

STRENGTHENING SUPPORT FOR REGIONAL PROJECTS BACKGROUND NOTE

International Development Association IDA Resource Mobilization Department (CFPIR)

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ACRONYMS AND ABBREVIATIONS

AFD Agence Française de Developpement

AfDB African Development Bank
APL Adaptable Program Loan
CRW Crisis Response Window

DBSA Development Bank of South Africa

DFID Department for International Development

DRC Democratic Republic of the Congo ECA Country Performance Rating

ECOWAS Economic Community Organization for West Africa States

EDF Electricité de France

EDM Mozambique Electricity Utility EIB European Investment Bank

ESKOM Electricity Supply Commission (South Africa)

ESW Economic and Sector Work
GDP Gross Domestic Product
HES Hydro-Electric Scheme
HVDC High Voltage Direct Current

IBRD International Bank for Reconstruction and Development

IDA International Development Association
 IFC International Finance Corporation
 IMF International Monetary Fund
 MDB Multilateral Development Bank

MIGA Multilateral Investment Guarantee Agency

MW Megawatts

PMEDE Electricity Markets for Domestic Consumption and Export

PPP Public-Private Partnership
REN Redes Energéticas Nacionais

SADC Southern African Development Community
SAPMP Southern African Power Market Program

SAPP Southern Africa Power Pool

SAR South Asia Region

STE Sociedade Nacional de Transporte de Energia

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EXECUTIVE SUMMARY

- i. At the IDA16 Mid-Term Review and the first two IDA17 replenishment meetings, Participants discussed progress under the IDA regional program and examined the issue of how IDA could expand its role in facilitating the preparation and implementation of projects with a significant transformational impact at the regional level. Since IDA13, IDA has provided support for this type of projects through its regional program. However, IDA's ability to support regional transformational projects has been constrained by two factors. First, when projects do not qualify for financing from the IDA regional program because their physical implementation is only in one country, even though they are expected to have a regional impact. Second, when the financing needs of qualifying projects exceed the resources available from the country's IDA allocation and/or the IDA regional program.
- ii. At the request of Participants at the second meeting of the IDA17 replenishment, this note provides further information on Management's proposed approach to address these constraints. In response to the growing and unfulfilled demand for regional programs, Management proposes to scale up financing for the IDA's regional program. Furthermore, given that the criteria that currently guide the use of regional resources can in exceptional cases constrain the ability of IDA to finance projects that could have a transformational impact on a region or sub-region, Management proposes the following:
- Introduce on a case-by-case basis, and subject to approval by IDA's Executive Directors, the ability to finance, with resources from the IDA regional program, projects that require financial participation of only one IDA country, where it can be clearly demonstrated that the project would have a transformational impact on the region, and that three or more countries (two, if one is a Fragile and Conflict-affected State, FCS) would receive substantial benefits from the project;
- Cap, on a case-by-case basis, and subject to approval by IDA's Executive Directors, the amount that comes from a country's regular IDA allocation to 20 percent of a country's IDA17 allocation for regional projects where project costs are very large relative to a country's available IDA resources.
- iii. In considering such case-by-case exceptions for funding from the IDA regional program, Management would be guided by the following parameters: (i) seek to catalyze strong partnerships to leverage financing from the public and private sectors, working with IFC, MIGA, IBRD, MDBs and other partners as appropriate; and (ii) cap financing to support the total envelope of such case-by-case exceptions to 20 percent of the IDA17 regional program envelope.

I. INTRODUCTION

- 1. The issue of how IDA can expand its role in facilitating the preparation and implementation of regional transformational projects was discussed at the IDA16 Mid-Term Review and the first two IDA17 replenishment meetings. The Mid-Term Review paper "Progress Update and Review of the Provision of Grants to Regional Organizations" provided an update on the implementation of the IDA regional program. The background paper "IDA Support to Transformational Projects with Regional Impact" that was prepared for the IDA17 first replenishment meeting in Paris provided background and analysis on how IDA could better support projects with a significant transformational impact at the regional level. This issue was further highlighted as part of the Ask Paper, which was discussed at the second IDA17 replenishment meeting in Managua.² At the meetings, Participants expressed support for scaling up IDA's regional program, and requested more information on Management's proposed changes to the eligibility criteria and financing rules aimed at addressing identified constraints to IDA's ability to support regional projects. This note responds to this request.
- 2. **This technical note is structured as follows:** Section II describes the current criteria for accessing IDA regional resources; Section III presents Management's proposal to scale up financing for the IDA regional program and to adjust, on a case-by-case basis and subject to approval by IDA Executive Directors, the eligibility and financing rules for IDA's regional program. Annex 1 presents an illustrative list of potential projects with a significant transformational impact at the regional level that may be considered for applying this flexibility (this list was compiled through close dialogue with the regions and sectors, and would be continuously updated throughout IDA17).

II. EXISTING CRITERIA FOR ACCESSING IDA REGIONAL RESOURCES

3. After the introduction of the IDA regional program in IDA13, the financing and eligibility criteria for regional projects have evolved to meet clients' needs and increased demand. The current set of criteria for accessing IDA regional resources (see Box 1 for details) have provided good guidance to Management in identifying and prioritizing IDA regional projects. They have been amended over time in consultation with Deputies based on lessons learned from implementation experience as well as from the evolving needs for regional solutions in IDA countries. Among the changes introduced were the setting of limits to the country contribution to regional projects for small countries (20 percent) introduced in IDA15; enabling regional projects to be financed with two (instead of three) participating countries, if one of those countries is an FCS (introduced in IDA16); introduction of the ability to finance grants for regional organizations (introduced at the IDA15 Mid-Term Review – MTR), and most recently, amendments in the criteria for financing regional grants (introduced at the IDA16

¹ IDA, October 2012, "IDA Regional Integration Program: Progress Update and Review of the Provision of Grants to Regional Organizations".

² IDA, March 2013, "IDA Support to Transformational Projects with Regional Impact"; and IDA, June 2013, "The Demand for IDA17 Resources and the Strategy for their Effective Use".

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MTR). At the same time, the size of the regional envelope has steadily increased in response to growing demand – from SDR304 million (US\$435 million) in IDA13 to SDR1.5 billion (US\$2.25 billion) in IDA16.

Box 1: Criteria for IDA Regional Projects

To be eligible for support under the IDA's regional program, initiatives must:

- a) Involve three or more countries, all of which need to participate for the project's objectives to be achievable and at least one of which is an IDA country. The required minimum number of countries is reduced from three to two if at least one IDA FCS participates in the regional project;
- b) Have benefits that spill over country boundaries (e.g., generate positive externalities or mitigate negative ones across countries);
- c) Have clear evidence of country or regional ownership (e.g., by ECOWAS or SADC) which demonstrates commitment of the majority of participating countries; and
- d) Provide a platform for a high level of policy harmonization between countries and be part of a well-developed and broadly-supported regional strategy.

In addition to the regional project eligibility criteria described above, two additional criteria are applied to prioritize projects, including:

- e) Regional projects should avoid funding primarily national-level investments with regional resources. The specific investments proposed within a regional project should have clear externalities, not just the regional concept itself; and
- f) Given the high demand for IDA regional project financing, IDA funding should be considered only once other options have been ruled out. Leveraging other resources and working with development partners are strongly encouraged.

III. ENHANCING SUPPORT TO REGIONAL TRANSFORMATIVE PROJECTS

4. **IDA** has long been a key partner of **IDA** countries in regional integration efforts. This program integrates a strong emphasis on leveraging partnerships, including with the private sector, and has leveraged over US\$3 billion in co-financing and parallel financing. However, IDA's ability to expand its role to further facilitate the preparation and implementation of projects with a transformational impact on a region or sub-region has been constrained by two factors. First, a project that is expected to have a significant regional impact, would not qualify for financing from IDA's regional program because its physical implementation takes place in a single country. Second, a project that does qualify for IDA regional program financing, would not proceed because the financing needs of the project exceed the resources available from one or more of the participating countries' IDA allocation. Tackling these constraints would enable IDA to better use its technical, financial and convening competencies to support key investments that have the potential to catalyze results at the regional level.

5. Given the strong demand for regional project financing, Management recommends scaling up financing for the regional program as detailed in the three "ask" scenarios described in the paper "Updated IDA17 Financing Framework and Key Financial Variables" and shown in Table 1 below. Specifically, under the preferred scenario the regional program envelope would amount to SDR2.0 billion (US\$3.0 billion), a 10 percent nominal increase over the IDA16 actual level of SDR1.8 billion (US\$2.7 billion). This increase would allow IDA to address the strong and rising demand for regional projects, including from many FCSs. Furthermore, the scaling up would respond to requests from clients for IDA to play a leading role in the preparation and implementation of regional transformational projects given its unique offering of scale financing, state-of-the-art global knowledge and extensive partnerships.

Table 1: Financing for the Regional Program
Under the Preferred and Alternative IDA17 "Ask" Scenarios (SDR million)

	TD 146	TD 146 1 1	IDA17 Scenarios		
	IDA16 Baseline	IDA16 Actual (including CRW Reallocations)	Lower	Preferred	Higher
Financing Scenario	1,500	1,815	1,933	1,997	2,061
Possible allocation to projects not meeting current regional IDA criteria (limited to 20% of the IDA regional program envelope)			(387)	(399)	(412)

6. Furthermore, Management proposes the following:

- Introduce on a case-by-case basis, and subject to approval by IDA's Executive Directors, the ability to finance, with resources from the IDA regional program, projects that require financial participation of only one IDA country, where it can be clearly demonstrated that the project would have a transformational impact on the region, and that three or more countries (two, if one is an FCS) would receive substantial benefits from the project;
- Cap, on a case-by-case basis, and subject to approval by IDA's Executive Directors, the amount that comes from a country's regular IDA allocation to 20 percent of a country's IDA17 allocation for regional projects where project costs are very large relative to a country's available IDA resources.³
- 7. An illustrative list of potential projects with a significant transformational impact at the regional level that could be considered for a case-by-case approach set out above is

³ This is already the practice for countries with small IDA allocations (defined as allocations of less than SDR13 million).

presented in Table 2. This list was compiled through close dialogue with the regions and sectors, and would be continuously updated throughout IDA17. The list shows the type of projects that would have a transformational impact at the regional level and which IDA has difficulty in supporting, either due to the country-rule criteria for regional projects, or because the financing needs are large relative to the size of a country's IDA allocation. With these adjustments implemented on a case-by-case basis, IDA could play a more active role in these projects, in conjunction with other development partners. More information is provided on these potential projects in Annex 1.

Table 2: Illustrative List of Projects with Significant Transformational Impact at the Regional Level

	Project	Benefitting Countries	National and Regional Financing Challenge	Country Rule Challenge
1	Mozambique Regional Transmission Project	Mozambique, South Africa, Botswana, Swaziland, Malawi, Namibia, Lesotho, Tanzania, Zambia, Angola, Democratic Republic of Congo	√	✓
2	Inga III	Democratic Republic of Congo, Zambia, Namibia, Angola, Botswana, South Africa	✓	✓
3	Abidjan Port Reform and Expansion	Côte d'Ivoire, Burkina Faso, Mali, Niger		✓
4	Nepal Hydropower	Nepal, Bangladesh, India, South Asia Energy Market	✓	✓
5	Bangladesh regional trade and transport	Bangladesh, Nepal, India		✓

8. In considering such case-by-case exceptions for funding from the IDA regional program, Management would be guided by the following parameters: (i) seek to catalyze strong partnerships to leverage financing from the public and private sectors, working with IFC, MIGA, MDBs and other partners as appropriate; and (ii) cap financing to support the total envelope of such case-by-case exceptions to 20 percent of the IDA17 regional program envelope. With respect to the latter, and based on the ask scenarios for the IDA17 replenishment, this could

result in a maximum of about SDR387-412 million (US\$583-621 million) to be made available to support this type of projects. The remaining regional IDA resources would support (i) regional IDA projects that would satisfy all the current regional IDA criteria, and will continue to leverage the one-third national IDA contributions; and (ii) IDA grants to regional institutions in line with the agreed eligibility criteria.

9. Board documentation for projects seeking approval for a case-by-case exception to the regular regional project criteria from IDA's Executive Directors would include analysis and information on: (i) the project's potential to have a significant transformational impact on the region or sub-region; (ii) how the project meets key strategic priorities for the participating countries, regional institutions, IDA and other development partners; and (iii) the need for IDA resources, including that the project would not be able to proceed under the regular regional IDA project criteria. This will help maintain a strong focus on project selectivity, and thus protect the regional nature of the program. It is not envisioned that the proposed adjustments would have a major impact on the type of projects currently being financed by the regional IDA program – except it would allow IDA to engage more fully on a few selected projects with transformational potential at the regional level, which are fully aligned with the current objectives of the regional IDA program. Management would report on the experience in implementation of these case-by-case adjustments to the regional program at the IDA17 Mid-Term Review.

Annex 1

Illustrative List of Projects with Significant Transformational Impact at the Regional Level

Mozambique Regional Transmission Project

1. The Mozambique Regional Transmission Project (Sociedade Nacional de Transporte de Energia or 'STE') will finance development of two high-voltage transmission lines that will link the energy resource-rich central (Tete) region of Mozambique with the major regional power demand centers in the South Africa Power Pool, including the South Africa grid and Mozambique's central and Maputo regions.

Cost Estimate and Co-Financiers

- 2. The total combined costs for the phase of the project the transmission lines and the first power generation project on the Zambezi River to use the STE the 1,500 MW Mphanda Nkuwa hydropower plant is estimated to be in the order of US\$5 billion. IDA has so far allocated US\$150 million from country and regional IDA allocations to be structured as a government equity contribution and Partial Risk Guarantees (PRGs). While IDA has been leading on the project's technical development and coordination, additional IDA regional resources will be required.
- 3. The project is to be developed as a public-private partnership (PPP). The Government of Mozambique has signed agreements with the State Grid Company of China and the China Development Bank as the main shareholders/financiers of the project, with smaller shareholdings for REN of Portugal, ESKOM of South Africa and EDM (the Mozambique Electricity Utility). The agreements also cover the planned Mphanda Nkuwa Hydropower development which will feed into the transmission line, where EDF of France, Electrobras of Brazil, ESKOM of South Africa and EDM would all be minority shareholders. Partners who have expressed willingness to participate include AfDB, EIB, AFD and DBSA. IFC has also been approached by EdF of France for financing.

Transformational Impact

9. The transmission lines would deliver significant quantities of least cost power for the wider Southern Africa Power Pool (SAPP). In addition, the project would create – for the first time – a unified national power system in Mozambique supporting its plans to increase access to electricity (Mozambique has one of the lowest electrification rates in southern Africa, with only 15 percent of households having access to electricity). The first generation project due to deliver power through the transmission lines is the Mphanda Nkuwa 1,500 MW hydropower plant followed by the Cahora Bassa North Bank generation project, both of which are expected to generate power at significant cost savings relative to thermal solutions. The developments would also foster low carbon energy development, with Mphanda Nkuwa alone expected to displace up to 7.2m tons of CO2 equivalent emissions per year. Development of the North Bank of Cahora Bassa and supply through the STE would potentially lead to additional substitution.

Regional IDA Criteria and/or Financing Constraints

10. While development of the STE project (and associated Mphanda Nkuwa generation project) is a critical component of the Southern Africa Power Pool master plan, it lays entirely within the borders of one country – Mozambique. This project would thus not qualify for regional IDA financing despite the significant regional spillovers.

Inga III Hydropower

11. Inga III is the development of the 4,800MW Hydro-Electric Scheme (HES) and associated transmission infrastructure on the Congo River in the Democratic Republic of Congo (DRC). Inga III is a precursor to the ~40GW Grand Inga hydropower development. The project consists of an intake on the Congo river and a 12.1 km transfer canal to bring the waters to the Bundi valley; a 113 meter high roller-compacted concrete (RCC) dam at the end of the Bundi valley and a hydropower station equipped with 11 units for a total capacity of 4,755 MW; and under the initial design, HVDC transmission lines connecting the power station to Witkop (South Africa) via Kolwezi (Katanga region) with a total length of 3,381 km, and two switchyards in Inga, one DC/AC converting station in Kolwezi and one in Witkop, with two HVDC lines between Kolwezi and Witkop (South Africa). Alternatively, power transmission from the Zambia border towards South Africa would be through AC lines and substations integrated within the SAPP transmission infrastructure.

Cost Estimate and Co-Financiers

12. The construction costs of Inga III and associated transmission lines are estimated at US\$9.8 billion. The AfDB, EIB and MIGA have all expressed interest in participating in the financing of Inga III. ESKOM is expected to play a key role as offtaker. Export credit agencies from countries of selected development firm(s) are also expected to play a key role.

Transformational Impact

- 13. With half of the continent's water resources, the DRC has a hydro-power potential of 100 GW. With 40 GW, Inga alone is the largest hydropower site in the world and one of the continent's most cost-effective power sources (at an estimated overall cost of about US\$0.02/kWh). Inga's development would allow for a transformational reduction in power costs both within DRC and across the sub-region through export to the Southern Africa Power Pool (SAPP). Inga III is the next phase of the Inga site development, with an expected generation capacity of 4.5 GW, to later be followed by the Grand Inga development, increasing generation capacity at the site to 40 GW.
- 14. The Africa Infrastructure Country Diagnostic Study estimates that the displacement of thermal generation with cost-effective hydropower from DRC could save the SAPP region US\$1.1 billion annually in power costs and reduce the long run marginal cost of power from US\$0.07 to US\$0.06 per kilowatt-hour or 5 percent overall. The largest benefits would be felt

by countries with thermal-based systems, which could save as much as US\$0.05 per kilowatt-hour or more than 40 percent of power costs overall. The shift to cleaner energy would reduce regional carbon emissions by a significant 41 million tons annually.

Regional IDA Criteria and/or Financing Constraints

15. Given that the Inga site falls solely within DRC, this project would thus not qualify for regional IDA financing despite the significant regional spillovers. However, the project could be presented within a regional program/series of operations for the SAPP, similar to the rehabilitation of Inga I and II (PMEDE) and the transmission line from Inga to Zambia (SAPMP). The key constraint will be financial as the investment cost exceeds the annual GDP of the country. It will require both public and private financing through a PPP to be achieved with a range of instruments (equity financing, guarantees, etc.). The financing costs, even after participation from other partners will be significantly greater than the financing that could be provided from the IDA country allocation (1/3rd) and the IDA regional program (2/3rd), especially given the many other needs of DRC. The project would have a major impact on the sub-region, with several countries expected to benefit from it (DRC, Angola, Namibia, Botswana, Zambia, and South Africa).

Port of Abidjan Reform and Expansion

16. Expansion of the capacity of the Port of Abidjan in Côte d'Ivoire would serve not only the domestic market but also as the import-export hub for West Africa's landlocked countries, such as Burkina Faso, Mali and Niger. Investments would include improving physical port capacity as well as improving the efficiency of port operations.

Transformational Impact

17. Constrained port capacity and efficiency as well as inland barriers raise the costs of goods trade in West Africa. A well-functioning deep-water port, paired with customs reforms and regional road and rail network investments, would greatly improve not only Côte d'Ivoire's competitiveness, but also that of neighboring landlocked countries which depend on Côte d'Ivoire for sea access (Burkina Faso, Niger and Mali).

Regional IDA Criteria and/or Financing Constraints

18. While the benefits of an efficient port would have spillovers region-wide, the project would only involve the participation of one country (e.g., will not meet the 3 country criteria).

Nepal Hydropower Development

19. The project would support the sustainable development of Nepal's hydro electricity generation capacity to meet the country's energy demand, contribute to Nepal's broader development needs, and potentially contribute to meeting regional energy and water security needs.

Project Cost estimates and Co-financiers

20. IDA and IFC could support at least one or two projects with a total capacity of 500-1000 MW (US\$1-2 billion) in the next few years, with IDA providing about 30 percent of the financing. Co-financing from development partners could include the ADB and DFID.

Transformational Impact

21. Nepal has a hydropower generation potential (estimated at 80,000+ MW) which is far in excess of its needs (current demand is estimated at about 1,500-2,000 MW while domestic supply is around 800 MW). Sustainable development of this hydropower potential offers the country the most tangible opportunity to break out of poverty and relieve its crippling energy It would also contribute significantly to reducing India's and South Asia's dependence on costly and polluting oil and coal resources, as well as potentially enhancing water security. Investors for several countries, including Norway, China, India and Korea, are in various stages of studying and developing projects for investment – about 5,000 MW are under active investigation of which at least 3-4,000 MW will be for export to India and potentially beyond (with Bangladesh-India-Nepal discussing trilateral investments). The on-going IDAfinanced Nepal-India transmission line and ADB-financed India-Bangladesh transmission line (expected to be commissioned in September-October 2013) will enable the export of Nepal power and facilitate electricity trade within South Asia. In addition to augmenting the overall supply of clean and renewable energy, hydropower is a complement to the largely thermal power supply systems in India and Nepal, and also offers seasonal complementarity by boosting supply mostly in the summer when Nepal's rivers have abundant water and when India and Bangladesh have the peak electricity demand to cope with the summer heat. Bhutan is already benefiting from this trading opportunity by exporting a large volume of power to India in addition to meeting its domestic demand.

Regional IDA Criteria and/or Financing Constraints

22. Since the physical implementation of the project would be in Nepal, the project would not qualify for accessing IDA regional program funding. Furthermore, the project financing needs greatly exceed Nepal's IDA allocation. This regional project would have transformational impacts in South Asia, especially on the environment, by reducing the need for costly and polluting oil and coal-fired power.

Bangladesh Regional Trade and Transport Project

23. The project would enhance trade between Bangladesh, India and Nepal through investments to facilitate Inland Water Transport along the Bangladesh-India Protocol Route, improve efficiency of key sea ports and support Bangladesh in building efficient land ports.

Cost Estimates and Co-financiers

24. The estimated project cost is US\$500 million. In addition to IDA financing, the following development partners have indicated interest in providing financial support: ADB, IFC and DFID.

Transformational Impact

- 26. While road transportation infrastructure in Bangladesh (and the region more broadly) is congested and Bangladesh's railways need a major institutional overhaul, the country's waterways, which used to be an important mode of energy-efficient transport, are underutilized. In addition to the economic and environmental merits of waterways, the relatively greenfield nature of this engagement offers Bangladesh an opportunity to put in place institutional arrangements, including by leveraging its private sector, while also capitalizing on actions India is taking to revitalize waterways on its side of the border. The project would lower transportation distances between mainland India and India's northeastern states (and beyond) by about 1000 km, revive former transportation routes that supported trade facilitation, boost trade and create jobs in some of the most impoverished parts of Bangladesh, India and Myanmar, and contribute to strengthening economic relations between India and Bangladesh.
- 27. The likely benefits to neighboring countries resulting from this project would include improved access to Chittagong and Mongla seaports for landlocked Nepal (which currently only has access to the congested Kolkata port) and India's north-eastern states. The project is seeking to finance expansion of road sections connecting Bangladesh to West Bengal, India, which is the missing road link for Nepal to access Chittagong and Mongla ports (ADB is financing road linkages in the Siliguri corridor in West Bengal, India, that borders Bangladesh and Nepal); and construction of a new road from Thegamukh (Bangladesh) on the border with Mizoram (India) to Rangamati (Bangladesh), which could open a trade corridor from Chittagong port (Bangladesh) to the North East Indian states. This would reduce the distance from Aizwal, the capital of Mizoram state, to its nearest ports from 1,500 km (Kolkata port, India), to about 500 km (Chittagong Port, Bangladesh). Furthermore, investments in river dredging, terminals and freight handling equipment in Bangladesh along the Bangladesh-India Protocol route would significantly enhance connectivity between India's north eastern states and the mainland. Historically, the Brahmaputra and Barak-Surma rivers were used extensively for transport and trade between northeast India and the port of now Kolkata.

Regional IDA Criteria and/or Financing Constraints

28. The project will have only one borrower (Bangladesh) and thus would not qualify for accessing IDA regional program funding; however, it would complement investments by the Government of India in waterways, roads and border infrastructure on its side of the border, and provide critical transport routes for landlocked Nepal. The World Bank is also supporting the preparation of the Mizoram state roads and regional connectivity project that includes improving border infrastructure between Mizoram and Bangladesh.