Workstream III: Operational Modalities

Background Note: Overview of financing modalities and addressing methods available to manage large-scale financial resources from a number of sources

Purpose of the Note

Consistent with the terms of reference for the Transitional Committee (TC) for design of the Green Climate Fund (contained in 1/CP.16 Annex III), the Co-Facilitators of the Transitional Committee's Workstream III (Operational Modalities) determined that a background note on financing modalities and management of large-scale financial resources from a number of sources is needed to support the Transitional Committee's work. The co-facilitators requested the Technical Support Unit (TSU) to conduct this work under their close guidance.

The background note is a factual description of 1) existing, relevant public sector and public-private financing instruments and access modalities, including direct access, and 2) systems for management of large-scale financial resources from multiple sources.

The background note remains a working document and is not in any way finalised or complete. Rather it is intended a basis for soliciting further views from TC members at the first technical workshop in Bonn 30 May- 1 June 2011. As such, examples quoted within this document are indicative only and intended to give clarity to the issues under discussion.

1. Introduction

A variety of instruments are used by bilateral and multilateral institutions to support developing countries in their sustainable development. Instruments are used to finance stand alone public and private sector projects, sector investment programs, technology transfer, information and knowledge sharing, policy and institutional reforms, and capacity development in developing countries. All of these aim to create an enabling environment in which national-level public and private investments will be generated in the long-term.

Different types of financial instruments promote varied investment environments at the national level, depending on the specific requirements of the recipient country. Accordingly, a range of instruments, modalities and delivery channels need to be available through Green Climate Fund to ensure that all developing countries are able to access and catalyze the financing they need to meet their priorities.

This note aims to be inclusive to the wide variety of requirements among developing countries, and so includes a range of instruments and modalities grouped into various clusters. First, it outlines the variety of financial instruments available to developing countries (Section 2). Second, it outlines the suite of access modalities and delivery channels that are used to deliver these instruments (Section 3). Third, it reviews methods used to manage large-scale financial resources from a number of sources (Section 4). Finally, Section 5 summarizes approaches taken by some major funds for allocating resources among recipients.

2. **Financing Instruments**

An "instrument" covers the generic means of providing or facilitating financing. This document categorizes these instruments as follows: grant instruments (direct grants, contingent grants, challenge grants, output-based approaches, with examples given of typical grant-financed activities); loan-financed investment instruments (public and private sector lending, insurance instruments, hedging, and guarantees); carbon financing and trading instruments: and climate bonds.

An investment "modality" involves the specific application of these financial instruments within defined legal, policy, and operational structures. Modalities are often used to bundle together multiple financial instruments, and they can be used in a wide variety of permutations to meet recipient country needs and priorities.

Instruments are rarely used in isolation or through single modalities. Instruments can be--and often are--blended at the sub-national, national, regional, and international levels to combine their impacts and leverage each other. However, for simplicity this paper disaggregates these instruments into rough clusters.

2.1 Grant Instruments

Grant-based instruments can come in the form of direct grants, contingent grants, challenge grants or output-based approaches. They can be used to support a range of preparatory activities, both in government or the private sector, to buy down incremental equipment or financing costs, or to finance outright investments where grant financing is the most appropriate. Grant financing can have a significant leverage ratio by creating a favorable investment environment at the national level that promotes further investment from domestic or international public and private sources.

2.1.1 Types of grant instruments:

2.1.1.1 Direct grants: Direct grants are transfers of funding with no repayment required from recipients under normal conditions. The only criterion is the agreed use of the finance. Payment can be made up-front, in milestone-based tranches, or fully on delivery. Because direct grants typically pay for enabling activities, the costs involved can be quite modest as compared to the investment eventually mobilized. Direct grants are often used where conditions make co-financing or performancebased approaches difficult, such as for some forms of adaptation or in fragile states.

2.1.1.2 Contingent Grants: Contingent grants can be used for various preparatory activities and then repaid in part or full when the project/programme has reached the operation and revenue-generating stages. The contingent grant (all or part) becomes a loan and must be repaid if the project succeeds, as determined by set criteria, thus allowing the donor to replenish its funds and support further projects (i.e. a revolving fund). If the project fails to proceed to implementation and financial closing, then the funding becomes a grant and does not have to be repaid. This approach is designed to give enterprise strong incentives for success. By covering some of the costs during

¹ "Innovation and Efficiency Initiative: Pilot Financing Instruments and Modalities". Asian Development Bank, August 2005.

the highest-risk development stages, it increases investor confidence and, in so doing, leverages highly needed risk capital.

- 2.1.1.3 **Challenge Grants:** Challenge grants match or co-fund an investment commitment from a private or public source. This often takes the form of co-financing requirements, where grantees are required to match international grant finance with additional resources from other sources (often including government funding). A good example is the SPRING Programme in Singapore that promotes technology development through an investment matching programme. Challenge grants are dependent on the ability of the grantee to raise additional resources from other sources.
- 2.1.1.4 **Output-based Approaches:** These are post facto subsidies used to pay for results on delivery rather than up-front project costs. This is a form of performance-based payment and can be used to reduce the risk of investment (for public or private actors). By providing certainty on pricing, output-based approaches can catalyze significant additional investment. Feed-in tariffs for electricity grids are a common application of output-based approaches across a range of developing and developed countries.

2.1.2 Typical Grant-financed Activities:

A wide range of institutions deliver grants, including multilateral (United Nations agencies, Multilateral Development Banks), bilateral, and national institutions. Some of these institutions are specialised in particular types of grant assistance

2.1.2.1 **Policy and Capacity Development Grants:** Besides mobilizing the supply of financing, support is also needed to create the incentives and demand for such financing. Grants can be used to support a mix of policy instruments (regulatory, capacity development and information interventions) that together create the conditions needed to incentivise and catalyze investment from both private and public actors.

Particular interventions that are often supported by policy development grants are: 1) Cross-cutting national policy development (e.g., low emission development strategies); 2) Development of Fiscal and Regulatory Instruments (e.g., taxes and incentives, minimum efficiency standards); and 3) Information and Training Programs (e.g., South-South programs).

To create change at scale, a mix of these instruments is often employed to simultaneously deal with multiple policy barriers. For example, the South African Wind Energy Program (implemented by UNDP with GEF financing) uses a mix of these instruments--including devising policy options on incremental cost mechanisms, commercial requirements for grid connection, and financial intermediation for Independent Power Producers (IPPs)--to create an environment in which private sector actors can commercially invest in wind energy.

2.1.2.2 **Project Development Grants:** By building the capacities of market actors, technical assistance programs ensure systematic project development by generating a pipeline of investment-ready and creditworthy projects. By supporting the development of projects grant finance helps to overcome perceived investment risk barriers and so can compensate first movers, and thus catalyse further investments.

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The Seed Capital Assistance Facility (SCAF, a GEF-funded initiative of UNEP, ADB and AfDB), for example, helps venture capital and private equity fund managers to include portfolios of seed transactions within their overall investment holdings. For each seed investment that fund managers make in first-time clean energy projects, the Facility cost-shares a portion of the project development and transaction costs. Such technical assistance programs thus have the potential to generate high leverage of commercial financing in the medium to long term.

2.1.2.3 Research, Development and Knowledge Grants: Public support for research and development (R&D) is used to increase the scale and efficiency of technologies and techniques available to governments and investors for addressing climate change. This could involve the development of new technologies (such as new crop varieties) or the adaptation of existing technologies for new conditions (such as durability of wind turbines in arid regions). By supporting pre- and earlymarket technologies, R&D grants (through direct grants, tax breaks, challenge grants, or innovation partnerships) can alter the investment conditions for climate-friendly technologies.

Similarly, information-based grants can improve data collection and analysis, as well as the use of that data for forecasting and impact analysis. This can increase the precision of climate investments by highlighting what specific needs are to be addressed.

2.1.2.4 Full Project Cost Grants: As well as capacity development and policy assistance, some grant funding is used to cover the full costs of project investments. The Adaptation Fund, for example, provides grant finance for the full costs of measures taken by developing countries to adapt to climate change through specific projects. Similarly other examples include regional funds which provide full project cost grants; for instance, the African Water Facility (hosted by the AfDB) supports full project costs and has implemented projects and programmes that build resilience of water supply and sanitation to climate change impacts in Africa, including promoting the use of renewable energies for water pumping (Ethiopia), recovery and use of methane emissions from sewerage plants (Ghana), watershed protection (Kenya) and implementing more productive agriculture water technologies in Djibouti and Rwanda.

2.2 Loan-financed Investment Instruments

Loan instruments cover a very broad range of financing mechanisms, ranging from public sovereign lending to pure private sector instruments. This range of financial products supports a variety of project types and leverages a range of financing sources to cover total project costs.

2.2.1 Public and Private Sector Lending²:

2.2.1.1 Non-concessional Lending Instruments: Public sovereign³ loans are the main financing instrument (in volume) made either directly to governments or to

² "Report of the Secretary-General's High-level Advisory Group on Climate Change Financing," 5 Nov. 2010, http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF_Final_Report.pdf 3 Backed by a national government's guarantee of repayment.

public entities benefiting from a sovereign guarantee. This enables lending at rates that reflect a relatively lower cost of borrowing (lending at rates close to or just below market rates, typically at a few points above LIBOR). Loan pay-back is generally over 15-20 years with a 3-5 year grace period before repayment of principal begins. The IFIs offer these instruments, including for climate change (such as via development policy loans), including the IBRD.

- 2.2.1.2 Concessional Lending Instruments: Particularly oriented to the poorest countries, these instruments are provided either as grants or credits (no-interest loans), and they typically have very long pay-back periods of up to 50 years combined with a very low interest rate. Their levels of concessionality range from 20% to 66% compared to market rates, and they are typically funded by donor contributions, reflows, and transfers from the IFIs' retained earnings. Examples within the development landscape include IDA in the case of the World Bank, the African Development Fund for the AfDB, and the Asian Development Fund for the ADB.
- 2.2.1.3 **Non-sovereign Financing for Public Entities**: Either public corporates or sub-sovereign entities such as municipal entities are eligible for such loans. The payback period of these loans reflects the features of the investment and can often be above 10 years for large infrastructure investments. Pricing reflects an assessment of the credit strength of the client4. This financing instrument can be structured to include the leveraging of public funds, for example for institution building or social protection purposes, or to reduce the impact of tariff increases on the poorest segments of the population. It can also be structured to include syndicated loans from commercial banks, particularly for larger projects.

2.2.2 Private Sector Financing Instruments:⁵

- 2.2.2.1 **Non-sovereign Loans**: As the main financing instrument to the private sector in volume terms, these loans are used to finance investment projects undertaken by private corporate entities and utilities. Investments by the IFIs' private-sector units/affiliates (such as the International Finance Corporation, IFC) to promote poverty reduction and economic development are on commercial terms, although they also have access to a limited amount of grant funding. These instruments parallel others that are offered bilaterally and through the private sector. Pay-back periods reflect the nature and profile of the investment. The margin is set on a market basis, taking account of the structure of the transaction and sponsor strength.
- 2.2.2.2 **Credit Lines**: Loans can also be made to financial intermediaries, which then on-lend to support targeted investments. This is particularly the case between IFIs and national financial institutions (see section 3.3.1 below for specific examples).
- 2.2.2.3 **Private Equity Financing**: Either in the form of direct equity investments or as investments via equity funds, these investments are used to provide capital for the expansion and development of companies and an impetus for development. For mitigation purposes private equity investment is most often used to finance the construction of infrastructure projects such as wind farms or geothermal plants.

⁴ This is based on an assessment of credit strength by the lending institution

⁵ http://treasury.worldbank.org/bdm/htm/financing.html

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Increasing the level of equity investment in a project is often a prerequisite for the mobilization of loan financing and creates a foundation against which this debt can be leveraged⁶. These investments can be delivered via multilateral and bilateral institutions.

2.2.3 Insurance Instruments:

A variety of actors are involved in insurance activities, including IFIs, private insurance firms, and technical assistance institutions. In the area of climate change, this remains a relatively new area. The Munich Climate Insurance Initiative, for example, brings together these actors--as well as potential clients from developing countries--to better understand and ultimately expand the use of insurance instruments to address climate change.

2.2.3.1 Catastrophe Bonds and Facilities: These innovative instruments help countries access affordable insurance for natural disasters. For example, the MultiCat program is a World Bank-supported catastrophe bond issuance platform that enables governments from developing countries to access affordable insurance coverage through the capital markets. Mexico used the platform to issue a \$290 million series of notes in October 2009, to insure against natural disaster risks in specified regions of the country. The Caribbean Catastrophe Risk Insurance Facility (CCRIF) provides parametric insurance against major natural disasters to 16 Caribbean countries.

2.2.3.2 **Production Insurance**: Index-based insurance programs help those involved in productive industries to hedge against climate-related risks. This is particularly important within the agricultural sector in many developing countries. Examples include the Central American Weather Risk Management Program developed in Honduras, Guatemala, and Nicaragua and a Malawi weather hedge transaction to provide drought and other weather-related insurance.

2.2.4 Hedging:

These are products such as interest rate swaps, interest rate caps and collars, currency swaps and, commodity swaps, which can address borrowers' changing needs during the life of their IFI loans by effectively hedging their loan obligations. These types of de-risking products are available within mainstream development assistance through facilities such as The Currency Exchange. This platform is based in AfDB and is designed to offer its shareholders basic currency and interest rate derivatives in emerging markets. The aim is to eliminate the currency mismatches that are typically created between local-currency revenues and foreign-currency liabilities, thereby transforming the terms in which developing countries' existing debt is held.

2.2.5 Guarantees and Risk Mitigation:

⁶ This could also be complemented by quasi-equity, a category of debt that has some traits of equity, such as having flexible repayment options or being unsecured (examples include mezzanine debt and subordinated debt).

Commercially structured guarantees enable the engagement of co-financing partners for project finance, facilitating private capital flows to sectors and countries considered risky by the private sector. Such guarantees can allow domestic banks to provide local currency lending, where such funding is not available on the capital markets, or they can increase the maturity of loans to match the related investment requirements. A range of guarantees may be applied for climate investment which typically involves higher upfront cost (and hence a longer payback period) and may face greater technology and other risks than conventional investments.

Guarantee and risk mitigation instruments are commonly provided by both multilateral and bilateral financial institutions for development assistance (such as through the Multilateral Investment Guarantee Agency) as well as specific climate change activities. MDBs, for example, provide a range of guarantees within the Climate Investment Funds.

- 2.2.5.1 **Partial Credit Guarantees** cover a portion of scheduled repayments of private loans or bonds against all risks. These guarantees are usually provided for privately-funded public projects and cover the later maturities, enabling creditors to extend tenors.
- 2.2.5.2 **Partial Risk Guarantees** cover debt service defaults on loans for private-sector projects that are caused by government failures to meet contractual obligations. These are particularly well-suited for mitigating risks related to government performance against contracts such as power purchase agreements.
- 2.2.5.3 **Policy-Based Guarantees** cover portions of the debt service on funds borrowed by developing countries from private foreign creditors in support of agreed upon structural, institutional and social policy reforms.
- 2.2.5.4 **Political Risk or Investment Guarantees** provide protection against non-commercial risks--expropriation, currency transfer restrictions, breach of contract-as well as war and civil disturbance, and cover both equity investments and related loans.

2.3 Carbon Financing and Trading Instruments

The carbon market, where greenhouse gas emission reductions (in CO₂ equivalent) can be monetized, is a potentially powerful tool to reduce greenhouse gas emissions and transfer financial resources and clean technology to the developing world. Under the Kyoto Protocol "Annex I" countries adopted quantified emission reductions obligations. Countries can meet their obligations through domestic actions and partially through one of the Protocol's three market-based (a.k.a., flexibility) mechanisms, i.e., 1) International Emissions Trading, 2) Joint Implementation (JI), and 3) the Clean Development Mechanism (CDM). The CDM and JI are two project-based mechanisms targeted at greenhouse gas (GHG) reducing projects in developing countries and Annex I countries, respectively (with the focus of JI being on countries with economies in transition). The EU Emissions Trading Scheme is the largest example of international emission trading and is linked to CDM and JI credits within specific limits. The Kyoto Protocol and its mechanisms provide the backdrop for carbon finance activities. Carbon finance is the generic name for the revenue streams generated by projects from the sale of their GHG emission reductions, or from trading in carbon permits.

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Carbon markets deliver revenues to eligible mitigation investments. The CDM has generated about €2.2 billion of revenues per annum since its inception in 2008. Carbon buyers generally pay on delivery of emission reductions, rather than providing the up-front financing required for investment. The potential for these revenues to leverage up-front climate financing depends on the ability of the carbon markets to deliver predictable cash flows against which financial institutions can lend. The uncertain state of the carbon markets does not yet provide the necessary predictability to make carbon revenues bankable.

2.4 Climate Bonds

A number of MDBs' treasuries are exploring new forms of innovative financing, including for climate-related investments through the funds they raise in the bond and capital markets. This includes World Bank CER-linked "COOL" bonds (a total of US\$30 million was raised through two bonds with coupons tied to Certified Emission Reductions – CERs – generated by specified GHG-reducing projects in China and Malaysia), and the World Bank Green Bonds (the equivalent of US\$1.4 billion has been raised through 16 transactions specifically to support adaptation and mitigation projects).

The European Investment Bank (EIB) issued the first Climate Awareness Bond (CAB) in 2007 for EUR 600 million due June 2012 and sold in 27 European countries to retail and institutional investors. A second CAB was issued in November 2009 and targeted to the Scandinavian investor base. A third climate change bond, named Earth's Future Bond, was issued by the EIB in February 2010 and catered to Japanese financial institutions. The proceeds from these issues are used for investment in EIB lending projects and funds such as wind generation, solar energy generation, district heating, cogeneration and projects with energy efficiency improvements of 20% or more.

The AfDB issued its Clean Energy Bond in March 2010. The Bond, denominated in New Zealand dollars, was sold mostly to Japanese retails investors and raised about NZ\$400 million. This maiden AfDB Clean Energy Bond offered investors the opportunity to participate in clean energy solutions through a highly rated institution. The net proceeds of the issue will be used to finance a portfolio of clean energy projects.

These experiences in raising funds for climate finance are important for countries which may consider similar initiatives at the national level.

3. Access Modalities and Delivery Channels

The financial instruments outlined above can be used in a wide range of combinations and permutations, depending on national circumstances and the institutions involved. A variety of modalities exists for developing countries to access and use these instruments. Apart from stand-alone project investments as a modality, projects are often bundled together under various forms of programmatic modalities. These can be defined by sector or geographic bounds, sometimes involving multiple countries. Modalities may also mix a wide range of instruments as described above, involving both the public and private sectors, policy and project investments, and utilizing grants, loans, guarantees and other forms of financing. Project investments also may be packaged under flexible time-bound and phased frameworks to accomplish agreed objectives under a plan or roadmap spread over a series of projects

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organized in tranches (the management of multiple sources of funds is covered in Section 4 below).

There are a variety of modalities and channels through which developing countries can access and bundle these instruments. These fall into a number of categories: 1) direct access to global funds; 2) use of international delivery channels; and 3) the role of national financial institutions.

3.1 Direct Access

Developing countries are increasingly able to directly access development and climate finance. There is no single recognized definition of direct access; however, currently three global funds have self-defined direct access modalities.

3.1.1 Adaptation Fund

Under the UNFCCC Kyoto Protocol's Adaptation Fund, countries can accredit National Implementing Entities (NIEs) to directly receive project-level grant finance. NIEs can be any institutions nominated by national government and deemed qualified according to the Adaptation Fund Board's fiduciary and other criteria. Once accredited, NIEs can implement and/or execute projects and report on those projects. Critically, governments have the flexibility to use both or either direct access and multilateral routes. This choice can depend on a variety of factors, including type and complexity of project and political sensitivities.

3.1.2 Global Fund to fight HIV/AIDS, Tuberculosis, and Malaria

Through the Global Fund countries may directly access funding through the annual funding application round. The direct access modality, created in 2002, is the principal channel for delivery of Global Fund resources, with multilateral options only being used where national options are not available. Principal Recipient entities receive funds and are responsible for program implementation and reporting. Local Fund Agents serve as in-country expert mechanisms that assess the capability of prospective Principal Recipients to deliver financial and program accountability. Overseeing this is a Country Coordination Mechanism, a national multi-stakeholder oversight body responsible for coordinating the submission and development of proposals and for monitoring program results. When a proposed Principal Recipient does not meet established fiduciary standards, the Country Coordination Mechanism is asked to propose another delivery channel. It is only in such instances that multilateral agencies are asked to take up the role of Principal Recipient.

3.1.3 GEF

GEF is also operating a small pilot program on direct access, primarily to support preparation of UNFCCC National Communications. The GEF Secretariat can enter into a grant agreement directly with a national agency in a recipient country. For particular activities, a grant of up to US\$30,000 may be disbursed directly in one tranche. The need for a fiduciary capacity assessment (i.e., financial management and procurement) of an executing agency for grants below US\$30,000 depends on the type of expenditures to be financed. For grants which only finance operating costs for logistical arrangements, no procurement capacity assessment is required. Financial

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management and disbursement specialists covering particular countries determine whether there is a need to undertake a fiduciary capacity assessment upon review of the proposal, in which the types of expenditures are clearly indicated.

3.2 International Delivery Channels

There are a number of options for delivery of financing using international partners, ranging from multilateral financial institutions to bilateral agencies. Not all institutions are able to offer all types of instruments, with some more specialised than others in the delivery of certain types of financial instruments and modalities.

3.2.1 International Financial Institutions

3.2.1.1: Multilateral Development Banks (MDBs)

MDBs are broadly defined as development institutions with a banking business model. They include the World Bank and the Regional Development Banks⁷, as well as private sector arms within these institutions such as the International Finance Corporation within the World Bank Group. In addition to their project investments utilizing a wide range of financing instruments, modalities, and funding sources, they also provide development research and advisory services. MDBs credit quality is typically very high (AAA rating), given the strong support they have from member countries, their high levels of capitalization and their relatively conservative policies with respect to risk and liquidity management. The MDBs serve as implementing institutions for the \$6.4bn Climate Investment Funds.

3.2.1.2: Bilateral Financial Institutions (BFIs)

BFIs also provide a wide variety of financial instruments to developing countries. Examples of BFIs include the French Development Agency (AFD), the Japanese International Development Agency (JICA), the German Development Bank (KfW), the UK Department for International Development (DFID), the Swedish International Development Agency (SIDA), and the Canadian International Development Agency (CIDA). There are also a number of private sector-focussed BFIs, such as the US Overseas Private Investment Corporation (OPIC), PROPARCO (France), DEG (Germany), Swiss Investment Fund for Emerging Markets (SIFEM), and the Netherlands Development Finance Corporation.

3.2.2 Institutions Specializing in the Delivery of Technical Assistance

A number of specialized agencies deliver mostly grant-based technical assistance. These include UNDP, UNEP, a number of IFIs, and bilateral organisation such as GIZ. Technical assistance agencies provide both policy advisory and technical project management services. They rank among the largest sources of sectoral (market transformation) and cross-sectoral (low-emission climate-resilient development strategies/institutional strengthening/skills development) technical assistance for climate change management. They also provide direct project management services to private investors to support various climate sectors, including carbon finance to increase market participation of developing countries.

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⁷ African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development and Inter-American Development Bank and various sub-regional banks.

3.2.3 Funds Focused on Technical Assistance

The activities of these agencies are funded via various multilateral and bilateral funds, including the Global Environment Facility (GEF) and multi-donor trust funds (MDTFs):

3.2.3.1: GEF

While the GEF supports implementation of several multilateral environment agreements, to 2010, as an operating entity of the UNFCCC Financial Mechanism, the GEF has invested US\$3.0 billion to support climate change mitigation projects in developing countries and economies in transition, of which US\$1 billion was during the 2007-10 period. Much of this funding (mostly grants, with 2% of GEF's portfolio in the form of loans) is offered to support knowledge products and capacity development, though some is used for risk mitigation. GEF's interventions in the area of mitigation focus on reducing barriers to the development of low-carbon technologies through demonstration and commercialization.

The GEF also supports adaptation, initially providing US\$50 million for measures that addressed local adaptation needs while simultaneously generating global environmental benefits. The GEF's approach to interventions in adaptation involve a three-stage process: (1) planning through studies to identify vulnerabilities, policy options, and capacity building; (2) identifying measures to prepare for adaptation and further capacity building; (3) promoting measures to facilitate adaptation, including insurance and other interventions, with the ultimate goal of integrating adaptation policies and measures in all sectors of development, including water, agriculture, energy, health, and vulnerable ecosystems.

The GEF administers two special adaptation-focused funds with US\$270 million in resources: the Least Developed Countries Fund (LDCF) for development and implementation of National Adaptation Programs of Action (NAPAs) in Least Developed Countries, and the Special Climate Change Fund (SCCF), which supports adaptation and mitigation projects (including technology transfer) in all developing countries.

3.2.3.2: UN Multi-donor Trust Funds (MDTFs)

The UN system has over US\$5 billon under management in over 400 technical assistance MDTFs across 82 countries and uses combinations of UN agencies to disburse finance and implement projects and programmes both directly and through national government institutions.

MDTFs are highly flexible funding mechanisms that are often used in situations where immediate disbursement is required across multiple implementing agencies. Both the MDG Achievement Fund and the UN-REDD Fund are examples.

3.3 National Financial Institutions

As well as using national entities to directly access international funds, national financial institutions play a key role in themselves catalysing climate finance.

3.3.1 Development Banks (NDBs)

Increasingly, NDBs play a critical role in climate finance, particularly in middle income countries. Recently, the Brazilian Development Bank (BNDES), China Development Bank (CDB), the Bank for Development and Foreign Economic Affairs (Vnesheconombank, Russia), the Export-Import Bank of India (Eximbank, India) and the Development Bank of Southern Africa (DBSA) decided to collaborate on economic and social issues. Such NDBs provide a large portion of national development finance. For example, BNDES, which accessed a US\$1.3 billion loan from World Bank in 2009 and a US\$300 million loan from JBIC in 2011 to finance national environmental initiatives, disbursed in 2010 the equivalent of US\$96.3 billion.

3.3.2 National Climate Funds (NCFs)

A significant number of developing countries have developed and established national climate funds. Around 40 such funds exist at present. NCFs are used for a variety of purposes, including channelling international finance directly and functioning as a blending tool for various flows of international (incl. bilateral) and domestic sources of finance. For example, the Brazilian National Fund on Climate Change was created to allocate a portion of the state's revenue from oil production in the country to mitigate the impact of oil production and combat climate change. The resources from the Fund can also be used to leverage international public finance and private finance in pursuit of the Fund's mandate. The Fund was established by a law adopted in December 2009 and provides grants and loans to adaptation and mitigation initiatives. It is overseen by the Ministry of Environment and operated by the National Social and Economic Development Bank.

4. Methods Used to Manage Large-scale Financial Resources from a Number of Sources

The preceding sections of this paper have dealt with financial instruments and modalities to deliver benefits through projects or programs. This section covers methods for the management of large-scale financial resources received from multiple sources. Flexible and innovative design is the key to managing large-scale financial resources. Some of the key features or tools that allow for the management of large-scale financial resources are described below.

- (i) **Financial Intermediary Funds (FIFs)**: The innovative financing and governance arrangements of FIFs enable efficient management of large-scale resources derived from multiple sources, including from sovereign and private entities.
- (ii) **Contribution Agreements:** Regardless of the number of donors, in most cases contribution agreements are widely standardized but allow for some customization, thereby facilitating the administration of contributions from multiple sources by the Trustee, in many cases, over multiple years.
- (iii) Leveraging Available Funding: Some of the FIFs (e.g. International Finance Facility for Immunization- IFFIm) use long-term, legally binding, irrevocable contribution agreements which allow the frontloading of assistance, i.e., the use of future donor commitments to leverage funds on the capital markets to make

more money available up front. The Trustee has intermediary access to the markets in order to facilitate these transactions.

- (iv) **Payments by Donors**: Contributions can be paid by promissory note, letters of credit or other similar instruments in order to secure funding for commitments; such financial instruments can be encashed over a longer term horizon to meet disbursement needs of the fund. This practice enables donors to stretch out their cash payments in a fiscally restrained environment.
- (v) **Alternate Markets**: The Adaptation Fund is funded predominantly not from donor contributions, but from the proceeds of CER sales. Efficient structures are put in place to enable predictable revenue flows, optimize revenue while limiting financial risks, and to ensure transparency and cost effectiveness.
- (vi) Innovative Financial Structures: In some cases, innovative financial structures have been employed; for instance two of the most financially innovative FIFs are the IFFIm (the first donor supported initiative where long-term donor contributions are used to finance front-loaded financing for vaccination and immunization by raising funds in the capital markets) and Advanced Market Commitments (AMC), which uses IBRD's balance sheet to provide assurance to vaccine markets.
- (vii) Complex Financial Models and IT Systems: FIFs such as the Climate Investment Funds (CIFs), Consultative Group on International Agricultural Research (CGIAR), and SCCF make use of sub-accounts, or windows, to facilitate the diverse requirements of multiple donors and other sources of funds. This facility allows consolidation of funding from multiple sources under a single fund. Other funds use financial models and IT systems to facilitate and support complex financial management of various financing products and obligations, and monitoring of liquidity and reserves.
- (viii) **Results-based Financing**: Results based payments have been introduced in programs such as the Guyana REDD+ Investment Fund (GRIF), where the donor's annual contributions to the program depend in part on the recipient country meeting performance criteria related to REDD+, as established and verified by the donor.

The establishment and management of large-scale FIFs requires specialized technical, financial, and legal expertise. In IFIs, this includes legal and treasury services, donor contribution management, accounting, reporting capabilities, prudent financial management policies, procedures and internal controls. The investment of liquid assets of all FIFs is managed by the IFI treasury, with the primary objective in all cases being capital preservation. An emphasis has also been placed on the use of integrated information systems that provide end-to-end financial transaction processing and support FIF governing bodies, implementing agencies and secretariats with required data and customized financial reporting.

5. Allocation of Resources

A second element of the management of resources is the method for allocating and arranging funds. This is important in determining the volumes of finance that particular categories of

countries can access. Existing funds have different methods for allocating resources, with a number of indicative examples presented below.

- (i) **GEF**: Funds held within the GEF Trust Fund are divided into funding windows or "focal areas" biodiversity, climate change, and land degradation represent the funding streams to which recipient countries can apply. Within these windows, funds are allocated among countries based on two criteria. First, applicant countries must be World Bank or UNDP member developing countries. Second, resources are allocated among eligible countries using the System for Transparent Allocation of Resources (STAR). Under STAR, resources are allocated to countries based on a number of criteria, such as prospective global environmental benefits and GDP per capita. In addition, there are caps and floors on the size of individual country allocations..
- (ii) **IDA**: The Country Performance and Institutional Assessment (CPIA) serves as IDA's aggregate performance rating and measures recent past country performance on economic and social management, governance and implementation of World Bank projects. Annual allocations largely are based on the CPIA rating a country receives..
- (iii) Global Fund: The Global Fund does not have a top-down allocation framework. Instead country projects are presented in funding rounds. In each round the Board gives priority to financing programs from countries with a low income and high disease burden. Also, proposals from countries and regions with a high potential for risk are considered, taking into account the opportunity to prevent increases in prevalence and incidence. The Board also considers requests from middle income countries. For all proposals the Board may consider criteria that take into account the ability of the country partnership to raise its own resources and to apply coordinated resources from multilateral, bilateral, or private sector sources in support of the proposal.
- (iv) Adaptation Fund, Clean Technology Fund of the CIFs, MDTFs: These funds all operate on a first-come-first-served basis, subject to country participation and ceilings on individual country allocations or program/project size. Expert panels or governance entities may then assess funding in rounds or cycles. There also may be further prioritization criteria applied when the total value of application requesting funding exceeds available resources.
- (v) **Performance-based Allocation**: increasingly development partners are exploring the use of performance-based systems for determining how resources are allocated within funds. Those projects and programmes that deliver high quality results (assessed against predetermined criteria) are those that receive finance. This is yet to be piloted through large-scale public funds; however, existing market mechanisms, such as the CDM, receive their tradable credits only upon verification of results.

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