawyers, engineers, auditors and corporate bankers. The HLP invites G20 countries to consider any other assistance initiative from the private sector to strengthen LICs local capacities in terms of infrastructure projects. In particular, the HLP recommends to G20 countries to convince private sector companies to get involved in free pro-bono advisory activities (banking, audit, consulting, law firms and engineers) for pilot infrastructure projects, consisting in minimum two-week advisory missions. As a start, the initiative could benefit from a strong commitment of corporate finance institutions and private equity funds. The HLP suggests that the World Economic Forum (WEF), together with IDFC, could be involved in the oversight of the program and for reporting to G20 countries on the actions undertaken within the initiative. This program will be based on high transparency standards, for the initial launching of the program as well as for its follow-up and the assessment of the results achieved.

14. In addition to these initiatives, the HLP supports the development and expansion of regional practitioner networks by governments, bilateral agencies and MDBs[7], notably as advocated by the MDBs Action Plan to strengthen domestic capacity building, by providing additional technical assistance to PPP units in developing countries and LICs in particular.

15. The HLP recognises that the development of a PPP unit in each of developing countries and LICs in particular, with the capacity, skills and expertise to undertake complex infrastructure projects using a PPP development model, is a long-term goal that may entail some considerable expenses. The HLP further believes that there should be no reinventing on a country by country basis of well proven PPP approaches that have been tested in developed countries. Accordingly, the HLP recommends that the MDBs continue to help PPP unit to structure and manage PPP projects in developing countries and LICs in particular thanks to the contribution of professionals experienced in delivering successful PPP projects. This could include considering the creation of an overarching PPP unit. In addition, "Gold standard" PPP policies, procedures and documentation based on proven experience for use in developing countries and LICs in particular should be developed as basic material, in order to realise efficiency gains. Doing so, it will be essential to avoid seeking to design "one size fits all" solutions and these policies, procedures and documentation should be aimed at providing illustrations of good practices. This could include bid templates for financing documents, EPC contracts and operations and maintenance agreements along with the concession agreement. Having a template loan agreement in a bid process will make it

[7] See in Asia, joint initiative by the Asian Development Bank, the World Bank Institute (WBI) and the Government of Korea; in Africa, collaboration between WBI, GIZ, Development Bank of Southern Africa (DBSA) and the South African National Treasury on the creation of a PPP network for SADC; in MENA countries, creation of MENA Policy Forum as part of the Arab Financing Facility for Infrastructure (AFFI).

significantly easier for private investors to secure binding debt funding prior to putting in a bid.

16. PPP success is greatly enhanced with well designed projects. The financing for project development has been highlighted as a key constraint, as has the difficulty for investors to access accurate information for investors about the potential of infrastructure investments in developing countries. The Panel recommends that:

    - The size and range of project preparation facilities should be reviewed, as recommended in the MDBs Action Plan, with a view to restructuring them on a more sustainable basis;
    - Greater emphasis is placed on the ability to recover the costs of project preparation which would allow grant and public funding to be used more selectively;
    - The proposals in the MDBs Action Plan for an information marketplace be adopted, along with the initiative to expand the Africa infrastructure benchmarking model to other regions.

17. As PPP projects are more complicated than traditional public sector projects, there is some concern that project development facilities (PDFs) may need to be expanded to match the envisaged expansion of PPP projects. At the same time, the existence of numerous preparation funds has been noted by the HLP, with many of them considered to be too small in size to make a meaningful contribution and some of them constrained by pre-allocation of resources by donor countries. The few initiatives taken over the past years to attempt to rationalise the range of these funds or – at a minimum – to better coordinate their use have delivered mixed results. Given the current resource constrained environment, the HLP recommends that reviews of existing project development financing facilities be performed, on a regional basis, jointly by the MDBs and the bilateral donors, with a view to restructuring them on a more sustainable basis including the provision of additional resources if needed. These reviews should also lead to a better visibility being given to the existing funds. The HLP welcomes the suggestion made by the MDBs in their action plan for the Infrastructure Consortium for Africa (ICA) to carry out such a review for Africa.

18. PDFs can be financed mostly through loans (instead of only grants), and operated on a revolving basis with recovery of project development expenses at the time of contract award from successfully bid projects. This cost recovery by PDFs provides a longer term sustainable approach. While new PDFs are required, for example on regional project development, while some grant financing to cover their set-up costs is required, they should also be able to operate on a revolving fund basis financed by an MDB loan. Governments would also need to bear local costs if the project is not successfully expedited and contracted out to the private sector. PDFs could finally use compensation mechanisms, such as success fees, for a group of transaction advisors who would be providing services on a standby basis.

19. Information asymmetries have also created perception barriers inhibiting private sector investments in infrastructure. Improving the quality of relevant data available on key components of the proposed developing countries infrastructure programs, in particular on operational and financial risks, would help support efforts to improve infrastructure project financing.

20. Committed to the promotion of an enhanced quality of information for potential private sector participants in PPPs, the HLP fully supports the proposals made by the MDBs in their Action Plan. These include:

- The establishment of an online marketplace platform for sharing information on infrastructure projects and environment in order to concurrently link project sponsors and financiers, initially starting with the Africa Infrastructure Marketplace (namely, Sokoni). The launching of this initiative will empower project sponsors and development officials to advertise projects and enable donor governments and potential financiers to easily identify African projects of interest;

- The benchmarking infrastructure development initiative which would be helpful as has been demonstrated by the informative data on the status of infrastructure by sector and country in Sub-Saharan Africa under the Africa Infrastructure Country Diagnostic (AICD).

Contributing to building an enabling environment

21. The private sector will not invest in the dark. The HLP recognises the central role of an enabling environment for facilitating infrastructure project financing in developing countries. Legal and regulatory frameworks for PPPs must provide adequate protection for all parties involved in PPPs, namely the government, the private sector investors, the lenders, the designers, contractors and operators, and the user of the infrastructure services. Long term certainty with respect to the laws governing the project is essential. These legal and regulatory frameworks are crucial for infrastructure projects given their long term nature and the inevitable need for adaptations within this set of rules to reflect changing circumstances throughout the lifecycle of the PPP.

22. Action to establish an enabling environment requires a long-term perspective, but concrete measures are needed in the short-term to demonstrate progress towards that longer term goal. The HLP recommends that MDBs should, in response to requests from LICs, provide targeted, sustained and localised assistance in these economies to improve, among others, the legal and institutional frameworks, the required expertise in PPP infrastructure development as well as developing the countries' capacity in project preparation and innovations in project financing instruments and modalities.

23. The MDBs also need to adjust the way they are operating in order to effectively support the development of PPPs. The HLP recommends that the MDBs:

    - Adjust the focus of their work towards PPP units in developing countries;
    - Change their procurement procedures in order to accommodate PPPs more easily and therefore improve economy and efficiency;
    - Adopt a lead bank approach in order to streamline procedures, use country systems more and reduce the burden on developing countries;
    - Consider adjusting their staff incentives to promote greater investment in regional projects;
    - Promote the CoST initiative on full disclosure of PPP contracts.

24. The MDBs have traditionally focused on public sector infrastructure projects. The HLP wants to ensure that each of the MDBs develops the out-reach capacity to support the operations of the envisaged PPP units in the developing countries. The HLP also acknowledges the need for developing countries and LICs in particular to benefit from quality PPP project design, quality of maintenance and quality of trained staff. The required staffs are typically those professionals who could operate effectively in investment banks in formulating PPP infrastructure projects. The MDBs staff will also be vital for the development of the regional

projects, hopefully through effective alliance with the national PPP units of the concerned economies.

25. A recurring issue in PPP development utilising the resources of the MDBs is the nature of the procurement policies that often appear to lack the flexibility needed to accommodate the complex and most often multi-stage procurement that typically characterises most PPP structures.[8] In the interests of transparency, MDBs financed procurement should be undertaken within the context of generally accepted international competitive procedures. However, a difficult issue for MDBs is the low level of bid contestability (i.e. the high frequency of single bids) in PPP projects, irrespective of whether they were solicited or unsolicited projects. This lack of contestability is generally thought to be due to the high cost of bid preparation. Further, given the larger scale and longer duration of most PPP projects, invariably MDBs must work within country legal and regulatory frameworks for undertaking PPP procurement despite these arrangements not being fully congruent with MDB procurement policies that are, in the main, geared to addressing transactional procurement compliance for exclusively public sector projects. Thus, in many cases, MDBs need to be willing to finance PPP projects based solely on private sector commercial arrangements that prevail within the host country despite these arrangements being sometimes less than ideal from the standpoint of promoting internationally acceptable competitive procedures.[9]

26. The HLP believes that a more flexible approach to PPPs, including accommodation of private sector commercial arrangements wherever reasonable, can ensure economy and efficiency in procurement given a high degree of transparency and requests the MDBs to conform their procurement policies to facilitate PPPs. The HLP welcomes the current work undertaken by the MDB Heads of procurement initiative on changes in procurement procedures in order to bring greater flexibility to PPP procurement, as expected from MDBs 'Heads of procurement' meeting scheduled from 10 October to 14 October 2011. The HLP is calling for this initiative to deliver results over the coming months.

27. Integrity of the procurement, design, construction and operational process is fundamental to creating an enabling environment for broad-based private participation. In this connection, the HLP warmly welcomes the proposal of the Infrastructure Consortium for Africa (ICA) to open its membership to G20 countries.

[8] No matter how well a bid document is prepared, there will be several rounds of clarifications, and negotiations of terms. Such multi-stage processes are not compatible with public procurement—wherein one reverts to the beginning whenever a major change (in terms or specifications) becomes necessary.

[9] The European Bank for Reconstruction and Development (EBRD) Document has attempted to address these issues by framing a 'core' approach for undertaking procurement in the context of award of public concessions for PPP projects. The EBRD incorporates procedures to minimise MDB fiduciary risk in procurement of public concession awards that are characterised by situations of less than robust or fully acceptable international competition. Critical to this process is an exceptionally high degree of transparency, full compliance with institutional (and host country) integrity and anti-corruption safeguards and related threshold procurement eligibility considerations, and appropriate sector and industry bench-marking to ensure that the terms and conditions of any negotiated concessions agreement are commercially reasonable, promote economy and efficiency, and provide optimal 'value for money' to the contracting government authority. See *EBRD Financing of Private Parties to Concessions.*

28. The MDBs and the bilateral development agencies need to closely coordinate their efforts in each economy and region, as there remains too much duplication of development efforts.[10] The HLP recommends that development agencies cooperate locally and on a regional basis and use the concept of 'lead bank' in such a way to move infrastructure projects forward more effectively. The HLP believes that distributing the lead role will not only economise on scarce resources but will also improve development effectiveness and recommends the adoption of the lead agency approach for PPP infrastructure projects.[11] In this respect, the HLP welcomes the AsDB-IsDB Pilot Joint Procurement Initiative, conceived as a pilot approach to make concrete progress in that field. The Regional Development Banks (RDBs) Procurement Policies specify that the proceeds of any financing undertaken in their ordinary operations shall be used for procurement of goods and services produced in member countries or provided by bidders or consultants from member countries. The HLP recommends that each MDB works towards greater harmonisation of their procurement policies and use of county systems; this could include for instance reviewing the use of blanket waivers to the eligibility rule for co-financed projects. MDBs staff are reluctant to implement risky, and complex projects as the outcome is less certain than others. The HLP recommends MDBs to adopt staff incentives to invest more in regional projects and PPPs, including through effective alliance with the national PPP units of the concerned economies.

29. Comparative analysis reveals that the PPPs contribute to saving time and thus increasing major social benefits, and reduce cost over-runs relative to public projects and thereby enhance the relative efficiency of investment, for example in PPP road projects. Private investments can be catalysed by the public sector, if the public investment is designed to provide a supportive framework for the beneficial private sector involvement through PPPs. Private sector efficiencies are not only available for bankable projects such as toll roads but can also be utilised in traditional public services with the appropriate structuring of contracts. For example, in Senegal, the performance contract between the Senegalese national water company (SONES) who owns the assets and a private operator (SDE) has resulted in improved sector performance (reduction of unaccounted-for water) and increased investments. The substitution of public delivery with private sector efficiencies in Manila's water supplies has resulted in the past ten years in bringing down the non-revenue water (i.e. from leakage and pilferage) from over 60% to below 15% with availability of water for consumers now over 99%.

30. However, the risk sharing between the public and private sectors, including making explicit any guarantees, needs to demonstrate applicability through model projects in an environment of investment-friendly laws and regulations. Contracts should be based on proven PPP experience, carefully adapted for each project, and well managed in order to achieve these potential PPP benefits with full disclosure.[12] Full disclosure of PPP contracts is in line with the MDBs Action Plan that recommends the extension of the Construction Sector Transparency (CoST) initiative.

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[10] In Africa, this duplication lead to enhancing coordination under the Infrastructure Consortium for Africa (ICA) within major infrastructure sectors (energy, transport, water) with ICA members in specific lead roles.

[11] A model of such cooperation is provided by the Mutual Reliance Initiative of the European development financing institutions involving Agence Francaise de Développement (AFD), European Investment Bank (EIB), and Kreditanstalt fur Wiederaufbau (KfW).

[12] See also the fiscal disclosure requirements recommended under the International Monetary Fund's Comprehensive Disclosure Requirements for Public-Private Partnerships.

31. As debt sustainability is an important underlying concern, the HLP encourages all countries to actively participate with the International Monetary Fund and the MDBs in debt sustainability exercises. The HLP recommends that the review of the Debt Sustainability Framework (DSF) should take into account:

- The efficiency of public investment through the use of the Public Investment Management Index (PIMI) to complement other indicators used in setting debt limits;
- The need for increased transparency and consistency of rules and procedures in relation to non-concessional borrowing policies;
- The need to develop a specific methodology for debt limits for transformational regional projects.

32. The HLP welcomes the on-going comprehensive review of the Debt Sustainability Framework by the IMF and the World Bank, which has had positive results with the increased flexibility on debt limits in IMF-supported programs for LICs since December 2009. The HLP considers the enhancement of the Debt Sustainability Framework (DSF) and of the policies guiding non-concessional borrowing towards infrastructure projects to be a major priority. It has identified several issues that could be part of the forthcoming DSF and IMF debt limits policy reviews and of the updated guidance note on IDA's Non-Concessional Borrowing Policy (NCBP), as follows:

    - The Public Investment Management Index (PIMI) could play a role in effectively assessing the efficiency of public investment and informing DSA growth scenarios and complementing other institutional indicators used in setting the debt limits. The HLP would also like to encourage the on-going work on this index to further strengthen it and expand its country coverage;
    - An increase in the transparency and consistency of the rules and procedures in relation to non-concessional borrowing policies would also be useful. The process involved in IDA's NCBP decision making should be formalised and publicised, in order to provide recipient and lender countries with a certain level of predictability in their borrowing space. Moreover, ensuring consistency between the IMF's debt limit policy and the World Bank's NCBP in countries that no longer have a program with the IMF should remain a priority;
    - Finally, the development of a specific and articulate methodology for setting debt limits for transformational regional infrastructure projects would be relevant. The IMF and the World Bank could cooperate in order to develop a specific methodology for assessing debt limits for transformational regional projects. The HLP supports professional assessments of transformational infrastructure projects, notably by the MDBs, in order to set up properly articulated infrastructure strategies.

The HLP has also taken note of the various initiatives that exist, across the public and private sectors, of indices aiming at providing indications as to the 'ease of investment' or the 'country-level attractiveness' for infrastructure investment. The HLP members would like to encourage the World Economic Forum to combine its efforts with the World Bank and the IMF to develop such a composite index that would provide potential investors and private sector developers with standard appreciation, at global scale, of infrastructure needs.

Making funding available under appropriate terms

33. Public intervention remains key for the effective launching of the funding process for long term infrastructure projects, as implemented through the policies and contributions of national governments, bilateral agencies and MDBs. Across developing countries, even where the enabling environment has improved, the challenge of mobilising private financing for infrastructure projects with private participation remains acute. The HLP believes, however, that significant improvements could be made in this area through decisive action from the G20. The HLP recommends:

    - Sustained support for the development and deepening of local currency debt markets in developing countries and consideration of the use of infrastructure bonds as eligible assets for repo funding by central banks,

    - Continued contribution to the development of local financial intermediaries, notably through capacity building. These intermediaries have a key role to play to reduce the gap between perceived and actual risks for infrastructure investments;

    - Efforts by MDBs to move from a lending culture to an enabling culture by 'crowding in' more private capital through the use of guarantees and other risk mitigation products. These risk mitigation instruments would benefit both public and private investment projects in infrastructure;

    - Use by MDBs of enhanced risk mitigation instruments to develop a range of cofinancing opportunities that could notably have special appeal to SWFs. Special consideration should be given by the G20 to the results and experience from existing initiatives being progressed, such as the ASEAN Infrastructure Fund (AIF), to see whether and how these could be extended to other regions within the developing world;

34. Infrastructure in developing countries in general, and in LICs in particular, is an asset class that is widely considered to be vulnerable to high political, regulatory and execution risk. Even where equity capital is available from private investors, raising long term debt financing is especially hard. Domestic markets for long term debt tend to be shallow so that infrastructure projects, especially in LICs, depend heavily on public or public led financing from multilateral and bilateral sources, and on funding from local or regional development banks. Where access to private debt financing is available, it is often delivered in foreign currency which, not being easy to hedge, creates the risk of potentially problematic currency mismatches. In this context, notwithstanding the time it might take to achieve tangible results, the HLP is convinced of the importance of providing sustained support for the development and deepening of local currency debt markets across developing countries. The HLP supports a long-term approach that aims at financing infrastructure through local currency bonds in LICs and MICs in order to mitigate foreign exchange risk and mobilise domestic savings. In the short term, technical assistance could be provided to LICs and MICs (e.g. issuance strategies, liability management tools, diversification of the investor base, coordination schemes, institutional and regulatory framework). The HLP would also welcome due consideration to be given to the use of infrastructure bonds as eligible assets for repo funding by central banks.

35. The HLP is of the view that the actual risk of infrastructure projects in LICs and MICs is frequently lower than the perception of risk amongst foreign providers of capital. Initiatives to share and disseminate information about the track record of successful past projects as

well the range of available opportunities need to be vigorously pursued. Domestic financial intermediaries that have a better appreciation for local risks also have a vital role to play. Learning from the successful examples of local intermediaries with specialised skills in infrastructure financing such as IDFC in India and BNDES in Brazil, the HLP urges support for enhancing the skills and processes of appropriate local financial companies, development banks and commercial banks so that they can become effective "gateways" for domestic and international capital to be deployed in infrastructure projects in LICs and MICs. Such entities could play a valuable role as catalysts for capital, and as hubs for local expertise able to evaluate, aggregate and monitor infrastructure projects, including in undertaking "regional to regional" relations and exchange of information (e.g. on-going discussions between South East Asia and Latin America).[13] In many smaller economies, such institutions (including regional and sub-regional development banks in Sub-saharan Africa, for instance WADB, CASDB, EBID, PTA, EADB, DBSA in South Africa) could play a significant complementary and/or facilitating role for infrastructure financing from MDBs, facilitating agreements with concerned countries, sharing knowledge and expertise and building consensus around regional initiatives.

36. MDBs have a critical role to play in helping to scale up financing for infrastructure development in their client countries. The HLP considers that the existing capital of MDBs could be made to work harder and smarter to "crowd in" substantially more private capital for infrastructure in developing countries. In this regard the HLP strongly supports the few initiatives already launched, or the process of being launched, by the MDBs. The HLP encourages the implementation of pilot projects to test new funding approaches, which could benefit from the experience of the IFC Asset Management Company (AMC), created in 2009.[14] The efforts of the IFC and the AsDB[15] to mobilise third party equity capital from private sources for investment in infrastructure should be encouraged and could expanded to other MDBs. In addition to investing directly in infrastructure products such funds should also seek to expand the capital base of deserving financial intermediaries focused on supporting infrastructure development in their respective countries or regions.

37. MDBs could however be much more active than at present in catalysing the flow of long term private debt capital into developing countries. In addition to stepping up syndication activities to include private sector banks as part of lending consortia, this could be achieved by allocating a substantially larger share of MDBs balance sheets to risk mitigation products rather than to direct loans to the infrastructure sector. This would have the benefit of "leveraging" the existing capital of MDBs in the sense that for every dollar of their own balance sheet deployed, MDBs should be able to mobilise several dollars from the private sector - the evidence is that partial guarantees have helped MDBs attract from the private sector 4 to 5 times the amount of their own capital at risk.

[13] Discussions between the World Bank-Singapore Infrastructure Finance Centre of Excellence (IFCOE) and Mexico on a 2012 Pacific Infrastructure Finance Summit. Based in Singapore, IFCOE provides advisory services to developing countries, in order to bridge knowledge gaps to structure viable infrastructure projects.

[14] IFC Asset Management Company is a wholly owned subsidiary of IFC that invests third-party capital, especially SWF, alongside IFC across the developing world, expanding its reach by crowding in commercial investors, notably through specific funds, such as IFC Capitalisation Fund, RBCF ("Russian fund"), ALAC ("African, Latin American and Caribbean Fund") and Africa Capitalisation Fund. By demonstrating the financial benefits, growth opportunities, and the development impact of investing in these markets, AMC aims to encourage investors to shift the long-term composition of their portfolios.

[15] See Association of Southeast Asian Nations (ASEAN) infrastructure fund (AIF) proposal by the Asian Development Bank.

38. To make this happen on a larger scale, the HLP believes that it will require some adjustment to the culture of MDBs. The MDBs will need, inter alia, to move from what has been a lending culture to an enabling culture, from an emphasis on balance sheet growth to one on "crowding in" private sector capital. In this respect, the HLP heartily welcomes suggestions in the MDBs Action Plan to suitably modify internal incentives in order to motivate staff to actively seek ways of mobilising third party funding for individual transactions. There might be some useful lessons from the IFC 's recent experiments along these lines.

39. Some adjustment may also be needed to the mind set of borrowing countries. MDBs clients often prefer direct project loans - they do not see the benefit of using up part of their overall risk exposure limits with MDBs on guarantee type of products. To the extent, however, that such products could significantly improve the borrowing country's access to capital overall, it should not matter to them how much they get directly from the MDBs. In fact, the more aggressive use of such products would be hugely beneficial to countries that are reaching their risk limits, and it would also free up some of the scarce capital of these multilateral institutions to be deployed directly into countries less able to attract private capital at this time. With the development of financial markets, particularly in middle income countries, the demand for MDBs guarantees will increasingly be found in LICs, especially for clean energy and large infrastructure projects. Thus, the HLP considers that MDBs should resolutely develop their guarantees policies. A special effort should be made in the direction of well-performing IDA countries - whose access to these instruments is too limited for now and whose IDA guarantees could be counted for less against country allocations -, enclave projects and guarantees facilities.

40. Greater coordination between MDBs could further bolster the leverage effect of their respective guarantee and credit enhancement programs. If MDBs could effectively streamline and harmonise their respective standards, procedures and documentation requirements, they could jointly provide a suite of risk mitigation products, craft back-to-back arrangements, cut down on bureaucracy and achieve significant scale economies in mobilising funding from the private sector. In this regard, it would be particularly helpful for the MDBs to harmonise and simplify their procurement guidelines.

41. The HLP urges the MDBs to take stock of the suite of risk mitigation products that they currently offer and examine each others' experience with the same. It is the HLP's belief that that there is room for further innovation and experimentation. The merits and feasibility of securitising MDB infrastructure loans post project completion; of seeding separate funds for offering risk mitigation and first loss absorption facilities to private lenders (as being pursued by the AsDB[16]); of expanding the scope of syndication activities (as being contemplated by the AfDB; and of expanding the existing capital base of MDBs using hybrid securities (as mooted, for example, by IFC) should all be examined carefully by the G-20. These enhanced risk mitigation solutions could apply both to public and private investment projects in infrastructure.

[16] A useful initiative in this respect is the Credit Guarantee and Investment Facility (CGIF) sponsored by ASEAN + 3 and the Asian Development Bank (ADB) which was set up as a separate trust fund with its own governance structures and was capitalised as a pilot project at $700 million in 2010. The intention is to have CGIF operate as a bond guarantee agency for investment rated corporations in ASEAN + 3 to allow them to issue local currency bonds in their local bond markets where they may need at least an A rating, if not an AA rating, to meet the current prudential requirements for bond sales to banks and/or insurance and pension funds. The guarantees would be priced at market, so while CGIF would be operated purely on commercial terms, its public policy objectives would be met by addressing the currency and maturity mismatches that contributed to the Asian Crisis of 1997/98. ADB is facing demands for similar agencies and a feasibility study is being initiated in India to set up a local currency bond guarantee agency.

42. In view of the fiscal constraints of the traditional providers of capital from amongst the G20 members, it is now important to find ways of attracting resources from sovereign wealth funds (SWFs) around the world and mobilising domestic savings in LICs and MICs more aggressively. MDBs should systematically develop a full range of infrastructure cofinancing opportunities that would have special appeal to SWFs and embark on a program of support for developing local currency contractual savings institutions.

43. The HLP also welcomes the pilot initiative proposed by the Asian Development Bank with its Association of Southeast Asian Nations (ASEAN) infrastructure fund (AIF), which could provide a strong illustration as to how to ensure an enhanced private sector participation (including by SWFs) to infrastructure development through PPPs, through the use of credit enhancement and risk mitigation solutions. The HLP encourages the G20 to consider, based on the results achieved by the AIF and other guarantee funds, the creation of further regional/international funds leveraging similar tools. The HLP also welcomes the suggestion made in the report by Bill Gates to the G20 of creating an infrastructure fund aimed at attracting SWF funding.

44. Finally, rural and micro credit initiatives are seen by the HLP to be important instruments in assisting with poverty reduction. These instruments need to be extended to augment infrastructure investments, particularly in rural areas. The aim should be to ensure that infrastructure investments are not only inclusive but also fully provide the expected benefits in terms of poverty reduction.

Working with MDBs to identify a set of exemplary projects

45. Regional infrastructure projects have been considered increasingly important to capture the benefits from economic integration. The HLP endorses this regional development approach and has asked the MDBs to collectively identify exemplary regional projects, illustrating the bottlenecks and challenges raised in their Action plan.

46. Together with the MDBs, the HLP has been focusing on identifying a set of selection criteria that would help both MDBs and governments to determine whether a specific infrastructure project could be considered as exemplary, in order to facilitate prioritisation. The six commonly agreed criteria, based on the view of the HLP and the MDBs, should help drive the selection and prioritisation process for future infrastructure investments in LICs and MICs:

- The first criterion is the extent to which the project brings about regional integration, considering the number of direct and indirect beneficiary countries. This criterion is met when the project consists in inter-connecting two or more countries or in providing a regional public good;
- The second criterion is the extent of political support available to the project, considering both concerned countries and regional organisations. This criterion is met when official documents or statements identify it as a priority;
- The third criterion is the potential transformational impact of the project on sub-regions' growth (see MDB Infrastructure Action Plan), considering its economic area of influence. This criterion is met when the material economic impact on the lives affects a large number of people (including reducing the cost of a key service, improving its quality or availability). This criterion also implies sustainable development dimension and is particularly met in green growth related projects;

- The fourth criterion is the maturity of the project, considering how advanced project preparation is. This criterion is met when substantial preparatory work has been made on the road to financial closure and project implementation (including pre-feasibility and feasibility studies);
- The fifth criterion is the institutional capacity, considering technical capacity of the implementing institutions (political independence, financial solidity, quality of technical staff, track record in successfully completing complex infrastructure projects). This criterion is met when the assessment of governance and institutional framework at country level (on the basis of indicators such as the IDA country policy and institutional assessment) and of the quality of local project management is positive;
- The sixth criterion is the potential attractiveness for the private sector, considering it in terms of funding and creditworthiness. This criterion is met when the project generates adequate and reliable flows of financial revenues and when risks are carefully designed allocated and as far as possible mitigated.

47. These agreed criteria have driven the identification process by MDBs for exemplary infrastructure investments in LICs and MICs. On this basis, the MDBs essentially worked on regional priorities with the involvement of the relevant institutions and regional actors of LICs/MICs development, to deliver a bottom-up process. Extensive dialogue was undertaken within the Multilateral Development Banks Group (MDB Working Group on Infrastructure, including the African Development Bank, the Asian Development Bank, the European Investment Bank, the Inter-American Development Bank, the Islamic Development Bank, and the World Bank Group) on concrete infrastructure projects in LICs/MICs, which resulted in the identification of the following 11 regional projects.

Frame 1: Projects presented by the MDBs

Africa
West Africa Power pool (WAPP)
Ethiopia and Kenya Power Systems Interconnection
Inga Hydropower
North-South Corridor (NSC)
Isaka-Kigali Railway
Middle East and North Africa
Jordan Railway project
Scaling up solar energy in MENA for export to European Markets
Asia
Turkmenistan-Afghanistan-Pakistan and India (TAPI) Natural Gas Pipeline
ASEAN Infrastructure Fund (AIF)
Regional Program for Scaling-up Clean Biomass Energy in the Greater Mekong Subregion
Latin America and Caribbean
Pacific Corridor

Source: Multilateral and Regional Development Banks.

48. Although the HLP has not been in a position to perform an in-depth assessment process of the projects with due consideration of technical and operational parameters of the project design and implementation., the HLP welcomes the process followed by the MDBs which has enabled a disciplined identification of exemplary projects, supported by the relevant constituencies in the different regions. The reasons behind the selection of each project as exemplary by the MDBs is summarised in appendix 2.

49. Based on the selection performed by MDBs, it is now up to the G20 countries to consider further whether – and if so, how – to support the implementation of these projects and mobilise the required means to improve their preparation. In doing so, the HLP believes it will be essential for special attention to be paid to the design of the roadmap for the implementation of these projects and to carefully monitor the implementation process with the involvement of all relevant stakeholders.

50. Given their significant size, some of the projects identified as exemplary are likely to be faced with specific implementation issues, including governance issues. One possible mitigating approach would be to seek to segment these projects and phase them when appropriate.

51. Finally, the HLP would like to reiterate the need for the G20 not to limit its focus to Greenfield projects. Maintenance and continuation of existing infrastructure facilities are also an important challenge for the developing world and the HLP is calling for continued efforts to make sure appropriate resources are dedicated to these.

52. Conscious that changes will require time and effort, the HLP calls for continued effort by the G20 to support and monitor progress in implementing the recommendations from this report as well as the MDBs Action Plan.

HIGH LEVEL PANEL ON INFRASTRUCTURE

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APPENDICES TO THE FINAL REPORT

Appendix 1: Members of the High Level Panel on Infrastructure Investment

- **Tidjane Thiam**, Group Chief Executive of Prudential plc – Chairman of the panel
- **Yahya A. Alyahya**, Chief Executive Officer of the Gulf International Bank
- **Yoon-Je Cho**, Professor at Sogang University, Seoul, Korea
- **Paul Douglas**, President and Chief Executive Officer of PCL Constructors Inc
- **Jim Harmon**, Chairman of Caravel Management LLC
- **Mo Ibrahim**, Founder and Chairman of the Mo Ibrahim Foundation
- **Hayrettin Kaplan**, Chief Executive Officer of the Türk Eximbank
- **Takatoshi Kato**, President of the Japan Center for International Finance
- **Norbert Kloppenburg**, Member of the Managing Board of KfW
- **Rajiv B Lall**, Chief Executive Officer and Managing Director of the Infrastructure Development Finance Company (IDFC)
- **Jin Liqun**, Chairman of the Board of Supervisors of China Investment Corporation (CIC)
- **Roberto Machado**, Director, Brazilian Development Bank (BNDES)
- **S.R. Mac Maharaj**, Spokesman and Special Envoy of the President of the Republic of South Africa
- **Nicholas Moore**, Managing Director and Chief Executive Officer of Macquarie Group
- **Paul Victor Obeng**, Chairman of the National Development Planning Commission of Ghana (NDPC).
- **Alessandro Ortis**, Chairman of Italy's National Regulatory Authority for Electricity and Gas (AEEF)
- **Lionel Zinsou**, Chairman and Chief Executive Officer of PAI Partners

Appendix 2: Exemplary regional projects presented by the MDBs

53. Based on the six criteria agreed between the MDBs and the HLP, the MDBs have identified a list of 11 exemplary projects which are listed in the table below. This list is the result of an extensive dialogue between the MDBs and the relevant institutions in each region, as well as within the MDB Working Group on Infrastructure (African Development Bank, Asian Development Bank, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, and World Bank Group).

Frame 2: Projects presented by MDBs

Africa
West Africa Power pool (WAPP)
Ethiopia and Kenya Power Systems Interconnection
Inga Hydropower
North-South Corridor (NSC)
Isaka-Kigali Railway
Middle East and North Africa (MENA)
Jordan Railway project
Scaling up solar energy in MENA for export to European Markets
Asia
Turkmenistan-Afghanistan-Pakistan and India (TAPI) Natural Gas Pipeline
ASEAN Infrastructure Fund (AIF)
Regional Program for Scaling-up Clean Biomass Energy in the Greater Mekong Subregion
Latin America and Caribbean
Pacific Corridor

Source: Multilateral and Regional Development Banks.

54. At the request of the HLP, the MDBs have prepared for each of these projects a short note summarising its content as well as highlighting the reasons behind their selection by the MDBs as exemplary projects. These notes which reflect the views of the MDBs are included in the next pages from this document.

AFRICA

West African Power Pool (WAPP): Côte d'Ivoire-Liberia-Sierra Leone-Guinea (CLSG) Interconnector

Overview

This project will support the construction of a 1,400 kilometer transmission line inter-connecting four countries – Cote d'Ivoire, Liberia, Sierra Leone and Guinea – with a combined population of 40 million. The total cost of phase 1 development of the project is estimated at approximately US$500 million and will be co-financed by a number of donors, including the World Bank, the AfDB, the EIB, and KfW. The project design has been adapted to the available funding envelope, and no shortfall is envisaged at present. The World Bank is preparing a loan of US$150 million for the project.

Regional Integration

This infrastructure will not only integrate the power systems of these four countries with a combined population of 40 million, but also connect them to the broader WAPP that stretches from Nigeria to Senegal, with a combined population of 200 million people. This will help to facilitate mutually beneficial power exchange across this entire area.

Political Support

The WAPP is on the AU-NEPAD Priority Projects List, and CLSG is a key sub-component. All four countries support the project and have signed the project protocol, although there are some issues with Cote d'Ivoire.

Transformation

Liberia and Sierra Leone face exceptionally high costs of power generation (US$0.30-45 per kilowatt-hour), while neighbouring Guinea and Cote d'Ivoire have relatively cost-effective hydro-power and natural gas with costs closer to US$0.10 per kilowatt-hour. By allowing power exchanges between these countries and the broader WAPP, the project will contribute greatly to the reduction in power costs in Liberia and Sierra Leone, while at the same time allowing Guinea to develop its potential as a major hydro-power exporter across the WAPP area. The project would also contribute significantly to the development of a national power grid in Guinea, Liberia and Sierra Leone, providing a basis for expanding low levels of electrification in these countries (currently under 20 percent).

Maturity

The project is at an advanced state of preparation with feasibility studies completed, environmental studies well underway and project financiers identified.

Institutional Capacity

The implementing agency – the WAPP Secretariat – has significant capacity. However, all beneficiary countries are fragile states, and many of the national power utilities are in a weak financial condition with limited institutional capacity.

Private Sector Potential

There are relatively few examples of multi-country transmission projects being funded by the private sector. However, the existence of the inter-connector would pave the way for some of Guinea's hydro-power resources to be developed potentially as export-oriented Independent Power Projects.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	**High**	**High**	**Medium**	**Low**	**Low**

AFRICA

Eastern Africa Power Pool (EAPP): Ethiopia-Kenya Interconnector

Overview

The project aims to inter-connect the power systems of Ethiopia and Kenya at an estimated cost of US$900 million. The pledges made by the development partners involved in the financing are sufficient to cover the required investment cost. The list of donors includes the AfDB, the AFD, KfW, the EIB and the World Bank.

Regional Integration

The 1,000 kilometer inter-connector with a transfer capacity of 2,000 mega-watts would integrate Ethiopia into the East Africa Power Pool (comprising Burundi, Kenya, Rwanda, Tanzania and Uganda) serving a combined population of 100 million.

Political Support

This project is a priority project of the East Africa Power Pool. The governments of the two implementing countries – Ethiopia and Kenya – are both committed to the project and have been actively involved in its preparation.

Transformation

Kenya and the other members of the East African Power Pool have been experiencing chronic power shortages, and have been forced to rely on increasingly expensive thermal power. Neighbouring Ethiopia has substantial clean hydro-power resources estimated at 30 Giga-watts with a substantially lower energy cost allowing both countries to share the benefit of the interconnection. This infrastructure will also eventually facilitate exchange of Kenya's substantial geothermal and wind potential. The integration of these two markets will thus improve the availability of power and help to improve the reliability of supply.

Maturity

The project's feasibility and associated environmental studies have been completed and demonstrate demonstrating its overall viability. A group of financiers has been identified.

Institutional Capacity

Both Kenya and Ethiopia have relatively well-developed power sector institutions to support the implementation of the project; although power trade is still incipient in the East Africa Power Pool.

Private Sector Potential

While there is limited international experience of private investment in transmission infrastructure, once the inter-connector is in place it could facilitate the development of export-oriented Independent Power Projects in Ethiopia.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
Medium	High	High	Medium	High	Medium

AFRICA

Development of Inga hydropower site and associated transmission

Overview

This project supports the optimal phasing of Africa's premier hydro-power site at the Inga Falls in the Bas Congo Region of DRC, with the objective of gradually developing its potential, and providing the necessary transmission links to ensure that the power produced can benefit both DRC and the surrounding region through power export. While the full hydropower potential of the Inga Site is up to 40 Giga-watt, the objective is to implement over the years optimal sub-projects to phase it. Concerned multilateral and bilateral donors include WB, EIB, AfDB, KFW and AFD.

Regional Integration

Inga is a key project in terms of promoting integration of regional power pools in Africa. The construction of the associated transmission lines would allow power produced at the site to benefit 16 neighboring countries in the Central and Southern Africa Power Pools with an aggregate population of over 400 million. Many of these countries are currently power-constrained and experiencing chronic outages.

Political Support

The Government of the DRC is championing this project. The project is identified as a continental priority in the NEPAD Africa Action Plan.

Transformation

The project would lead to a massive expansion of power availability, and significantly increase the continent's reliance on clean renewable energy sources. The site's 40 Giga-watt potential is almost double that of the world's largest hydro-project (Three Gorges Dam), and significantly exceeds the current installed generation capacity of Sub-Saharan Africa (excluding South Africa). Due to its large scale and hydrological characteristics, the Inga site offers *the* most cost-effective source of power currently available to Sub-Saharan Africa, estimated at some US$0.04 per kilowatt-hour at plant gate, compared with Africa's average end-user power cost of US$0.18 per kilowatt-hour.

Maturity

The project is at the pre-feasibility stage. While rehabilitation of Inga 1 and Inga 2 is underway, a huge amount of feasibility work will be needed to prepare for financing once basic design decisions are taken. Feasibility work for the next phase of the development of Inga hydropower site alone is expected to cost in excess of US$50 million, and in excess of US$100 million for the full Inga site (40GW).

Institutional Capacity

The project is located in a fragile state. The financial condition and institutional capacity of the domestic power utility is weak, but the next phase of Inga site's development will involve the private investor/developer and a steering committee with external support.

Private Sector Potential

The next phase of Inga project is to be structured as a PPP with key off-takers in local processing industries, manufacturing interests and neighboring countries importing power.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	Low	Medium	High

AFRICA

North-South Corridor

Overview

The project aims to improve the state of physical transport infrastructure (roads, rail, border-posts, ports), as well as the regulatory environment for trade facilitation (by simplifying and reducing cross-border clearance procedures, harmonizing transit and transport regulations, and simplifying administrative requirements, etc) along southern Africa's key trading arteries. The current funding amount is about US$1.2b, after the High Level Financing Conference in Lusaka April 2009 with. The list of donors includes the AfDB, the DFID, the EU, the World Bank, and other bilateral donors.

Regional Integration

The 4,000 kilometer North-South Corridor links the copper belt in Zambia and southeastern DRC with the port of Durban in South Africa; also incorporating two eastward spurs to the ports of Dar Es Salaam in Tanzania and Nacala in northern Mozambique. The North-South Corridor is the main route to the sea for five landlocked countries/regions – Botswana, Malawi, Zambia, Zimbabwe and southeastern DRC – with a total population of 40 million people. The smooth functioning of the corridor involves close coordination of infrastructure investments and trade facilitation among the eight countries involved.

Political Support

The North-South Corridor Pilot Aid-for-Trade Program is the flagship infrastructure initiative of the Tripartite Arrangement between COMESA, EAC and SADC since 2008. A High Level Financing Conference held in 2009 secured pledges of US$ 1.2 billion for the corridor. The UK government is supporting the NSC through its TradeMark South Africa program. In 2010, President Zuma, of South Africa agreed to champion the North-South Corridor as part of the AU's Presidential Infrastructure Championing Initiative (PICI) aimed at providing political leadership to delivery of regional projects.

Transformation

The North-South Corridor is the main transport artery in southern Africa, supporting some US$80 billion of exports and US$5 billion on intra-regional southern African trade. The project addresses missing infrastructure links and lengthy border delays, which contribute to slow, expensive and unreliable transit for goods. Delays currently add up to several days at borders costing US$170 million a year, while the effective velocity of freight along the corridor has been estimated at no more than 10 miles per hour.

Maturity

The program encompasses numerous individual projects at different stages of preparation and implementation totaling US$8 billion in all. Greater progress has been made on roads and trade facilitation than on the railway agenda.

Institutional Capacity

The extent of institutional capacity varies significantly among the eight countries involved in the project, but overall can be assessed as moderate. The formation of a corridor association is planned.

Private Sector Potential

Most of the investments required in the corridor are upgrades to road and rail infrastructure, which are unlikely to attract private sector funding. Private sector involvement in railway operations and rolling stock investments is already a feature of the corridor.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	Medium	Medium	Low

AFRICA

Isaka-Kigali Railway

Overview
The project involves the extension of the existing 980 kilometer Tanzanian railway line from Dar Es Salaam to Isaka onwards for a further 494 kilometer from Isaka on to Kigali in Rwanda at an estimated cost of US$1.6 billion. There are also plans to add a spur from Keza in Tanzania to Musongati in Burundi (197 km).

Regional Integration
The project will complete the rail network from the port of Dar Es Salaam to the landlocked capitals of Rwanda, and potentially also Burundi. The link will go through the Inland Clearing Depot or dry port at Isaka in central Tanzania, which was designed to speed-up the delivery of transit goods to Rwanda and Burundi.

Political Support
The Isaka-Kigali railway project is the highest ranked priority within the framework of the East African Railway Master Plan.

Transformation
The project is intended to reduce the unit costs of freight and passenger traffic to the landlocked countries of East Africa, potentially improving their competitiveness. The project will also enhance the financial attractiveness of various mining developments that international mining companies are presently exploring and provide "greener" transport solutions to the current transport modes used in the region.

Maturity
Technical and financial feasibility studies are currently underway, which will also include the optimal way to structure the investment.

Institutional Capacity
There is moderate institutional capacity in the affected countries.

Private Sector Potential
PPP models are being considered, although their viability would depend on traffic volumes.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
Medium	Medium	Medium	Low	Medium	Low

MENA

Jordan Railway Project – Connecting Europe to GCC

Overview
The Kingdom of Jordan is planning to develop a new railway network which will connect major centers, ports and entry points within Jordan to its neighboring countries (Syria, Saudi Arabia and Iraq). The total capital investment requirement is US$ 5 billion. The estimated total cost for development of infrastructure is US$ 3.8 billion, which is currently envisaged to be financed through public sector debt in amount of US$ 3.4 billion and remaining US$ 0.4 billion is expected to be financed by the Government of Jordan. The donors meeting, held in Jordan, in February 2011 was able to tentatively raise approximately 70% of total financing needs.

Regional Integration
Upon completion the project will integrate Jordan with its neighboring countries to foster improved regional cooperation as well as connect European railway network, through Turkey and Syria with Saudi Arabia and GCC region.

Political Support
The Project enjoys the full political support of the Government of Jordan.

Transformation
The Project will foster regional and local economic growth by increasing the flow of trade within the GCC countries as well as between Middle East and Europe by reducing the cross-border cost of transportation.

Maturity
The Government of Jordan, using its own financial resources, has already completed the full bankable feasibility study including the project design. The Jordan Railway Company (currently wholly owned by the Government) has also been established. Required laws and regulations have also been put in place, effectively making the project ready for tender. World Bank, IsDB, EIB, AFD, JICA, Arab Fund, Saudi Fund, Kuwait Fund, and Abu Dhabi Fund have already expressed interest in financing the Project.

Institutional Capacity
The Jordan Railway Company (currently wholly owned by the Government) has already been established for purposes of implementing the project. Required laws and regulations have also been put in place, effectively making the project ready for tender.

Private Sector Potential
US$ 1.2 billion representing rolling stock investments (including provisioning of Locomotives and Wagons) will be financed by granting a concession to a private party under a PPP scheme.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	High	High	High

MENA

Scaling-up Solar Energy in MENA for Export to European Markets

Overview
MENA countries are embarking on scaling-up concentrated solar power (CSP) investment programs to reduce their current consumption of oil and gas in the power sector as well as for export of solar energy to their European neighbors. Moreover, the CSP development is motivated by objectives of employment creation, climate change mitigation, regional integration, and energy security through development of indigenous solar renewable energy resources. These objectives have been reflected in the Mediterranean Solar Plan and Desertec Industry Initiative.

Regional Integration
MENA CSP will enable trade in solar energy, a fundamental pillar of MENA-EU economic integration, and it therefore presents a major opportunity for MENA to earn export revenue.

Political Support
The Project currently enjoys the full political support of five MENA countries including Morocco, Algeria, Tunisia, Egypt and Jordan.

Transformation
MENA solar scale-up envisions to enable the region to become home to a new "Green" industry. If the global CSP market increases rapidly in the next few years, the region could benefit from significant job and wealth creation, as well as from enough RE power supply to satisfy the growing demand.

Maturity
The first 500 MW CSP plant is already under construction in Morocco. Negotiations are also underway for development of CSP in Algeria, Egypt, Jordan, Morocco, Tunisia at an estimated cost of US$ 4 billion. Currently, the scale-up of CSP is being supported by a multi-donor group which includes AfDB, World Bank Group, IsDB and EIB, as well as Japanese and European donors.

Institutional Capacity
The MENA countries being targeted by the initiative have extensive experience in development of conventional power generation and associated transmission facilities. The individual project Executing Agencies will also be assisted by specialized consultants to assist with the particular aspects of CSP projects during tendering and construction phases.

Private Sector Potential
The initiative is envisioned to benefit from both public and private sector financing for its development.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	Medium	High	High

ASIA

Turkmenistan-Afghanistan-Pakistan-India Natural Gas Pipeline Project (TAPI)

Overview

This project helps Turkmenistan to diversify its natural gas access to market, by supplying gas from Yolotan-Osman gas field in Turkmenistan to buyers downstream via approximately 1,800km long pipeline. The total cost of the TAPI is about $ 7.6 billion in 2008 estimates. Afghanistan, India and Pakistan can secure long-term clean energy supply. The TAPI financing is expected to come from international and domestic banks including potentially AsDB and investments from commercial sponsors and from state owned enterprises.

Regional Integration

The project will connect the natural gas supplies in Turkmenistan with the energy markets in Afghanistan, Pakistan and India. Successful implementation will deepen the regional economic integration. TAPI would also enhance regional peace and security.

Political Support

The project enjoys the support from the concerned regional countries. Gas Pipeline Framework Agreement (GPFA) and Inter Government Agreement (IGA) were signed at TAPI Summit of Heads of State/Government in Ashgabat in December 2010.

Transformation

This project would lead to longer term energy security and eventually economic growth for the proposed natural gas buyers. Pakistan will meet part of demand for power plant fuel as well as gas to augment depleting domestic supply. Afghanistan will utilize the natural gas to develop its southern area and India will utilize this gas (climate friendly) for northern part and diversification from domestic coal. At the same time the pipeline will allow Turkmenistan gas customer diversification.

Maturity

The project has had feasibility study financed by the AsDB. In addition to its feasibility study, AsDB has financed several technical assistance to facilitate this project towards financial closure with a private sector constructor and operator which will be selected by the countries.

Institutional Capacity

Through negotiations with each other and commercial parties interested in becoming the partners for TAPI, the participating countries' institutional capacity for multi-party cross border transactions will be significantly increased.

Private Sector Potential

Commercial partners for TAPI will be sought by the countries.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	Medium	Medium	High

ASIA

ASEAN Infrastructure Fund (AIF)

Overview
To tackle the major infrastructure deficiencies in the Association of Southeast Asian Nations (ASEAN), ASEAN countries and ADB will set up an investment fund (AIF) with a total equity contribution of $485.2 million. AIF will lend for long-tenor sovereign/ sovereign guaranteed infrastructure projects, from 2012 onwards. Total lending commitment by AIF until 2020 is estimated at about $ 4 billion.

Regional Integration
AIF will contribute to enhanced access to key infrastructure services with the ASEAN leading to improved regional cooperation including greater trade and connectivity; and synergy with other ASEAN regional integration initiatives including Chiang Mai Multilateral Initiative Mechanism, ASEAN Bond Market Initiative. One of the primary operation targets is that the portion of regional projects should be at least 30%.

Transformation
Through this initiative, and with ADB's investment, technical and operational support, ASEAN's investments will be catalyzed, representing an important effort at south-south cooperation. The AIF model thus holds the promise of leveraging future potential equity contributions and cofinancing, and subsequently demonstrating a means of unlocking a portion of the region's own resources (such as domestic savings and foreign reserves) for its needs through future debt issuance.

Political Support
The AIF was endorsed by the Asian Development Bank (ADB) Board in mid September, 2011 and subsequently was signed by the ASEAN Finance Ministers and the President of ADB at the time of the IMF/World Bank Annual Meetings in Washington, D.C. at the end of September, 2011.

Maturity
Preliminary project pipeline is under preparation. In addition, further cofinancing by other development partners, including private institutions have already been committed.

Institutional Capacity
The participating ASEAN members have requested ADB to provide the full range of services relating to project sourcing, design, execution, implementation and evaluation. In addition, ADB has been requested to act as the lender of record for all AIF investments.

Private Sector Potential
The AIF is expected to engage only in sovereign operations during its initial stage. Once a strong track has been developed, it could expand to non-sovereign operation. Also, ADB's participation as a lender of recorder and its role as market catalyst could partially mitigate any risk arising from insufficient funding from private sources to fully cover project costs.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	High	High	Medium	High

ASIA

Scaling-Up Clean Biomass Energy in the Greater Mekong Subregion (GMS)

Overview

The project is to scale up the use of biomass technologies (biogas and biochar) within GMS. The two components are: 1) the regional program of $ 80 million to support efficient utilization of biomass in GMS countries; and 2) the establishment of Asian Rural Biogas Fund for private sector participation.

Regional Integration

Regional cooperation among GMS countries has been successful in implementing their agreed development agendas and regional programs. This regional project is fully supported within this institutional framework.

Transformation

The project is expected to transform the rural poor in Cambodia, Lao PDR and Viet Nam from being emitters of green house gas and black carbon to become active participants in production of clean bioenergy, carbon sequestration, and food security enhancement.

Political Support

The project preparation is through the regional cooperation mechanism of GMS Working Group on Agriculture, representing a strong government support of this project.

Maturity

The technologies in utilizing biomass for bioenergy and food security have been fully demonstrated within the GMS, notably in Cambodia, Lao, PDR and Viet Nam and have been found to be both financially and economically viable, with strong participation from private sector. The Japan Asia Clean Energy Fund has earmarked $ 1.5 million to support the formulation of the regional project in 2012.

Institutional Capacity

The Secretariat of the GMS Working Group on Agriculture and ADB will implement this project through the existing regional cooperation mechanism. An on-going $4 million regional capacity building technical assistance is currently building institutional and human capacities on biomass technologies to ensure efficient project formulation and implementation.

Private Sector Potential

Private sector is currently active in this sector. To further enhance their participation, ADB is developing the Asian Rural Biogas Fund in partnership with SNV and KfW to deploy one million domestic biogas digesters to provide access to clean energy to 5 million poor in Asian countries by 2015. The fund is divided into a US$ 100 million regional structured debt fund to be on-lent by financial institutions, and a US$ 175 million basket grant fund for developing the associated markets wherever feasible.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High	Medium	High	Medium	High

LATIN AMERICA AND CARIBBEAN

Pacific Corridor

Overview

The objective of the Pacific Corridor is to integrate the Meso American region by facilitating the transport of goods and persons. The project consists of a series of highway and border crossing improvements across 7 Meso-American countries, in order to provide an efficient and safe corridor for trade intra-regional trade. The Pacific Corridor starts in the city of Puebla (Mexico), and follows the coastal route parallel to the Pacific Ocean until Panama City, covering a total length of 3,244 km. Studies show an aggregate economic cost of US$ 2,256 m. The proposed investments vary depending on the scope and size of the investments for each concerned country.

Regional Integration

The Project will enable regional integration and economic cooperation for seven countries in the Meso-American region.

Political Support

The Project enjoys the full political support of the seven countries (México, Panama, Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala). The project will be ratified as a regional priority in the upcoming Presidential Integration Summit (Oct. 17, 2011).

Transformation

The Project will create an efficient and safe corridor to accommodate the growing needs of trade and transportation. It will be an opportunity to, not only provide top quality infrastructure, but also modern technologies for freight transportation and facilitation at the border crossings that can be replicated throughout the region.

Maturity

The project is at the preparation stages. While minor works could start soon, the project still requires completing its engineering stages before moving to construction phase.

Institutional Capacity

While the project represents a significant challenge for the region, the IDB with its ample experience in the transportation sector will support the project implementation and transfer the necessary knowledge to the local ministries and agencies.

Private Sector Potential

The project has been proposed as an opportunity for private sector involvement. Studies show that toll roads could pay between 30-40% of the total project costs, while the remainder would consist of public funds.

Regional Integration	Political Support	Transformation	Maturity	Institutional Capacity	Private Sector Potential
High	High .	High	Medium	Medium	Medium