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# LESSONS LEARNED AND EMERGING GOOD PRACTICES IN INFRASTRUCTURE GUARANTEE PROGRAMS UNDER USAID'S DEVELOPMENT CREDIT AUTHORITY



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## ACRONYMS

APS	Annual Program Statement
CABEI	Central American Bank for Economic Integration
CIB	Commercial International Bank
CPC	Clean Production Centers (under Proarca's DCA Guarantee program)
CRB	DCA's Credit Review Board
CTO	Contracting Technical Officer
DCA	Development Credit Authority
DSC	Debt Service Coverage/ Escrow
EGAT	Bureau for Economic Growth, Agriculture and Trade
ESCO	Energy Service Company
EU	European Union
FAA	Foreign Assistance Act
FIRE	Financial Institution Reform Expansion
FSN	Foreign Service National
GJMC	Greater Johannesburg Municipal Council
IDB	Inter-American Development Bank
I&E	Infrastructure and Engineering
IMF	International Monetary Fund
IPP	Independent Power Producer
IQC	Indefinite Quantity Contract
LT	Long-term
MDB	Multilateral Development Bank
MIF	Multilateral Investment Fund
MEEP	Municipal Energy Efficiency Program
NGO	Non-Governmental Organization
ODC	Office of Development Credit
RE	Renewable Energy
ROI	Return on Investment
RFP	Request for Proposal
SEEDCA	Southeast Regional DCA Facility
SME	Small and Medium Enterprise
SO	Strategic Objective
TA	Technical Assistance
USAID	U.S. Agency for International Development
WSPF	Water and Sanitation Pooled Fund

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## **Executive Summary**

Throughout the developing world there are significant needs and demands for infrastructure development, particularly in the areas of electricity, water and municipal infrastructure. Such projects can: stimulate economic growth, by enabling businesses to grow and be more competitive, generate strong employment opportunities, promote private sector participation and investment; strengthen democracy and foster political stability, through improved transparency and communication; enhance national security; improve quality of life, by enabling better health care, education, and access to clean water; and protect the environment and public health. However, many of these critical projects are unable to be financed and implemented due to a range of constraints on the part of host governments, including considerable budget deficits, limits on borrowing capacity, non-investment grade status in commercial markets, lack of private sector participation and investment, or underdeveloped or absent capital market. Thus, international donors, including USAID, have developed creative and targeted financing schemes to demonstrate the viability of investments in infrastructure projects in the hopes of further facilitating and catalyzing increased financing in critical infrastructure improvements and expansion.

Towards this end, USAID established the Development Credit Authority (DCA) in 1999 to provide USAID Missions with the opportunity to take a direct role in supporting private sector investment and lending for all sectors, including infrastructure. The DCA mechanism is an explicit recognition that perceived risks and a need for attractive financing is a deterrent to the financing of basic infrastructure projects in developing countries. USAID DCA credit guarantees allow Missions to effectively address this need.

The DCA partial guarantee instrument can be a powerful tool to meet a strategic need in many developing and emerging economies and, as a result, there is exponential interest for the use of DCA partial credit guarantees to assist in developing and expanding credit markets in USAID-assisted countries. With this innovative tool, USAID Missions are able to stimulate financing for a variety of target sectors with substantial leverage from local commercial markets. Since its inception, the DCA instrument has helped attract private sector financing in all sectors by mobilizing more than \$1.1 billion in 44 countries through 139 guarantee agreements. The portfolio includes 29 programs totaling \$307 million associated with infrastructure sectors, including energy, environment, water/waste water and other municipal infrastructure investments. These programs have ranged in size from \$750,000 to \$20 million with about half in Asia & the Near East Region, just over 20 percent in both Europe & Eurasia and Sub-Saharan Africa, and the rest are in Latin America & the Caribbean.

### **Role of DCA in Infrastructure Financing**

The use of DCA partial credit guarantees is a mid-term step in an overall assistance strategy aimed at promoting infrastructure development. This tool is most appropriate when the sector can recover costs, when clear rules govern private sector participation, and when there is a resulting revenue stream that banks find sufficient to service the loan. Although DCA guarantees can be used in one-off transactions, they are typically used to finance a package of smaller, similar, and replicable infrastructure projects through one or more local financial institutions. The DCA can help bridge the gap between perceived risk, which is often considered high, and the actual risks, which may vary, and is often used to compliment technical assistance within a target sector so that the impact of the intervention is more sustainable and scalable. DCAs are often used along side a technical assistance program for a given sector, which allows the sector issues to be addressed while concurrently completing some transactions to allow for demonstration and replication. DCAs cannot create viable markets, make bad borrowers creditworthy or make bad

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projects viable; there are a host of conditions that need to be fulfilled to do so. But, DCAs is a tool that Missions can utilize along with their ongoing technical assistance programs to offer a more complete intervention package to promote the development of local infrastructure projects and markets.

### Objective of Assessment

The objective of this review was to identify and document past experiences, lessons learned, good practices and successes in an effort to develop a set of guiding principles and recommendations for infrastructure-related financing for existing and future USAID-supported efforts. Interviews were conducted with Missions accounting for 26 (out of 29) infrastructure-related DCAs well as interviews with select partner banks and technical assistance contractors who have worked on implementation of DCA programs.

### Survey Findings and Emerging Good Practices

Survey findings confirmed that the DCA guarantee instrument continues to serve as a strategic tool that supports the financing of municipal energy, environment, infrastructure, and water projects. Other than grants, the DCA is one of the few tools accessible to USAID that allow USAID to become a direct participant in the planning, as well as the financing, stages of private sector and municipal projects. Use of the DCA appears to be most effective with smaller projects which, although critical to economic development, often are unable to obtain financing. But, this tool does require careful analysis of the prevailing market and lending conditions to design an appropriate blend of policy dialogue, technical assistance and training and credit enhancement in order to achieve its intended objectives. Experiences and lessons learned from DCA managers have been identified and summarized in the report. The survey also identified many “emerging good practices” that are listed below:

- 1. DEVELOP A SOUND BASIS FOR INITIATING A GUARANTEE.** Many of the Missions stressed the importance of conducting sound analyses of the market constraints to commercial financing, supporting a strong enabling environment and advance planning prior to initiating a DCA instrument. Such planning allows for a more comprehensive understanding of the target sector, and the barriers that would need to be overcome, in order to facilitate bank lending. While the DCA can play a role, it often needs to be accompanied with other interventions (e.g., policy dialogue, technical assistance, training) in order to be most effective. A broader view of the macroeconomic environment, policy and regulatory frameworks, local capital markets, banking regulations and practices, local capabilities of the financial institutions and target borrowers, are also necessary in order to help create strategies for systemic changes in how such projects can be more sustainably financed over time.

**Emerging Good Practice:** Adopt careful advanced planning including the development of a sound understanding of the policy environment, market needs and critical financing obstacles and then designing a program, using a DCA instrument as an integral component of a Mission’s SO Program. Other issues, such as developing and coordinating among parallel technical assistance efforts and staffing with proper skills mix, need to be considered in the planning process.

- 2. CAREFULLY SELECT AND THEN DEVELOP STRONG RELATIONSHIPS WITH DCA PARTNER BANKS.** An essential factor influencing the successful operation of a DCA guarantee program is the quality and commitment of the participating local financial institution. Having a committed and flexible banking partner dedicated to the success of the facility is key to making DCA programs work successfully, since it is the bank that will ultimately market and implement the facility. Also, a dedicated partner can be an effective agent of change by encouraging other local partners (i.e., new borrowers) to participate in the DCA guarantee facility or open up markets to other lenders, thereby significantly widening the impact of the program and enhancing the prospects for sustainability. Thus, encouraging competition among banks for access to a DCA and

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conducting careful due diligence on prospective banking partners is strongly recommended.

**Emerging Good Practice:** Selection of partner banks or other existing loan funds through a competitive process and proper due diligence can help strengthen the partnership to enhance the success and coverage of the DCA guarantee instrument. Consider alternative structures to best meet the market needs.

### 3. PARTNER THE DCA WITH TECHNICAL ASSISTANCE AND TRAINING PROGRAMS.

A DCA guarantee program's success can be greatly enhanced by complementary training and capacity building. Before financing programs are even conceived, technical assistance is often needed to lay the foundation for market development, sector restructuring, and expanded service delivery to address basic policy, regulatory, operational and other issues. Such efforts can also help determine market conditions and assess its capacity to absorb the debt that a potential DCA instrument may help unlock. Once a DCA is in place, more technical assistance is likely needed to provide additional support to the local participating financial institutions and borrowers and address softer barriers, such as social norms, historical misconceptions about certain sectors or borrower classes, conflicts with existing business practices, etc. that also need to be overcome if the program is to be a success. These barriers can be addressed through engaging the various partners in topical workshops and roundtables focused on describing the benefits of creative financing approaches to increase investments aimed at improving infrastructure services to the community.

**Emerging Good Practice:** Assessment of the training and capacity building needs of the partner financial institutions and private sector and then implementing such programs both prior to and during the process of implementing a DCA guarantee program is critical to a successful outcome. Such support can also assist the partners in becoming effective agents of change and spreading the strategic value of the DCA guarantee as a tool for market development for infrastructure financing. Early deals can greatly increase the credibility of the program and encourage replication. Periodic assessments may also be needed to address changing market conditions, newly emerging constraints, and softer barriers.

### 4. ENCOURAGE HIGHER UTILIZATION AND EXPANSION OF THE GUARANTEE PROGRAM.

The extent to which a Mission's banking partner uses, or fails to use, the DCA guarantee to enhance its lending activity to the target sector(s) is a key determinant of a DCA program's effectiveness. The survey indicated that despite good local financial partners and accompanying technical assistance programs, in some cases, DCA facilities remain underutilized. Typically, this underutilization is a result of many extraneous factors often outside of the Missions' control, such as changes in market conditions, limited interest by participating banks, reluctance of borrowers, and lack of competition for market capital. However, despite their lack of control over such factors, Missions have identified several key DCA design issues and ongoing technical assistance interventions which could be considered to help address some of these factors as they arise. Proactive marketing of the guarantee program, flexibility in program design and implementation, increased market competition, and targeted technical assistance programs are all elements of a strategy a Mission can undertake to help improve deal flow to a DCA program.

**Emerging Good Practice:** Implementation of programmatic actions to increase market competition for the DCA instrument through engaging multiple partner financial institutions, innovative guarantee schemes, and increasing outreach to both lenders and borrowers in order to develop the market for capital in strategic municipal infrastructure sectors.

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- 5. MEASURING THE SUCCESS OF A DCA.** As with other USAID development programs, performance indicators are used to help measure results and impacts of DCA guarantee facilities. USAID generally uses two types of performance indicators: output and outcome. Output indicators typically concentrate on the direct result of an activity, are generally available in real-time, and are easy to collect. Outcome indicators go a step further and focus more on the broader intended result of an activity. In some instances, there may be a tendency to overly focus on DCA utilization rates as the primary indicator of a guarantee's effectiveness, since high utilization rates generally imply strong demand and high leverage of the guarantee facility. However, it should be recognized that utilization rates should serve as a proxy only and may not exhibit a true measure of the success of USAID's efforts. In some cases, just the process of providing technical assistance and training during the planning and early implementation stages of a guarantee facility may contribute to a change in the attitudes of either commercial or other donor financial institutions, resulting in their lending to organizations in the targeted market sector without using the DCA guarantee.

**Emerging Good Practice:** A combination of outcome and output indicators that measure both the direct results of the guarantee and the broader intended development impact are recommended. Also consider reviewing total lending for a target market, rather than utilization, to better assess transformational effects of DCA and accompanying technical assistance.

- 6. COORDINATE WITH OTHER DONORS ON FINANCING.** Various multilateral and bilateral donors provide soft loans, grants, and financing for the capitalization of specialized funds for investment in small-scale infrastructure projects in developing countries and emerging economies, which has in some cases, competed with the more commercially-oriented DCA instrument. There are no simple solutions to such issues. But they stress the need for improved donor coordination. Where competing programs are being considered or have been identified, efforts should be made to try and stratify markets between donor programs, consider merging the programs, or agree to harmonize lending terms and conditions so the programs can compete on a more level playing field.

**Emerging Good Practice:** Close donor coordination is critical to avoiding competing programs and potentially undercutting the DCA instrument. Consider targeting different market segments, combining programs or harmonizing terms to reduce competition and likely confusion in the marketplace.

### Conclusions

The DCA tool continues to be very instrumental in helping further develop a market for investments in small-scale infrastructure projects. The survey also confirmed that the DCA guarantee often played a critical role in the start-up phase which led to the development of a market which may have otherwise not taken place or would have been significantly delayed. While the DCA instrument is not a "magic bullet" to cause financing for all projects, it has played a powerful role in demonstrating that infrastructure projects can be good candidates for local financing. Often, it has been a lack of such demonstrations and initial risk sharing that has been a barrier to local participation in financing municipal infrastructure. It is important to note, however, that DCA partial credit guarantees are designed to function best under reasonable market conditions; they cannot address systemic sector or banking issues. Such tools need to be carefully designed and properly managed, based on prevailing policy and market conditions, and within the local context. As use of the DCA instrument increases, new approaches are expected to be developed, new lessons and experiences will be gained, which will serve to provide even better understandings of how USAID can more effectively leverage developmental impacts and mobilize the critical commercial financing that is needed to help address the enormous infrastructure necessary to sustain and enhance economic growth.

## **I. Infrastructure Financing and the Role of DCA**

### **Background**

Most developing countries and emerging economies are faced with considerable demand for both reconstruction and development of infrastructure in order to improve the reliability and quality of services in their respective societies. Often, many of these governments also face considerable budget deficits and limits on their borrowing capacity imposed by international institutions such as the World Bank and the International Monetary Fund (IMF). Typically, the governments are able to finance selected large infrastructure projects through loans from the international financial institutions, for which government sovereign guarantees are required. The capacity of these governments to provide financial guarantees is limited and is not able to address many critical infrastructure needs.

Because of the enormous financing constraints, the international donor community has tried since the early 1990s to promote increased private sector participation and investment in these sectors. The rationale was that it was believed that the private sector would be able to manage service delivery more efficiently than the government enterprises and be capable of attracting more capital off the government's balance sheet. The hope was that private operators could mobilize capital to upgrade the existing infrastructure, improve the efficiency of supply and provide services to those not yet served. Domestic capital markets in these countries are also generally underdeveloped. In fact, in many of the developing countries, the local capital markets predominantly engage in providing short-term and high interest overdraft lending and scarcely engage in project financing as these infrastructure projects represent high risk and high transaction costs. International investors have been largely reluctant to serve the financial needs of the municipal infrastructure development market because (i) these projects are generally smaller; (ii) they represent high transaction costs; and (iii) they do not provide for a sustained potential for follow on investments.

As a result, a common pattern in most developing country economies is that the financing of infrastructure projects has been left behind, which is a key reason for insufficient and unreliable delivery of public services such as electricity, water, municipal waste management, and other basic services. In addition, many of these sectors operate below economic cost recovery levels as political and social pressures can prevent such businesses from charging full costs. This also then leads to decapitalized assets and largely uncreditworthy utilities. Governments and donors recognize that the delivery of efficient, reliable, and environmentally sound infrastructure services is a critical element to overall economic development and the well being of their societies. It is also an essential ingredient for poverty alleviation through spurring local and community level income generating activities that can only be created through the reliable provision of basic infrastructure services.

Accordingly, there is a considerable need for creative and targeted financing schemes that would be available to initially demonstrate the viability of investments in infrastructure projects and eventually create a momentum for multiple infrastructure investments by the private sector. This need has been recognized by most developing countries which are constantly exploring approaches to energizing this segment of the market.

However, there still remains vast technical assistance needs to transform most infrastructure sectors to the point of being viable for either private sector involvement or commercial financing as well as policy and regulatory shifts to enable these sectors to become more bankable. Infrastructure projects often have substantial government involvement if not ownership of assets which can be cause for concern for private investors. Infrastructure sectors also require significant regulation, which is required given the capital intensive nature of the projects and need

## *Infrastructure Financing and the Role of DCA*

for economies-of-scale. Such conditions can necessitate monopoly providers, which need to have carefully designed incentives to be efficient while expanding services at a reasonable cost to the consumer. Finally, the financial viability of the sector often rests with the ability for the service providers, public or private, to collect sufficient and consistent payments from their customers. While encouraging private sector investment is a goal, often times, USAID support must first address the myriad of preconditions needed to establish the basic economics and market structures to create a functioning and viable sector through its provisions of technical assistance, such as basic governance for policy formulation, establishing an independent and functioning regulator and sector structure, ensuring reasonable performance of service providers, strengthening the ability for utilities to generate a proper revenue stream from its end users, etc.

### **The USAID Development Credit Authority**

The United States Agency for International Development established the Development Credit Authority (DCA) to precisely address the critical need of the developing countries for catalyzing private sector led investments in sectors which are generally neglected for want of creative financing. At the core of the design of the DCA instrument is an explicit recognition that the developing country governments will not have the resources to finance a large portion of their basic infrastructure needs and that the private sector does not find investments in such projects attractive based on their perceived risk profiles, despite having additional funds available. Therefore, the DCA instrument is designed to create a systematic process for meeting this critical need that will otherwise not be met either by the governments or by the private sector.

The DCA provided the Agency with a broad financing authority that allows USAID to work with the private sector in developing countries to expand investment in local development activities. It does this through the use of credit to pursue any of the development purposes specified under the Foreign Assistance Act (FAA) of 1961. It is a tool which enables USAID Missions to offer partial credit guarantees to commercial lenders and investors in support of private sector investments. These guarantees are designed to reduce the risk associated with lending to new sectors or to new classes of borrowers. DCA guarantees can help stimulate economic development by increasing the flow of credit to areas and activities where it is lacking or available at unattractive terms.

Since its inception in 1999, the DCA instrument has achieved impressive success in both initial start-ups for private sector investments in infrastructure projects and in creating a sustained momentum in many countries, whereby many more investors are investing in projects that would generally be left behind in the absence of a guarantee instrument, such as the DCA. In this sense, the DCA instrument has demonstrated that it is a powerful tool for meeting a very strategic development need in many developing and emerging economies. As a result, there has been exponential interest and enthusiasm for the use of DCA credit guarantees as a mechanism to help develop and expand credit markets abroad.

USAID is committed to expanding the impact of its DCA instrument for infrastructure sectors by assessing the impacts of its current program and further streamlining the implementation of the instrument through documenting experiences and lessons learned based on some 30 credit guarantee programs serving 19 countries, providing over \$300 million in actual investments to date in energy, water and environmental projects during the period 1999-2005.

### **Description of the DCA**

The DCA is a tool that allows the USAID Missions to provide partial credit guarantees to lenders and investors for private-sector and municipal investments in infrastructure projects that can significantly reduce the risk that banks often associate with lending to new industry sectors or new clients. The DCA instrument serves two critical needs. First, it provides guarantees that expand the flow of credit to market sectors and businesses that either do not have access to attractive credit or find that the available credit is unattractive. It does so through providing guarantees that combat key market impediments such as (i) short term frames, (ii) high collateral requirements, and (iii) unusually high interest rates. Second, it also leverages its funding

## *Infrastructure Financing and the Role of DCA*

resources to projects and target sectors within a country, thereby causing a wider impact in terms of additional investments that would otherwise not occur. On average, DCA guarantees achieve a leverage of 25:1, or \$25 in project loans for every \$1 provided by USAID for the loan guarantees.

### **DCA Products**

The DCA guarantee program offers four primary products that are made available to USAID Missions. DCA guarantees can cover up to 50 percent of the principal of the debt required to fund a project. The Mission's use of its guarantee products can be modified to address the specific needs of each Mission Strategic Objective (SO). DCA's products include:

- **Loan Guarantees** -- A guarantee to an identified lender/borrower for a specific project
- **Loan Portfolio Guarantees** -- Guarantee coverage on a portfolio of similar loans that the Mission's partner bank(s) provide to their customers
- **Bond Guarantees** -- Support for the issuance of bonds by financial institutions, private sector corporations, or sub-national entities
- **Portable Guarantees** -- Guarantees to selected borrowers which they can then take to banks to negotiate more favorable terms

### **Role of DCA in Infrastructure Financing**

There are a broad menu of options and structures for financing infrastructure projects. Individual financial instruments, such as the DCA, are most effective when used under appropriate legal, regulatory and market conditions. Large public infrastructure projects are generally financed by governments directly, sometimes with multilateral development bank (MDB) and/or bilateral financing. Where sectors are simply not viable in the near term, providing the necessary technical assistance to improve the basic structure, regulatory environment and collections are needed first steps. In cases where countries have unrated or subrated utilities and/or municipalities or basic efficiencies needed as a precursor to private sector lending, management, or takeover, USAID is considering the development of revolving funds. Such options can provide an excellent way to bring investments into sectors to help improve their efficiencies and basic operations while helping these entities establish lending and repayment track records. Specific plants can sometimes be financed by the private sector, such as independent power producing plants or waste water treatment, even if the entire sector is not fully recovering costs, but only in cases where there is a realistic and enforceable contract with the utility at a fair market price. Where service expansion is the goal, careful attention needs to be placed on the ability and willingness for end users to pay, particularly in disadvantaged and remote areas. Government subsidies can play a role, but payments need to be consistent and transparent in order to provide sufficient comfort to commercial investors and lenders.

Use of DCA partial credit guarantees to help finance infrastructure is generally a more medium-term step in an assistance strategy. Guarantees are thus most appropriate when the sector is able to recover costs, there are clear rules governing private sector involvement and there is a resulting revenue stream that banks believe will be sufficient to service the loan. DCAs can be used for one-off transactions, where there is a need for the first project of a certain type to be financed in order to showcase its viability for future similar projects. DCAs are also often used to finance a package of smaller, similar infrastructure projects using one or more local financial institutions. DCAs are generally meant be financial sector interventions (as opposed to an infrastructure sector) to bridge the gap between the high perceived risks from banks and the actual risks. The idea is that once a bank has actually made an investment in a sector and been able to assess its performance and associated risks, the bank is better able to price such risks and make similar loans on its own in the future. Its experience may also enable it to determine that the terms of its loans can be softened once the true risk profiles are established in the local markets. DCAs are often used along side a technical assistance program for a given sector,

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which allows the sector issues to be addressed along side some transactions, which is clearly the preferred arrangement. These are generally, but need to be, smaller, replicable projects, often with small- and medium-sized enterprises (SMEs) as a target borrower class. It should be reiterated that DCAs cannot make a bad borrower creditworthy or a bad project viable. And, DCAs, in themselves, cannot create viable markets; there are a host of legal, regulatory, institutional and market conditions that need to be fulfilled to do so. DCAs can help facilitate access to affordable term financing but there must be a market able to absorb the financing created.

In many of the USAID Mission countries, macroeconomic conditions, such as sector monopolies, lack of competition, unclear and restrictive banking regulations, unusually stringent credit limits, etc. can create an environment which is not conducive to investments even in the most attractive small-scale projects. Financing programs are generally most appropriate in more mature markets. The introduction of financing programs in less developed markets can often highlight deficiencies in the market, whether these are basic regulatory and sector structuring issues, lack of reformed banking sector, a vibrant private sector able to develop projects and raise equity, reasonable legal reform to ensure enforceability of contracts and bankruptcy provisions, etc. The private financial institutions, in some cases, see the government as a competitor, rather than as a facilitator, in the financial markets. In other cases, the governments believe that they are the only source of financing for municipal projects. DCA can play an important role in addressing these barriers through well planned pilot projects that can demonstrate how investments can be leveraged in sectors and projects that are often considered high risk and left behind and thus serve to stimulate and eventually mainstream such lending.

### **Objective of the Assessment**

USAID's EGAT Offices of Infrastructure & Engineering (I&E) and Development Credit (ODC) contracted CORE International, Inc. to document past experiences, lessons learned, good practices and successes in an effort to develop a set of guiding principles and recommendations for infrastructure-related financing for existing and future USAID-supported efforts. To this end, CORE International designed a survey instrument in consultation with USAID officials. Officials from both I&E and ODC provided valuable comments to the survey instrument which was used to conduct interviews with key officials in the USAID Missions, the financing industry, and other stakeholders. The survey instrument is provided as Attachment 1.

These interviews focused on past and ongoing guarantee programs in energy, environment, municipal water, and other infrastructure areas. This review identifies the common elements of success, highlights many best practices, and analyzes the implications of these practices on the development of future programs. A list of individuals that participated in the survey is included as Attachment 2. As part of this activity, a desk review of the DCA's current and past portfolio and credit memorandums were also reviewed. Attachment 3 includes a summary table of selected DCA energy, water and environment project actions reviewed as part of this assessment. This report includes a detailed analysis of the information gained through the interviews and also includes selected case studies that offer valuable insights for further enhancement and wider impact of the DCA instrument.

## II. USAID Development Credit Authority Portfolio

### The Portfolio

Since its inception in 1999, USAID Missions have successfully signed 139 guarantee agreements with private sector financial institutions creating an additional \$1.053 billion in new loans in 44 countries in a variety of sectors. In the energy, environment and water sectors, during that same period, USAID Missions have used the DCA for financing 29 projects in some 19 countries with a total overall investment ceiling of \$306.9 million. These 29 projects were the primary focus of this review.

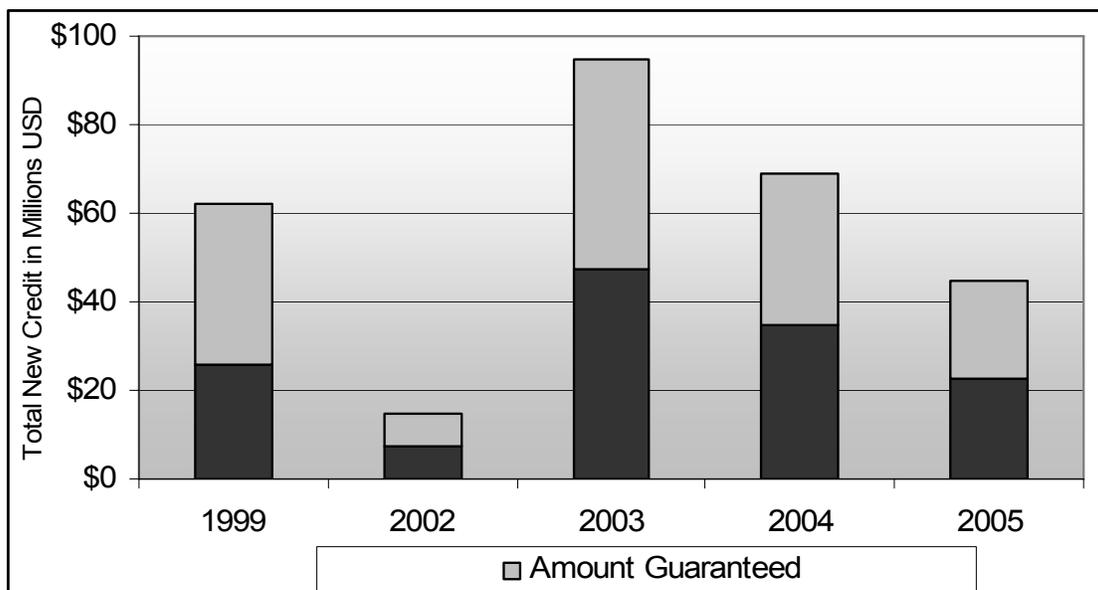
#### Summary of DCA Guarantees in Energy, Environmental, Infrastructure and Water (1999-2005)

Number of Guarantees:	29
Number of Countries:	19
Total Credits Made Available:	\$306.9 million
Amount Guaranteed:	\$142.8 million
Cost to USAID:	\$18.8 million

DCA guarantees have been extended to a range of different sized projects, from as small as a \$750,000 guarantee to two banks in the Ukraine in support of energy efficiency improvements, to as high as a \$20 million guarantee to Commercial International Bank in Egypt in support of expanding and improving water service delivery. Some guarantee facilities have achieved very high utilization levels, while some of the newer guarantee programs are still in the process of start up.

Figure 1 illustrates the overall credit made available through DCA guarantees from 1999 through 2005 relative to these 29 programs. The initial jump in DCA guarantees soon after the DCA's inception reflects the impact of three large guarantees totaling \$31 million that were extended by the South African and Philippines Missions in support of basic urban services in water and

**Figure 1: Total New Credit Made Available by Fiscal Year**



## USAID Development Credit Authority Portfolio

infrastructure. The decrease in use of DCA guarantees during the next two years reflects preparatory activities such as initial set up, start up, and public outreach to Mission's by the Office of Development Credit. These preparatory activities gave a significant boost to the DCA coverage. During the 2003-2005 timeframe, 21 additional guarantees were sponsored by Missions, supporting some \$217 million in disbursements.

As shown in Figure 2, Asia and the Near East Regions were the largest users of the DCA – 46%, followed by Africa (23%), Europe and Eurasia (22%), and Latin America and the Caribbean (9%).

Despite high unmet credit demand in Africa, the usage of the DCA guarantee instrument was relatively low as the Missions in Africa predominantly focus on agriculture, food aid, and healthcare programs.

**FIGURE 2: DCA CREDIT USAGE BY GEOGRAPHIC REGIONS**

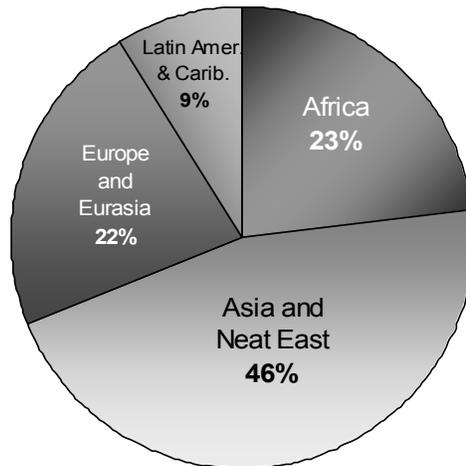
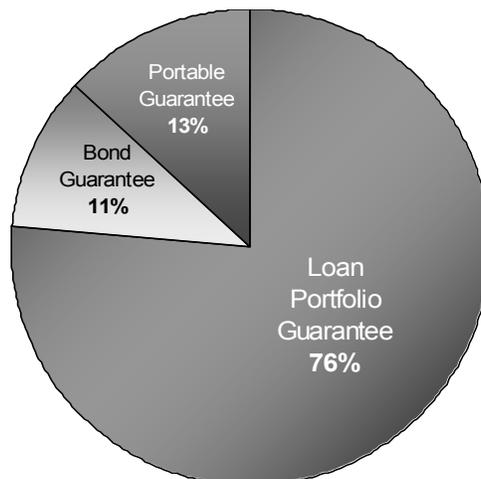


Figure 3 illustrates the usage of the DCA guarantee by type of product. The most popular and most often used product of the DCA guarantee is the Loan Portfolio Guarantee Program. During the period 1999-2005, over 75 percent of the cumulative disbursements and over 80 percent of the programs used this product.

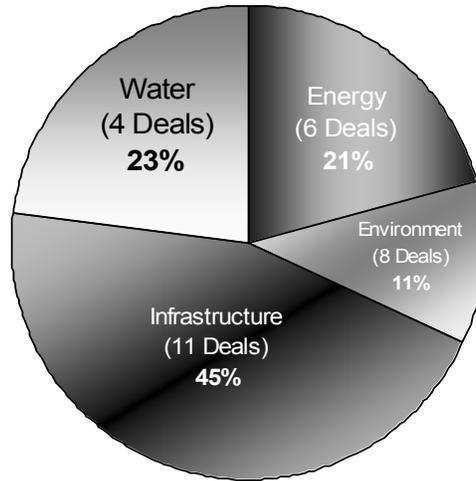
**FIGURE 3: TOTAL DCA USAGE BY PRODUCT TYPE**



USAID Development Credit Authority Portfolio

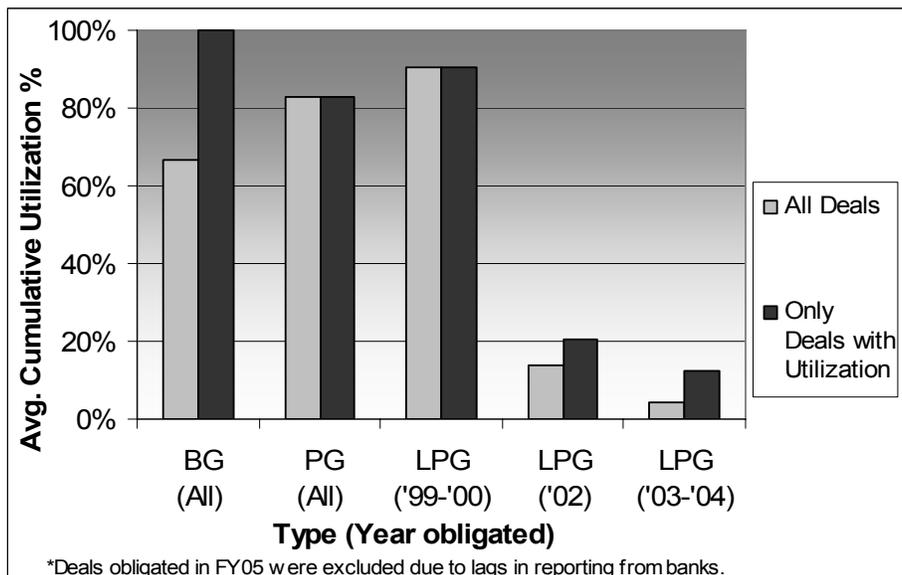
Figure 4 illustrates the DCAs by sector. Almost half of the credit mobilized has been for municipal infrastructure projects (45%), followed by 23% for water, 21% for energy and the remaining 11% for environment & cleaner production projects. It should be noted, however, that sector classifications are determined by the sponsoring Mission and generally reflect the strategic objectives that Missions intend to support with a guarantee. Moreover, DCA facilities may be designed to support multiple sectors. As such, there is some overlap between the sector classifications shown in Figure 4.

**FIGURE 4: TOTAL CREDIT MADE AVAILABLE BY SECTOR**



Utilization rates of the DCA guarantees are varied. As would be expected, utilization is typically higher for bond guarantees because the guarantee is used as soon as the bonds are issued. Of the three bond guarantees included in this study, two are 100 percent utilized and the third has no utilization due to delays in the issuance. For similar reasons, utilization of loan guarantees, including portable guarantees, is also high; the two portable loan guarantees that were completed before FY05 have an average 83 percent utilization rate. For loan portfolio guarantees, utilization tends to be low in the first two years but increases over time. As Figure 5 illustrates, the two loan portfolio guarantees that were issued before FY01 have utilization rates in excess of 80 percent.

**FIGURE 5: AVERAGE UTILIZATION BY GUARANTEE TYPE**



### **III. Survey Findings and Emerging Good Practices**

#### **Summary of Survey Findings**

The survey conducted as part of this desk study included meetings with officials from USAID/Washington and telephone discussions with a number of USAID Mission project managers as well as financial institutions that have participated in DCA projects. The discussions focused on gaining insights into the experience of the participants with respect to the overall value and results of the DCA instrument. Specifically, the survey focused on (i) the need for DCA, (ii) the value provided by the DCA instrument, (iii) the experience of the participating institutions, and (iv) areas where the DCA instrument could be further strengthened and expanded.

The survey provided useful insights that confirm that the DCA guarantee instrument is an important strategic tool to meet a niche market – financing of municipal energy, environment, infrastructure and water projects in order to improve the quality of these services in many developing countries and emerging democracies. The local capital markets in most of these countries are largely undeveloped or underdeveloped. Most of the infrastructure projects generally tend to be smaller projects compared to larger projects such as a new power plant, rationalization of a refinery, or a new cement plant. These larger projects, under the right market conditions and sound legal and regulatory environments, can be good candidates for financing by larger donors such as MDBs or private investors such as Independent Power Producers (IPPs), as noted previously.

By contrast, the smaller projects, while critical to economic development and poverty alleviation are left behind, as the primary responsibility for financing those projects lies with the municipalities from their public budgets, local communities or small businesses. The central governments and the municipalities also face two important barriers. First, there are severe budget constraints resulting in a high degree of competition among many viable projects with limited public resources. Second, the cost recovery on most of the municipal infrastructure projects is well below what is needed to attract private sector investors who require full cost recovery and a reasonable profit. The relatively poor cost recovery on municipal projects is because of many factors inherent in the overall governance of the sectors including poorly designed tariffs, huge technical and non-technical losses, and political interference that often discourages consumer from paying for electricity, water, or municipal waste management services. These patterns create risks for investors and in the absence of appropriate risk removal/reduction interventions, investors typically shy away from these types of projects and pursue safer and more reliable investments.

As a result, infrastructure development projects represent markets with high demand for investment and few takers. This is precisely where the DCA instrument can be used both in catalyzing the market through solid pilot projects with high demonstration value and in expanding the market by making additional credit guarantees available to potential new investors. While a DCA partial credit guarantee is not a "cure-all" solution to a Mission's project development needs, it can serve as a very good tool for serving the needs of a niche market like small-scale infrastructure finance. DCA products are one of the few tools available to USAID -- other than grants -- that allow USAID to become a direct participant in the planning and *financing* of private sector and municipal projects.

Nearly all of the Missions surveyed view the DCA guarantee program as a highly valuable tool that can be used to further development programs which, without financing, would not have been brought through to implementation. Because USAID routinely supports pilots and demonstration

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projects, the DCA instrument allows Missions to build upon these efforts by scaling-up impacts and “commercializing” tested approaches. The survey identified many “emerging good practices” that are documented in this report. In addition, the comments provided by the Missions offer valuable insights into the design and management of DCA guarantees.

### **Developing a Sound Basis for Initiating a DCA Guarantee**

Many of the Missions stressed the importance of advance planning prior to initiating the DCA instrument. A few Missions indicated that they may not have paid adequate attention to articulating their specific goals in terms of how the DCA instrument could address financing constraints for infrastructure projects to support specific Mission SOs. Some of the key preparatory activities considered as very important by the Missions include (i) analyzing the macroeconomic issues and policy environment in the countries; (ii) conducting market assessments of the target infrastructure subsectors; (iii) understanding of local capital markets and identifying key barriers to financing; (iv) analyzing banking regulations and the extent to which they either promote or inhibit small-scale infrastructure financing; (v) determining the capacity building needs of the investor community and the local financial institutions; (vi) considering political, policy and socioeconomic factors affecting infrastructure financing; and (vii) ensuring adequate staffing and resources needed to implement an effective DCA facility.

Some Missions perceived a conflict between their social objectives and banks’ commercial orientation; other Missions assumed that, with the DCA, the banks objectives would be aligned with their own. A well designed DCA guarantee can serve both the Missions desire for social impacts and the banks desire for a fair risk-adjusted return if each objective is clearly acknowledged upfront and respected.

### *Understanding the Market and Its Needs*

Several Missions noted the importance of clearly understanding market deficiencies or needs that must be addressed in order to determine appropriate intervention options. This is necessary both to determine what types of supporting technical assistance activities may be warranted but also to confirm that the DCA instrument is the appropriate tool to overcome these barriers. This understanding directly influences both the design of the DCA instrument and the modalities of implementation. For example, the Ukrainian Mission sponsored a comprehensive technical assistance program for government, bank and municipal officials prior to their guarantee program. However, the Mission staff subsequently observed that a major impediment to financing infrastructure that had not been addressed was the National Bank of Ukraine’s inability to accept U.S. Treasury Bills as an acceptable form of collateral, resulting in high commercial reserve requirements for local banks despite the DCA. This issue has prevented the DCA alone to be able to reduce the high collateral requirements, a key desire of the Mission. Other Missions assumed that the lack of financing in a given sector was necessarily a supply-side problem and did not assess the willingness and ability for prospective borrowers within the target market from taking bank loans for certain types of activities (e.g., cleaner production, environmental management).

In some cases, Missions indicated that they may have designed their programs either too restrictively or too generously, resulting in either an underutilization or in providing more credit guarantee than needed to spur lending. Therefore, careful analysis of the precise credit needs of the market is another area where the DCA instrument can be strengthened. This situation was exemplified in Ukraine, where the Mission’s initial project design restricted the borrowers to the municipal-owned companies only for which municipalities set up tariffs. Unfortunately, this excluded many privately-owned enterprises from taking advantage of the DCA guarantee. Many of these private enterprises lease municipal infrastructure facilities and provide communal services. In response to market demand, both DCA partner banks requested that the guarantee facility be expanded to allow lending to the private enterprises that provide water and district heating services to communities.

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Attachment 4 illustrates an analytical framework prepared by the I&E Office to assist the South Africa Mission in thinking through possible energy financing program options.

### *Mission Planning and Resource Allocation*

Other Missions indicated that a lack of adequate staffing and resources was a key reason for underutilization of the DCA instrument. These issues need to be addressed through internal Mission decisions. USAID/Georgia, for example, which is currently implementing a DCA bond guarantee to support the placement of domestic corporate bonds, suggested that Missions should strongly consider having a finance person on the USAID staff implementing the DCA guarantees. On the other hand, USAID/South Africa felt the need to outsource the financial monitoring of the DCA guarantees to local consultants as they did not have adequate Mission staff to perform this function. Several Missions indicated that better results were achieved if they took an active role in working with the staff of their partner banks.

### *Create the Right Environment*

A key component for the most successful programs has been the ability for Missions to create a conducive environment for the DCA facility to function effectively. Specifically, a number of interventions can be implemented to ensure the right environment and address any market or institutional weaknesses. Based on the survey findings, the following steps could be useful in ensuring that the DCA addresses the right market needs and provides a valuable service to an otherwise neglected market:

- Link the proposed DCA instrument within a broader program and SO, designing the overall program to address all the identified barriers
- Analyze the target market, identify barriers to financing, develop a strategy to address them and conduct adequate market research to assess the market niche able to be stimulated with the DCA instrument
- Where markets are underdeveloped, consider intermediate steps, such as pilots, to create market precedents for scale-up under a DCA
- Review local capital market conditions and lending policies and behaviors as well as coordinate and possibly link up with ongoing donor-assisted financial sector reform programs
- Determine technical assistance and capacity building needs of the local banking partners and borrowers in order to implement an effective financing program
- Mobilize appropriate staffing and other resources to implement and monitor DCA guarantees

Several Mission respondents indicated that the lack of certain conditions within the banking sector in some countries created barriers to the successful implementation of their DCA guarantee facility. Items that were commonly cited as being most important included (i) a growing, stable, and transparent banking industry, (ii) active and existing long-term lending markets within the country, (iii) existing bond markets, and (iv) a semi-mature commercial banking industry. As an example, USAID/Bulgaria felt that the banking sector practices in the country required reform that could only be achieved through a continuous engagement with selected banks. Accordingly, for many years, USAID has played a direct role in assisting banking supervisors in the country including a strategic relationship with the Bulgarian Central Bank. Through its ongoing programs, the Mission was able to directly monitor the development of the banking system and the overall market dynamics which helped it schedule the right timing to offer DCA guarantee assistance to the sector.

***EMERGING GOOD PRACTICE: Adopt careful advanced planning including the development of a sound understanding of the policy environment, market needs and critical financing obstacles and then designing a program, using a DCA instrument as an integral component of a Mission's SO Program. Other issues, such as developing and coordinating among parallel technical assistance efforts and staffing with proper skills mix, need to be considered in the planning process.***

### Thinking Strategically to Support Municipal Lending in Bulgaria

USAID/Bulgaria structured a DCA under its Municipal Energy Efficiency Program (MEEP), which was designed to develop sustainable commercial financing of energy efficiency projects. A well designed and targeted technical assistance and training program assisted Bulgaria's public and private sector participants to identify eligible projects and develop business plans and loan applications for bank financing. USAID's support of potential borrowers and its offering of a DCA guarantee resulted in the local bank, UBB, gaining both a comfort level and a sustainable formula to extend energy efficiency project loans. The Mission's ability to provide continued technical assistance, which included well prepared project applications, proper project and credit analyses, served to help UBB to offer improved loan terms and reduce collateral requirements; UBB now offers the municipalities loan terms of up to five years, while industry and manufacturers are allowed 10-year repayment terms. As a result of these efforts, over \$8.1 million of lending has been completed in 30 projects and the DCA facility has achieved an 81% percent utilization rate with no defaults.

Building off of this success, the Mission has recently launched two additional DCA programs: a follow-on guarantee with UBB to finance additional energy efficiency projects with only 30% guarantee coverage and a \$15 million loan portfolio guarantee with another banking partner, HVB Bank Biochim, to further promote investment in municipal infrastructure. In order to strengthen the program, the Mission provided pre- and post-training to Bulgarian public and private institutions in the areas of municipal credit and infrastructure financing. Training was also provided to municipal loan officers in local banks. Local banks view the DCA and accompanying training as a great opportunity to open the door and establish relationships with new medium-sized municipality clients for further business development in the future.

An issue that arose during implementation of the follow-on DCAs was the availability of European Union accession funds for infrastructure projects. USAID thus made a strategic decision to use the DCA instrument to complement the EU financing. For the HVB facility, USAID targeted mid- to small-sized municipalities for limited loans not to exceed \$1 million, as projects of this size would not typically qualify for EU funds. The DCA guarantee will also help municipalities meet the 25% private financing requirement needed to qualify for 75 percent EU funding.

### **Developing and Nurturing Strategic Partnerships with Local Financial Institutions**

One of the most important factors influencing the successful implementation and operation of a DCA guarantee is the quality and commitment of the participating local financial institution(s). Having a committed and flexible banking partner dedicated to the success of the facility is key to making DCA programs work successfully, since it is the bank that will ultimately market the facility, offer new lending terms, issue the loans, and manage repayments. Also, a dedicated partner can be an effective agent of change by encouraging other local partners (i.e., new borrowers) to participate in the DCA guarantee facility or open up markets to other lenders, thereby significantly widening the impact of the program and enhancing the prospects for sustainability.

In many cases, Missions expect banks to use a DCA guarantee to decrease collateral requirements, extend longer repayment terms for the loans and, in some cases, lower interest rates. However, some Missions (the Philippines, Central America - Proarca, Peru, Egypt, and India - Yes Bank) suggested that their banking partners may not be fully conveying their reduced risks in lending onto the target sector borrowers since it is typically up to the discretion of the banking partners to decide whether or not to pass on the benefits of the guarantee to the borrowers. In some cases, partner banks appear to have either passed on only part of the benefit or none at all to the borrowers. To address this issue, some Missions suggested asking prospective banking partners upfront how the DCA instrument would affect their lending

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procedures and loan terms before entering into an agreement with them, so that any differences in expectations between Missions and banks can be addressed early on in the planning stages. Several Missions concluded that an independent assessment of the potential partner banks' suitability was beneficial prior to entering into a DCA agreement.

A majority of the Mission staff surveyed stressed several important factors when selecting the best available banking partner(s). These included:

- **Competitively select banking partner** – While many Missions met with multiple banks before selecting one with the strongest interest, the survey findings suggested that more structured competitive processes may have led to a better result. Considerations for issuing a formal request for proposals (RFP) or Annual Program Statement (APS) can require banks to compete for the DCA and thus encourage them to offer the best package of commitments upfront (e.g., marketing, staffing, borrower terms).
- **Conduct due diligence on partner banks** – Evaluating lending practices, assessing customer profiles, reviewing subsector specialties, etc. can help the Mission better understand its partner and possibly identify any deficiencies that may require additional technical assistance to address. Discussing early on how the lender envisions modifying its credit analyses and lending policies as a result of the DCA can help lead to a better designed and perhaps more utilized guarantee facility.

Rather than selecting and working with just one bank, some Missions have used alternative approaches to better enable competition throughout the program, such as:

- **Initially select several partner banks** -- Instead of teaming with only one bank, identify and team with several partner banks and allow each bank the ability to use a portion of the guarantee limit. This would have the effect of creating competition between the banks for the use of guarantees on loans that they extend in the target sectors.
- **Use the DCA to support a local guarantor** -- By partnering with a guarantee organization that supports the loans of banks within a country, the Mission can considerably broaden the availability of its DCA. This can occur because the local guarantor is able to provide DCA guarantees to projects brought to the organization by any bank within the country (e.g., Philippines – LGUGC).
- **Support a Pooled Financing Mechanism** - Pooled financing allows a group of borrowers, typically municipalities, to access credit by issuing bonds based on the underlying creditworthiness of the entire group. The main benefit of a pooled structure is that provides smaller borrowers access to credit on better terms than what would be available to each borrower individually (e.g. India – Tamil Nadu and Karnataka).
- **Sponsor a portable DCA guarantee** – Under such a scheme, a Mission can finance projects with an identified borrower and any bank from amongst many that offers the most favorable terms.
- **Guarantee a project fund facility** – This approach would guarantee an existing loan fund where contributions to the fund are made by several lenders and the fund is made available for a variety of eligible projects. Funds can also offer a wider range of financing products, such as mezzanine financing (e.g., bridge financing, subordinated debt, preferred equity) to help address the most critical financing gaps in the market (e.g., CAREC – Central America).

The interviews with banks further reinforced this feedback from Missions, particularly in regard to the need for Mission and bank interests to be aligned and the importance of understanding the bank's underwriting criteria. For example, one bank in South Africa cited the difficulty in finding

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suitable projects for the guarantee because they were unclear how the Mission was defining an eligible borrower. In Central America, two banks participating in the Proarca program cited the training partner's lack of understanding of their underwriting criteria as the primary reason no loans had been made under the guarantee. However, after a roundtable discussion and follow-up meetings to clarify their criteria for approving projects, the training partner subsequently identified a pipeline of acceptable projects larger than the guarantee facility, and the bank expects the facility to be fully utilized in the near future.

**EMERGING GOOD PRACTICE: Selection of partner banks or other existing loan funds through a competitive process and proper due diligence can help strengthening the partnership to enhance the success and coverage of the DCA guarantee instrument. Consider alternative structures to best meet the market needs.**

### Helping Communities Help Themselves in South Africa

In 1999, USAID/South Africa entered into an agreement with the Greater Johannesburg Municipal Council (GJMC) to provide a portable guarantee to support private investments in municipal environmental infrastructure projects, including the provision of water and water treatment services in underserved areas. Under this program, the Mission engaged a number of local banks to facilitate municipal financing and provided targeted technical assistance and training to South African municipalities and private sector project sponsors. The Mission also provided technical assistance to the South African municipalities and GJMC to assist them to reorganize their operations and provided training in budgeting, financial management, debt restructuring, and municipal revenue collection.

Using a competitive tender process, GJMC was able to use its DCA to access competitive terms and eventually selected ABSA Bank as its lender. Using the DCA guarantee, the GJMC was able to implement several high priority clean water and solid waste disposal projects. The technical support and partial guarantee helped Johannesburg improve its credit rating thus improving its access to long-term private capital markets for other priority infrastructure projects without the DCA coverage. The DCA and technical assistance program was not only able to stimulate financing of many attractive projects by GJMC, it was also able to transform GJMC into a more sustainable organization with a sound standing in the local financial markets.

### Integrating DCAs into Robust Technical Assistance Programs

A common message from almost all Missions surveyed is that the chances of a DCA guarantee's success will be greatly enhanced by the Missions undertaking a multi-year program of training and capacity building both **prior to and during** the DCA guarantee program. Pre-guarantee training is quite often undertaken by Missions as part of their programs to support economic growth, sector restructuring, expanded service delivery, and market development. Such technical support is often a necessary precursor to address basic policy, regulatory, operational and other issues (as discussed in Chapter 2), before a financing program may be viable. Such efforts can also help determine market conditions and assess its capacity to absorb the debt that a potential DCA instrument may help unlock. ODC generally encourages Missions to provide training assistance to sectors in which the DCA guarantee program is being planned.

Once a DCA is in place, more technical assistance is likely to be needed to provide additional support to the local participating financial institutions including training and marketing to expand the demonstration value of the initial DCA guaranteed projects to additional new projects. Even if previous technical assistance efforts have sought to address key market constraints, most loan guarantee programs have observed that the introduction of financing programs can help identify and uncover additional barriers as well as softer barriers that also need to be overcome if the program is to be a success. Such barriers include social norms, perceptions and attitudes formed

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on the basis of past experience, lack of trust between the private sector and public sector entities, etc. These barriers can be addressed through engaging the various partners in topical workshops and roundtables focused on describing the benefits of creative financing approaches to increase investments aimed at improving infrastructure services to the community.

### *Identify Skill Gaps and Associated Bank Training Needs*

In terms of training, the survey indicated that key areas of training needs may include: (i) market and project risk assessment; (ii) assessment of the borrowers' financial capability; (iii) provisions and conditionalities of the DCA guarantee scheme; (iv) project financing; and (v) financial appraisal of the projects. USAID/Georgia, for example, initiated a bond guarantee program but found that its partner bank needed to better understand the process and detailed steps needed to prepare and submit a bond issue. So, the Mission arranged for an external financial advisor to provide the needed training to enhance the skill sets of the bank officials, which facilitated the programs implementation. A similar skills gap in the area of project appraisal was identified by USAID/Honduras for its partner BAMER, so the Mission assisted BAMER to receive the required training in financial appraisal of projects that could qualify for the DCA guarantee. In the case of Panama, the borrowers and Mission representatives were concerned that its partner bank, Banco Cuscatlan, was not sufficiently committed to offering loan terms to prospective clients that were attractive and reflective of the reduced risks as a result of the DCA coverage. The Mission arranged for training of the branch loan officers in risk analysis, loan analysis, and economic and technical feasibility assessments, which resulted in a turn around in the process.

### *Publicize Successful Pilot Projects*

In terms of technical assistance for catalyzing market development and deal flow, it was noted that initial pilot projects and demonstrations can help bring early credibility to the program and provide a good test for a bank's credit review and approval procedures. A key is to develop good case studies of these pilots, which provide both the technical and financial aspects of the pilots so other banks can better appreciate the resulting cash flows and risk profiles, and publicize them heavily. EGAT's I&E Office is now working with USAID/Egypt to improve utilization on its energy and environment DCA by implementing a bidding program with small grants awarded to the first couple of projects that reach financial closure. The results will be aggressively marketed in order to generate more business for the partner bank, NSGB.

### *Ideal TA Providers are Conversant in Both Technical and Financing Issues*

Several Missions stressed the importance of selecting technical assistance and training contractors that are conversant in project financing to ensure they possess the right skills to adequately complete the tasks requested. A number of respondents noted that they may have selected contractors strong on technical issues but maybe less so on the banking and finance side, which resulted in several projects being prepared that were later rejected by the partner banks. A few Missions went further to note that some contractors and partners were also strong advocates of particular technologies (e.g., renewable energy) and, in many cases, did not pay sufficient attention to the fundamental economics of the projects and cash flows. Establishing a clear delineation of responsibility between the bank and contractor regarding who is responsible for originating deals, ensuring systemic feedback between the banks and contractors on common proposal weaknesses, and considering use of performance contracts for technical assistance partners to develop increased accountability can all help improve results.

Several USAID countries included in this survey were unable to continue their program of training and capacity building to participating local financial institutions and borrowers in the target sectors that they had sponsored prior to undertaking a DCA guarantee. As a result, those DCA guarantee facilities have been generally underutilized, highlighting the importance of using the DCA instrument within a broader program. This has occurred in Kazakhstan, some Proarca countries in Central America, the Philippines, Egypt, Kyrgyzstan, and Peru. Representatives of these Missions stressed that without a program of ongoing training, it has been very difficult for them to address and rectify market obstacles that have arisen.

**EMERGING GOOD PRACTICE:** *Assessment of the training and capacity building needs of the partner financial institutions and private sector and then implementing such programs both prior to and during the process of implementing a DCA guarantees program is critical to a successful outcome. Such support can also assist the partners in becoming effective agents of change and spreading the strategic value of the DCA guarantee as a tool for market development for infrastructure financing. Early deals can greatly increase the credibility of the program and encourage replication. Periodic assessments may also be needed to address changing market conditions, newly emerging constraints, and softer barriers.*

### Funding Clean Energy Production in Central America

In 2003, USAID/GCAP signed a master loan portfolio agreement with five regional banks located throughout the Central American countries to provide capital for small and medium enterprises to encourage them to introduce, upgrade, or retrofit industrial and agro-business practices that utilize cleaner production practices, certification processes, and sound environmental management systems. This DCA was meant to deepen impacts from an ongoing technical assistance program that began in 1997, working with municipalities, target industrial sub-sectors (slaughter houses, water distribution, waste water treatment and solid waste disposal) and national Clean Production Centers (CPCs).

Despite a strong technical assistance program, Missions found that take up of the DCA-guaranteed loans was very low. So, USAID/GCAP began undertaking proactive measures to enhance the relationship between the CPCs and banks. As a first step, the Mission organized a working group meeting with banks, CPCs, and government representatives to identify and address barriers to clean production lending. Two issues that were identified were (i) banks lacked confidence in some of the project proposals submitted by the CPCs in part because the Centers were technically strong but had less finance experience; and (ii) the CPCs were working in some industrial sub-sectors that were not priorities for the banks. Thus the working group agreed to agree on target sub-sectors upfront, clarify bank requirements for future proposals, select project sponsors with high commitment to the projects, and provide additional training to the entrepreneurs in project packaging and financing. Recent discussions with some of the partner banks suggested a much higher degree of confidence in the program and several high quality project proposals are now being reviewed by the banks and are expected to be approved shortly.

#### **Encouraging Utilization and Expansion**

The extent to which a Mission's banking partner uses, or fails to use, the DCA guarantee to enhance its lending activity to the target sector(s) is a key determinant of a DCA program's effectiveness. Of course, as will be discussed later, indicators beyond utilization are important. The survey indicated that despite good local financial partners and accompanying technical assistance programs, in some cases, DCA facilities remain underutilized. Typically, this underutilization is a result of many extraneous factors often outside of the Missions' control, such as changes in market conditions, limited interest by participating banks, reluctance of borrowers, and lack of competition for market capital. However, despite their lack of control over such factors, Missions have identified several key DCA design issues and ongoing technical assistance interventions which could be considered to help address some of these factors as they arise.

#### *Market the Value of DCA Guarantees*

In some cases, the survey found that the DCA facility was underutilized despite a large unmet demand for investments in municipal infrastructure. Often this was a result of a lack of understanding of the DCA instrument among the potential partners in the countries. The Missions felt that there is a need to significantly market the value of the DCA instrument through a

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variety of means including (i) general public outreach, (ii) roundtables and information seminars in partnership with local banks, (iii) initiating selected pilot projects and advertising their success, (iv) engaging in partnership with local Chambers of Commerce to mobilize industry interest, (v) engaging local community groups in dialogues to correct perceived risks associated with specific sectors and projects, and (vi) educating city and municipal officials in the value of the DCA guarantee as a powerful tool in mobilizing investments in critical projects aimed at improving basic infrastructure services.

### *Design Flexible DCA Guarantee Structures*

In some instances, market conditions, management changes, competing donor facilities, and obstructions presented by internal lending practices have reduced the incentives of the participating local banks' management to aggressively promote lending under the DCA loan guarantee facility. DCA guarantee facilities should be designed with the maximum amount of flexibility to allow Missions to respond to general market conditions and make adjustments as new realities arise. Several Missions such as USAID/Honduras and USAID/Ukraine are in the process of renegotiating and restructuring their DCA agreements with ODC and partner banks to modify and expand the target sectors and types of organizations that will be allowed to borrow under the guarantee facility.

Additionally, in the initial stages of the DCA facility implementation, the Missions may consider offering a much larger guarantee and then gradually reduce the guarantee share as the market sees the demonstration value of the DCA instrument and the local banks become more confident. An example of flexibility being built into the guarantee is exhibited by the DCA in India's guarantee program with Yes Bank, which allows for guarantee coverage ranging from 25-50 percent for different projects. Allowing as little as 25 percent coverage allows the bank to be charged less for less risky projects and makes DCA guarantee coverage available for many more projects.

### *Increase Market Competition for DCA Guarantees*

Several Missions suggested that their partner bank's lack of motivation to lend using the DCA guarantee facility might be partly due to the lack of competition in lending. Typically the Mission's partner bank is the only bank selected for the DCA coverage and, thus, may not have the necessary impetus to expand lending to the target sectors or pass on the benefits derived from the guarantee coverage. Unless the partner bank is highly committed to putting the DCA facility at the core of its lending program, the DCA guarantee may go underused. Several Missions felt that this lack of competition with other banks provides no incentive for the partner bank to seek to aggressively overcome any market obstacles and increase new lending by utilizing the DCA instrument. Again, selecting more than one bank can help partially address this issue. Another suggestion was to consider offering a DCA guarantee with declining coverage over time. This can serve as a big incentive for the bank to book deals early, when the higher coverage percentage is accessible. As experiences are learned and the market develops, the declining coverage can allow USAID's DCA to gradually exit from the bank's lending considerations and thus result in more sustained lending once the DCA has expired.

Moreover, project sponsors are often reluctant to switch from their existing bank to a new bank as the process of switching may be tedious and difficult. Many borrowers indicate that they (i) have already gone through this tedious approval process with their own bank, (ii) feel comfortable with their current bank, and (iii) do not want to go through such a process with another bank known to lend to only known clients. This may point to the value of considering the selection of multiple banks upfront to be eligible for the DCA guarantee coverage, or alternative schemes as discussed previously.

### *Increase Bank Interest through Parallel Technical Assistance Programs*

Several Missions mentioned a variety of other factors that appeared to influence the use of the DCA by the partner banks, such as: (i) biases towards larger projects in more mature markets to reduce risks and transaction costs and increase prospects for larger fees; (ii) unfamiliarity with the

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subsectors targeted by USAID Missions and lack of existing clients within the target borrower pool; and (iii) hesitancy to take on new borrowers/clients. Since many emerging market banks are very conservative and operate only in proven markets, there is a general tendency in many local banks to prefer to lend to their existing clients, and sometimes reject good projects presented by new project sponsors. Different banks -- particularly in regional facilities such as Proarca in Central America -- also have different sector specialties and client preferences. Although these issues should ideally be identified during the initial due diligence of potential bank partners, various forms of technical assistance can help overcome these obstacles even after a facility is in place. The development of parallel technical assistance programs to develop borrower profiles attractive to the banks, creation of standard loan applications and appraisal procedures for DCA-targeted projects, support for initial demonstration projects to prove low risks, and, perhaps, entering into a small contract with the bank to help defray marketing, training and other costs, all could help address this issue.

Different Missions have taken different approaches to addressing the underutilization issue. Faced with low DCA utilization rates, Proarca Missions, for example, attempted to broaden the sectors for lending, thereby increasing the overall market for credit utilizing the DCA instrument. The Mission expanded its overall outreach to cultivate many new partners and potential borrowers. A similar approach was taken by USAID/Kazakhstan, which, in response to the lack of lending by its partner bank under the DCA guarantee, organized roundtable discussions between the bank and the borrowers to improve relationships between both groups. They sought to bring the bank projects and clients with whom they would be more comfortable with.

***EMERGING GOOD PRACTICE: Implementation of programmatic actions to increase market competition for the DCA instrument through engaging multiple partner financial institutions, innovative guarantee schemes, and increasing outreach to both lenders and borrowers in order to develop the market for capital in strategic municipal infrastructure sectors.***

### Improving Urban Environmental Infrastructure Services in India

In 2002, USAID/India supported the creation of a pooled financing mechanism to provide investment funds to small- and medium-sized municipalities in the State of Tamil Nadu in Southern India to finance and construct water and sanitation projects. The DCA facility was structured as a bond guarantee on a maximum portfolio amount of \$6.4 million for 14 municipalities. A trustee, the "Water and Sanitation Pooled Fund" (WSPF), was created to issue the bond. The USAID DCA guarantee provided the necessary credit enhancement required to earn the bond issue an investment grade status of double A ("AA"). Attracting private capital also required the establishment of escrow accounts for servicing debt from municipal revenues and gaining a commitment letter from the State of Tamil Nadu to agree to intercept funds due to the municipalities and direct them to the escrow accounts in case of default. The DCA guaranteed a one-time replenishment of the bond service escrow account.

In parallel, the Mission also offered technical assistance and training to municipalities through its Financial Institutions Reform and Expansion (FIRE) Program. Under this program, municipalities were provided with support in project structuring, improving budgeting practices, assisting in cash flow projections, developing acceptable project profiles, and negotiating with credit rating agencies.

As a result of this program, bonds were issued at 9.2% with a 15-year term, and a 1-year moratorium. Funds raised by the bond issue were disbursed as sub-loans to the participating municipalities. Subsequent to the successful implementation of this bond guarantee, the Mission is now supporting a similar pooled financing mechanism established in the Indian State of Karnataka, where it provided a DCA guarantee of 50 percent of a \$23 million pooled financing bond issue. Based on these promising experiences, USAID/India is considering the possibility of replicating this process in other states and at the national level.

## Survey Findings and Emerging Good Practices

### Measuring the Success of a DCA

As with other USAID development programs, performance indicators are used to help measure results and impacts of DCA guarantee facilities. ODC usually uses two types of performance indicators: output and outcome. Output indicators typically concentrate on the direct result of an activity, are generally available in real-time, and are easy to collect. Outcome indicators go a step further and focus more on the broader intended result of an activity. These can be more difficult to attribute to a single activity and may require more time and funding to collect. When possible, a combination of output and outcome indicators is appropriate, especially when the Mission has partners providing complementary technical assistance. Typical examples of performance indicators may include, as is the case with the UBB2 in Bulgaria: (i) the number of energy-related loans made to qualifying borrowers, (ii) the dollar amount of energy-related loans made to qualifying borrowers, or (iii) the amount of energy saving from the activities. Or they could include, as is the case, with Proarca in Central America: (i) the number of private sector entities that obtain financial resources for environmental management initiatives, (ii) the number of private sector entities that adopt best practices or environmental management practices, and/or (iii) the number of businesses that complete an evaluation of their environmental management needs.

In some instances, there may be a tendency to overly focus on DCA utilization rates as the primary indicator of a guarantee's effectiveness, since high utilization rates generally imply strong demand and high leverage of the guarantee facility. However, it should be recognized that utilization rates as a performance indicator should serve as a proxy only and may not exhibit a true measure of the success of USAID's efforts. In some cases, just the process of providing technical assistance and training during the planning and early implementation stages of a guarantee facility may contribute to a change in the attitudes of either commercial or other donor financial institutions, resulting in their lending to organizations in the targeted market sector without using the DCA guarantee. This appears to have been the case in South Africa with INCA, which was supported by a USAID guarantee. INCA specialized in buying and rehabilitating sub-grade municipal debt and reselling the debt to the highest bidder. After a time it appeared that INCA was not actively pursuing the market on behalf of USAID. This inaction likely occurred because companies purchasing the debt began feeling more comfortable with the sub-grade municipal market, and simply began buying it on their own.

***EMERGING GOOD PRACTICE: A combination of outcome and output indicators that measure both the direct results of the guarantee and the broader intended development impact are recommended. Also consider reviewing total lending for a target market, rather than utilization, to better assess transformational effects of DCA and accompanying technical assistance.***

### Coordination with Other Donors on Financing

DCA has experienced growing competition from other donors. Various multilateral and bilateral donors provide soft loans, grants, and financing for the capitalization of specialized funds for investment in small-scale infrastructure projects in developing countries and emerging economies. While many of these financing products address different markets, in some cases, such programs have been offered at more preferential rates and, thus, served to undercut the more commercially-oriented DCA instrument. There are no simple solutions to such issues. But they stress the need for improved donor coordination. Where competing programs are being considered or have been identified, efforts should be made to try and stratify markets between donor programs, consider merging the programs, or agree to harmonize lending terms and conditions so the programs can compete on a more level playing field.

Two DCA facilities in Morocco supporting municipal lending and concessionaires have suffered after a government-sponsored program offered its own guarantee program, offering up to 70% coverage and better terms. USAID/Peru, for example, noted that a competing Swiss Clean Production guarantee program allowed three banks to compete for use of the guarantee in the program. While similar to the Mission's DCA, the Swiss established a 50 percent loan guarantee

## *Survey Findings and Emerging Good Practices*

program, but added a second component that specified that if the applicants met certain target indicators established in the project relating to waste reduction etc, the participating bank received a 30% reduction on the amount that they needed to pay back. They also allowed three banking institutions in Peru to access the guarantee, including the Mission's banking partner, BCP. In such cases, the Missions may consider restructuring the DCA instrument by (i) reducing or increasing the guarantee percentage, (ii) redefining the project size eligible for DCA guarantee, (iii) defining a new market segmentation, or (iv) changing the core focus sector.

The CAREC fund in Central America is a case where several donor funds were pooled together to offer a common product for potential borrowers. This facility, which is designed to offer mezzanine financing for renewable energy and clean production projects, has funding from the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB), Central American Bank for Economic Integration (CABEI), and European development banks and funds (BIO, FinnFund, Triodos). The DCA provided CAREC with a portable guarantee for private debt into CAREC, allowing CAREC to shop around for the best lending terms the market would bear.

***EMERGING GOOD PRACTICE: Close donor coordination is critical to avoiding competing programs and potentially undercutting the DCA instrument. Consider targeting different market segments, combining programs or harmonizing terms to reduce competition and likely confusion in the marketplace.***

## **IV. Conclusions**

Clearly, the introduction of the DCA instrument has provided USAID with a powerful tool to complement its ongoing assistance packages to developing country clients. Such an instrument allows USAID Missions to complement their ongoing technical assistance programs by engaging the banking sector and scale-up program results. The DCA-backed infrastructure projects, in many of the countries surveyed, also confirmed a direct link between the implementation of projects and positive development impacts, and created a wider and more sustainable development across other sectors within many of the countries. In this sense, the strategic value of the DCA guarantee instrument has gone far beyond just a facility to spur financing. It has served a critical need in a niche market directly aimed at creating locally driven economic development.

One of the key findings of the survey was that the DCA tool continues to be very instrumental in either helping further develop a market for investments in small-scale infrastructure projects or significantly boosting the market by involving more new partners and stimulating financing in additional new infrastructure projects. In many developing countries, small-scale infrastructure projects represent high risks to investors and often the communities may not fully appreciate these risks. Nonetheless, the demand for new investments in critical infrastructure projects is very high in most of these countries. The survey also confirms that in some cases the DCA guarantee played a critical role in the start-up phase which led to the development of a market which may have otherwise not taken place or would have been significantly delayed. While the DCA instrument is not a “magic bullet” to cause financing for all projects, it has played a powerful role in demonstrating that infrastructure projects can be good candidates for local financing. Often, it has been a lack of such demonstrations and initial risk sharing that has been a barrier to local participation in financing municipal infrastructure.

It is important to note, however, that DCA partial credit guarantees are designed to function best under reasonable market conditions; they cannot address systemic sector or banking issues. Such tools need to be carefully designed and properly managed, based on prevailing policy and market conditions, and within the local context. Such careful planning and monitoring can help better ensure that the overall program meets the Missions’ intended goals. While DCAs do require staff time to manage, they do not require disproportional resources if developed and designed properly at the outset. The use of the DCA option also may require a shift in strategic thinking for some Missions, particularly those that have focused on programs to provide basic infrastructure services to the poorest of the poor. Such markets have obvious social objectives but may not be best suited for leveraged commercial financing, which the DCA provides.

The survey also pointed to the fact that some DCA guarantees have had multiplier effects in many of the countries in that there are increasingly more projects being taken up by local banks beyond those guaranteed by a DCA facility. Therefore, the DCA has also acted as a leveraging instrument to create a culture of financing in small-scale infrastructure projects which are most critically needed and most often neglected, often because of high transaction costs and high real or perceived risks. Creating this shift in practices and culture also provides more fertile ground for sustainable development in the years ahead. And, as use of the DCA instrument increases, new approaches are expected to be developed, new lessons and experiences will be gained, which will serve to provide even better understandings of how USAID can more effectively leverage developmental impacts and mobilize the critical commercial financing that is needed to help address the enormous infrastructure necessary to sustain and enhance economic growth.

## Attachment 1: Survey Instrument

### Bank Interview Questions

#### **Questions Regarding the Planning Stage of DCA:**

1. How comfortable had you been in lending to the target market?
  - a. Had you previously done any other loans?
  - b. What were the main hesitations about lending to the market and to companies or municipalities in that market?
  - c. What were the major obstacles to lending to that market?
  - d. Has participating in the loan guarantee facility affected your hesitancy to lend in this market?
2. What made you decide to team with USAID as the banking partner in the guarantee program?
  - a. What did you hope that participating in the guarantee program would achieve?
  - b. How did you find the process of working with the USAID Mission and the Office of Development Credit in Washington D.C.?

#### **Questions Regarding the Period that the Guarantee Was in Effect:**

##### ***Sector Training and Technical Assistance Questions***

1. Has your bank received any training or technical assistance, sponsored by the Mission, prior to or during the implementation of the guarantee? If so,
  - a. What did it consist of?
  - b. Was it useful? If it was not useful, what type of training or assistance would have been useful in making your bank more comfortable about lending to the targeted market sector?
  - c. Where was training lacking?
2. What type of training or technical assistance do you feel would be most useful to your organization, the results of which might make your bank more comfortable in lending to these types of borrowers?
3. Did you make an agreement with USAID that you would support the training within your own organization in support of the guarantee? What type?

##### ***Lending Under the Guarantee Program Questions***

1. Did you use the guarantee to support loans to any projects or organizations in the target sector?
  - a. If you did, what were the main factors influencing your decision, and how much of a role did the guarantee program have in influencing that decision?
  - b. Were the terms of credit that you offered improved because of the guarantee? Why or why not?
    - i. If not, what were the major considerations why you did not, and what would be needed to change this decision?
2. How useful is the DCA guarantee in encouraging you to lend to the targeted sector?
  - a. What are its main advantages and disadvantages?
  - b. Did you find it sufficiently flexible or inflexible?
3. Are there any other observations that you feel that I should be aware of?

## Mission CTO Questions

1. Why did you decide and what were the events that led you to your decision to do a DCA guarantee?
2. What pre-guarantee analyses or surveys did you conduct (e.g. target market analysis, bank or borrower surveys)?
  - a. Did you implement programs of technical assistance, training, and advertising prior to or after preparing the Action Memorandum?
3. What process did you go through in selecting the potential banking partners and participants?
  - a. General Familiarity with the Program
    - i. How well acquainted are local financial institutions, local companies, and local entrepreneurs with the DCA program?
  - b. What process or criteria was used in the following:
    - i. Identifying, contacting, and subsequently selecting financial institutions to participate in the program?
  - c. Was the availability publicized? What type of media or what types of programs for which uses (banks, end-users, developers, the public)?
  - d. Why did you select the banks that were chosen?
  - e. Technical assistance: In what areas did you support local capacity building activities, using specific examples, in respect to?
    - i. Local Financial Institutions
    - ii. Borrowers and Developers
    - iii. Consultants and Other
  - f. Would you change anything about this process for the next program?
4. What are some of the considerations that you have encountered in setting up and, later, implementing the guarantee program?
  - a. Examples of Considerations:
    - i. Quality and Quantity of Projects in the Pipeline;
    - ii. Increasing your bank partner's commitment;
    - iii. Increasing utilization;
    - iv. Structure and terms of the financing;
    - v. Competitiveness of the final offered product;
    - vi. Interest by local banks and/or developers or potential borrowers.
5. Best Practices and Lessons Learned
  - a. If you were to get a call from a CTO from another USAID Mission, what type of advice, cautions, or recommendations would you give them regarding:
    - i. Training, education and stakeholder involvement;
    - ii. Good Practices;
    - iii. Lessons Learned as relating to Energy and Infrastructure Guarantees as they relate to:
      1. The Mission
      2. Local Banks
      3. Borrowers.
  - b. Country Specific Factors and Issues, such as:
    - i. Government policy and legal framework;
    - ii. Regulatory environment;

## Survey Instrument

- iii. Local financial markets and working with local financial institutions;
  - iv. Market specific and competitive market issues;
  - v. Public outreach;
  - vi. Addressing political issues and hot button issues.
  
6. Benefits: What have you found to be the greatest benefits of the DCA Guarantees?
  - a. Specific Examples.
  
7. Best applications and uses for the program:
  - a. Best applications;
  - b. Usefulness and Competitiveness of the DCA Program: How often do you encounter and/or respond to competitive guarantee offerings and enhancement mechanisms from other donor agencies on specific transactions?
  - c. What other products should be offered by DCA to increase its attractiveness, usefulness, and utilization?
  
8. Your Impressions:
  - a. How difficult did you find the process for applying for, and receiving, the DCA Guarantee?
  - b. What features or aspects do you find most attractive about the DCA program in helping to perform your job?
  - c. What are the program's greatest constraints?
  
9. Tracking: To what extent do you track the performance of each DCA?
  - a. Stated Objectives;
  - b. Pre-award process;
  - c. Post-award activity.
  
10. Regional Differences: Factors in the above questions.
  - a. What are the regional lessons learned?
  
11. Is there anything else you would like to tell me or highlight from your experience?

List of Individuals Participating in the Review

**Attachment 2: List of Individuals Participating in the Review**

USAID Mission	Project Name	Primary Contact	Telephone
Honduras	Banco de Occidente	Denia Chavez	5042369320 x4418
Central America	Bancentro, Nicaragua	Alfonso Moncade	5052670502 x214
Central America	Banco Cuscatlan, El Salvador	Orlando Altamirano	50322341309
Central America	Banco Cuscatlan, Panama	Orlando Altamirano	50322341309
Central America	Lafise, Costa Rica	Orlando Altamirano	50322341309
		Fabian Redondo	
		Vargas -- Lafise	506 246-0800
		Robert Morales	50224224000
		Ricardo Aguilar	
Central America	Banco Mercantile, Honduras	Carlos Solis	5042369320, x4030
Peru	Banco de Credito	Edilberto Alarcon	511618121281
Central America	CAREC	Jas Singh	2027124473
Brazil	Gethal Amazonas	Alexandre Mancuso	556133127246
		Eduardo Freitas	556133127203
			37322201800, x.
Bosnia	Volksbank BH d.d.	Babette Prevot	122
		Marc Ellingstad	
			380444927100, x.7137
Ukraine	Nadra Bank	Andriy Mitskan	
	UkrSibBank		
South Africa	GJMC/ABSA	Marcia Glenn	27124522257 2634252401, x.220
	INCA/Investec	Joel Kolker	
	MIU		
Bulgaria	UBB #1 & UBB #2	Andre Kruger -- ABSA	27 11 350-3906
		David Lieberman	35929395747
		Ira Birnbaum	2027121459
		Ms. Hrisimira	
		Malcheva -- UBB	359 2 811 2229
	HVB Bank Biocim	Kiril Kiryakov	35929395747
		Mrs. Rumiana	
		Pavlova -- HVB	359 2 9269 353
Serbia	Raiffesisen Bank A.D.	Art Flanagan	381113064711
		Jelena Bulatovic	381113064785
Egypt	Commercial International Bank	Mamdouh Raslan	2025226768 99532778540, x.
Republic of Georgia	Bank of Georgia	Dana Kenney	129 57124236880, x.
Kazakhstan	Kazkommertsbank	Craig Anderson	119
		Sergey Yeltkin	
Kyrgyzstan	Bai Tushum	Jamila Amodeo	73272507612, x.
India	Yes Bank	Archana Walia	343 911124198153

*List of Individuals Participating in the Review*

**Attachment 2: List of Individuals Participating in the Review**

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Bangladesh	HSBC	Aniruddha Hom Roy	8802885550022, x. 2541
	Prime Bank	Sher Khan	8802885550022, x. 2541
Philippines	LGUGC	Tyler Holt	6325529939

USAID Mission	Project Name	Primary Contact	Telephone
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USAID/ EGAT		Kofi Owusu Boakye	202 712-5582
USAID/ EGAT		Jennifer Dostert	202 712-5203
USAID/ EGAT		Karen Doswell	202 712-4431
USAID/ EGAT		Alison Eskesen	202 712-5323
USAID/ EGAT		Paul Freedman	202 712-5098
USAID/ EGAT		Sandra Goshgarian	202 712-0382
USAID/ EGAT		Christopher Ray	202 712-5538
USAID/ EGAT		Edward Roche	202 712-5203
USAID/ EGAT		Jas Singh	202 712-4473

### Attachment 3: List of DCA Energy, Water, Infrastructure and Environment Projects

DCA Guarantees in Energy, Water and Environment  
As of March 31, 2006

Banking Partner	Region	Country	Start Date	Target Sector	Type	Facility Size	Guaranteed Amount	Cumulative Utilization (Percent)	Number of Loans	Average Sub-loan
United Bulgarian Bank	E&E	Bulgaria	2000	Energy	LPG	\$10,000,000	\$5,000,000	81.0	30	\$270,000
United Bulgarian Bank	E&E	Bulgaria	2004	Energy	LPG	10,000,000	1,500,000	1.9	1	\$190,000
Bank of Georgia	E&E	Georgia	2004	Energy	BG	3,000,000	1,500,000	0.0	0	N/A
Kazkommertsbank, JSC	E&E	Kazakhstan	2004	Energy	LPG	15,000,000	7,500,000	11.7	1	\$1,688,411
Yes Bank	ANE	India	2005	Energy	LPG	20,000,000	10,000,000	0.0	0	\$3,000,000
CAREC	LAC	Central Amer.	2004	Energy	PG	5,000,000	2,500,000	0.0	0	\$1,500,000
Banco de Credito	LAC	Peru	2002	Environment	LPG	2,000,000	1,000,000	31.1	5	\$124,466
National Societe Generale	ANE	Egypt	2003	Environment	LPG	17,300,000	8,650,000	0.0	0	N/A
RBTT Bank	LAC	Jamaica	2003	Environment	LPG	5,000,000	2,500,000	19.9	4	\$248,750
Bancentro	LAC	Nicaragua	2003	Environment	LPG	2,000,000	1,000,000	0.0	0	\$20,000
Banco Cuscatlan de Panama	LAC	Panama	2003	Environment	LPG	2,000,000	1,000,000	0.0	0	\$20,000
Banco Cuscatlan	LAC	El Salvador	2003	Environment	LPG	2,000,000	1,000,000	25.5	4	\$130,250
BAMER (Banco Mercantil)	LAC	Honduras	2004	Environment	LPG	2,000,000	1,000,000	3.3	3	\$26,430
Lafise (Banco Lafise)	LAC	Costa Rica	2004	Environment	LPG	2,000,000	1,000,000	0.0	0	\$20,000
LGUGC	ANE	Philippines	1999	Infrastructure	LPG	28,500,000	8,550,000	100.0	6	\$4,388,913
ABSA Bank	AFR	South Africa	1999	Infrastructure	PG	25,000,000	12,500,000	90.1	1	\$25,000,000
Investec Bank	AFR	South Africa	1999	Infrastructure	PG	10,000,000	10,000,000	76.0	1	\$10,009,126
Banco De Occidente, S.A	LAC	Honduras	2002	Infrastructure	LPG	5,000,000	2,500,000	9.9	2	\$352,377
DAD	ANE	Morocco	2002	Infrastructure	LPG	3,000,000	750,000	0.0	0	N/A
FEC	ANE	Morocco	2003	Infrastructure	LPG	4,696,000	2,348,000	0.0	0	N/A
Municipal Infrastructure Investment Unit (MIIU)	AFR	South Africa	2004	Infrastructure	LPG	35,000,000	17,500,000	0.0	0	\$3,500,000
HVB Bank Biochim	E&E	Bulgaria	2005	Infrastructure	LPG	15,000,000	7,500,000	0.0	0	\$750,000
Raiffeisenbank a.d., Beograd	E&E	Serbia	2005	Infrastructure	LPG	10,000,000	5,000,000	0.0	0	\$750,000
Nadra Bank	E&E	Ukraine	2004	Infrastructure	LPG	1,500,000	750,000	0.0	0	\$500,000
UkrSibBank	E&E	Ukraine	2004	Infrastructure	LPG	1,500,000	750,000	0.0	0	\$500,000
W.S.P.F. (Tamil Nadu)	ANE	India	2002	Water	BG	6,400,000	3,200,000	100.0	1	\$914,285
Commercial International Bank (CIB)	ANE	Egypt	2003	Water	LPG	40,000,000	20,000,000	0.0	0	\$2,000,000
Karnataka WSPF (KUIDFC)	ANE	India	2003	Water	BG	23,014,960	10,850,000	100.0	1	\$3,100,000
Bai Tushum	E&E	Kyrgyzstan	2004	Water	LPG	1,000,000	500,000	0.0	0	\$7,500
							<b>\$306,910,960</b>	<b>\$147,848,000</b>	<b>60</b>	<b>\$2,360,420</b>

## Attachment 4: Sample Decision Tree for Energy Financing Programs

