# **Debt Management**

## A New Initiative by IDRC

Part One
An Overview



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#### 1.0 INTRODUCTION

The 1980s was the decade of the debt crisis. Debt issues dominated international economic discussions and the international financial system was subject to intense scrutiny. It brought forth cooperative endeavours between the industrialized countries, international financial institutions and commercial banks on a scale not thought possible before the debt crisis affected the world economy. These cooperative endeavours were partly the result of a greater realization than in the past of the interdependence between the developed and developing world. Nevertheless, it became a very emotive issue and various pressure groups were formed which called on governments to unilaterally suspend debt service payments, to form debtor cartels, to negotiate with creditors and to take other radical measures. At the same time there was acceptance by the borrowers that policy reforms had to be introduced to improve their economic management, including debt.

These policy reforms created a demand for improving the debt management capabilities of developing countries, many of them in the context of adjustment programs negotiated with the World Bank and International Monetary Fund. In response to this demand, several multilateral and bilateral agencies decided to launch technical assistance programs which would assist developing countries to record and manage their external debt more effectively than in the past. The leading agencies which provided this assistance were the Commonwealth Secretariat and the United Nations Conference on Trade and Development (UNCTAD).

Policy reforms implemented under adjustment programs created a demand for improving debt management capabilities in developing countries.

IDRC has been associated with the Commonwealth debt management program from its inception in 1983. It responded to a request for technical and financial support from the Technical Assistance Group (TAG) of the Commonwealth Fund for Technical Cooperation (CFTC) for the development of a software package, the Commonwealth Secretariat Debt Recording and Management System, which came to be known by the

acronym CS-DRMS. This software became an integral part of the Commonwealth program of advisory services on external debt management. Subsequently, assistance was provided to Sri Lanka for the implementation of a Debt Recording and Management System (DRMS) project which became the pilot project for the Commonwealth program. The program now covers 33 Commonwealth countries.

A second phase of support to the debt management program involved joint financing with CFTC for the provision of a training coordinator located in TAG for DRMS projects. This phase also resulted in the production of training materials and documentation for DRMS. This made a significant input to the development of training modules which became a major component of DRMS projects. IDRC support continued with the co-financing of a regional DRMS project at the Eastern

IDRC contributed to the development of a software package, CS-DRMS, which became an integral part of the Commonwealth program of advisory services on external debt management.

Caribbean Central Bank (ECCB), which covers 8 countries in that region. More recently, the DRMS projects in Sri Lanka, the ECCB and Guyana were provided support to assist in the conversion to the latest version (5.0) of the CS-DRMS software.

Interest in the CS-DRMS software has extended to countries outside the Commonwealth. At the request of the Ministry of Finance in Thailand, the Commonwealth Secretariat is implementing a DRMS project in Thailand via a special contract financed by IDRC and USAID. The Asian Development Bank is co-financing a project with IDRC in the Lao Peoples' Democratic Republic. IDRC is also co-financing a project in Mozambique with the CFTC. Other countries outside the Commonwealth have also expressed interest in obtaining access to the software.

In 1988, the United Nations Development Programme (UNDP) commissioned an expert group to study the

The **UNDP** expert group recommended that debt management be adopted as a priority area for technical assistance.

debt management needs of developing countries and recommend a program of action for technical assistance agencies in this field. Their report entitled "Debt Management in Developing Countries", which was released in July 1989, recommended that debt management be adopted as a priority area for technical assistance within the framework of financial management for economic adjustment. The report also recommended the implementation of country-level projects which corresponded in scope to those implemented by TAG in Commonwealth countries using either the Secretariat CS-DRMS or UNCTAD software. These recommendations, inter alia, provide the

basis and justification for IDRC to launch a program of its own and finance DRMS projects and related activities using the CS-DRMS software, full access to which has been assured. It is expected that the IDRC program will focus on countries outside the Commonwealth, although co-financing with the CFTC on a project basis has not been ruled out for Commonwealth countries.

Presently, the CS-DRMS software is available only in English. A special opportunity presents itself for the development of a French version of CS-DRMS for use in IDRC-funded projects and this is a possibility that

will be pursued. IDRC has appointed a team with economic and computing skills to deliver the technical expertise required in these projects. The resources of this team will be supplemented by consultancy inputs as required for project implementation. The projects will be modelled on the Commonwealth program and methodology, and will use the CS-DRMS software in their implementation. Although the IDRC team will provide follow-up troubleshooting and technical support, the maintenance of the software package itself and responsibility for enhancements will remain with the Secretariat. IDRC has signed a Distributor Agreement with the Commonwealth Secretariat whereby it has become a distributor with rights to use the CS-DRMS software for the implementation of DRMS projects in non-Commonwealth developing countries.

IDRC's program, which will use the CS-DRMS software, will be modelled on the Commonwealth program and methodology.

#### 2.0 DRMS PROJECT OBJECTIVES AND SCOPE

Debt recording and management system projects will enable countries to undertake a range of debt management activities. A borrowing policy has to be formulated to provide guidance on the borrowing levels that could be sustained in terms of the country's ability to meet debt service payments. Guidance has also to be provided on individual borrowing decisions. Following a decision on the borrowing level,

### **Debt Management: Action needed**

- establishment of regulatory framework
- formation of borrowing policy
- adoption of an operational strategy
- establishment of an effective accounting function
- undertaking of a debt policy analysis and review

an operational strategy has to be adopted which involves a breakdown by source of loan capital, a breakdown of the borrowings by the public and private sectors, interest rate and maturity structure, and the currency composition. The possibility of substituting equity for loan capital should also be examined when the sources of loan capital are explored. A regulatory framework is necessary with well-defined legal and institutional arrangements for monitoring the contracting of loans, their utilization and repayment. A detailed loan inventory and schedule of service payments arising from these loans has to be compiled using

these arrangements and an effective accounting function established for making payments on time. The capacity to monitor loan withdrawals and project implementation would be enhanced by the establishment of this function. Finally, it is necessary to undertake debt policy analysis and continually assess and upgrade the loan portfolio based on opportunities and new loan instruments becoming available in capital markets. This would include re-scheduling, re-financing and debt reduction also shifting from fixed to floating or floating to fixed rate or term adjustments. Derivative products can often be developed from the borrowing portfolio.

In order to implement these activities, it is important that each project aim to meet the following criteria:

- a) a clear definition of the data requirements for the computerization of all aspects of loan operations and the administrative arrangements for data compilation;
- b) the establishment of a well defined legal and institutional framework for regulating and monitoring the contracting of loans, their utilization and repayment;
- c) the hardware and software necessary for the storage, retrieval and analysis of debt data;
- d) the organizational arrangements for debt management including the establishment of a Debt Management Office (DMO) or equivalent and its staffing, including the use of consultants both short-term and long-term; also important are the delegations of authority to contract; and
- e) the training of staff in all aspects of debt management.

Given the comprehensive nature of the projects that will be implemented, an initial assessment will be conducted by IDRC staff/consultants of the country's debt management requirements at the beginning of each project. This assessment will be conducted in the field and cover the balance of payments and debt situation in the country; the debt inventory and data availability; the debt recording and management needs of the country in terms of reports required for economic management; the present legal and institutional

An initial assessment of a country's debt management requirements will be undertaken upon receipt of a request for assistance.

arrangements for monitoring the contracting, utilization and repayment of debt; the location of the DMO and its interaction with other agencies engaged in loan operations; the computer environment in the agency in which the DMO will be located and the computer and software needs of the project; any other computer-based systems in this or other agencies with relevant or related data; the staff availability and needs of the project; and the training requirements. This report, when discussed and accepted by the government, will form the basis on which the project is implemented.

## 3.0 MAIN COMPONENTS OF A DRMS PROJECT

#### 3.1 Data Requirements

A loan database of all external and internal borrowings has to be built up for the DMO to function effectively. It would include borrowings by the government, state enterprises or parastatals, commercial banks, private sector firms and the Central or Reserve Bank as well as medium and short-term trade and bank lines of credit for each category of borrower. The loan data captured has to be complete and precise to facilitate computerization and to ensure that repayments are made accurately.

A loan agreement is the basic unit of the database. Three sets of data have to be collected with respect to each loan, including:

- a) the basic loan details available from loan agreements;
- b) forecasts of disbursements, data on withdrawal applications and actual disbursements; and
- c) the terms of repayment available from loan agreements and actual debt service payments covering principal, interest, commitment fees, service and other charges (and, in some cases, data conversion) and foreign currency requirements.

Main components of DRMS Projects

- Data requirements and sources of data
- Legislative and regulatory framework for borrowings
- Hardware needs and installation of CS-DRMS software
- Establishment and staffing of the DMO
- Training in all aspects of debt management.

IDRC will recommend procedures for data collection and provide training in entering data onto computer coded data entry sheets. The responsibility for data collection rests with the government, and, in particular, the DMO.

## 3.2 Legislative and Institutional Framework

Legislation is necessary for borrowings by the government, state enterprises, parastatal, private sectors, commercial banks and the Central Bank. This legislation has to be backed by regulations and procedures for the approval of each category of borrowing and service payments. Legislation, criteria and procedures are also necessary for the use of government guarantees. Additionally, procedures are necessary for making withdrawal applications for each loan. IDRC will review the current legal and institutional framework and recommend changes, where necessary, in their assessment report.

At the policy level, a Debt Policy Committee has to be set up to formulate an annual borrowing policy and operational strategy. This committee should establish procedures to ensure that the borrowing limits or ceilings established by the committee on total debt outstanding, annual borrowing levels, the debt service ratio and other debt indicators are observed. A Working Group consisting of representatives of agencies involved in loan operations should also be set up to assist the DMO in the task of data collection.

## 3.3 Computerization

The decision to computerize debt data would depend primarily on the number of a country's loans, the complexity of its loan portfolio and whether it is prepared to improve its debt management capability. Before embarking on computerization, it is necessary for fully operational data collection procedures to be established.

The current version of the CS-DRMS software (version 5.0), which will be installed as a component of DRMS projects, uses the Xenix operating system and is written in the C language using the INFORMIX 4GL/SQL database management system. The software will be installed in the country by IDRC following the signing of a licensing agreement. IDRC has obtained the rights to use the software through a Distributor Agreement concluded with the Commonwealth Secretariat. Reference manuals will be provided as will training in the use of the software. There will be "hotline" support from IDRC to software users.

Maintenance, correction of bugs inherent in the software and enhancement of the software will continue to be the responsibility of the Commonwealth Secretariat to whom all such requests will be channelled through IDRC. Newer versions of the software and diskettes with corrections to known bugs will be issued by IDRC when received from the Commonwealth Secretariat.

The hardware configuration and the proprietary software requirements necessary to operate version 5.0 of the CS-DRMS software are detailed in Part Three of this brochure.

### 3.4 Organizational Arrangements

The organizational arrangements for a successful DRMS project involves the early identification of an agency in the country substantially involved in loan operations to locate the DMO. There may be instances where the DMO will be set up as a statutory body with its mandate embodied in legislation. Whatever legal form this office takes, it is necessary to have its terms of reference drawn up, endorsed by the government, and circulated widely within the government administration and to all creditor agencies. IDRC will advise on an appropriate location for the DMO, establish linkages with other agencies involved in loan operations, and assist in drawing up its terms of reference.

The skills and experience that should be available to the DMO are in loan operations and accounts, creditor practices and loan instruments; microcomputers, database management systems and spread sheet packages, debt policy analysis, and international capital markets. The number and skills of staff in the DMO will depend primarily on the size and complexity of the loan portfolio and the availability of systems staff within the agency in which the DMO will be located. There may be instances where it is necessary for the DMO to obtain the assistance of external advisers, both short-term and long-term. The need and timing of such inputs would depend on each country situation and will be dealt with in the assessment report. IDRC assistance will include short-term consultants, but long-term advisers would have to be supplied and funded by others.

#### 3.5 Training

Training is a major component of DRMS projects and is imparted at various stages of the project cycle. The first step is training in the interpretation of loan agreements and creditor statements and completing computer-coded data entry sheets with information on basic loan details, disbursements and payment data. The next training imparted to users of the software would be in the Xenix operating system, data input, generation of reports, and various aspects of database maintenance. Once the database has been completed and cross-checked with creditors, the staff of the DMO could produce standard reports incorporated in the software for use by policy analysts. At this stage, training will be provided in the use of the management tools in the CS-DRMS software and the SQL query language to undertake debt analysis and evaluate the loan portfolio. Training will also be provided on the use of the ACE report-writer to format country specific debt reports and tables.

When the country's external debt has been analyzed, training will be provided in the use of the software for debt re-structuring, including re-financing, re-scheduling and debt reduction. It is also necessary to familiarize the staff of the DMO with preparations for the Paris and London Club debt re-negotiations and their procedures. Staff of the DMO also need to be exposed to the operations of international financial markets and loan instruments that are commonly used.

Most of this training will be provided in the country before, during and after the installation of the software. Some training may be done outside the country if the decision is taken to participate in some of the training programs conducted by the Commonwealth Secretariat for their own projects.

#### 4.0 IMPLEMENTATION STEPS

#### STEPS TOWARDS THE IMPLEMENTATION OF A DEBT MANAGEMENT SYSTEM

Governments interested in implementing an effective debt management system will have to ensure that certain procedures are followed:

- i) A thorough **needs assessment study** should be carried out to determine the country's external debt management requirements.
- ii) A detailed plan for co-ordinated debt management should be developed before the system is actually implemented. Problems of mandate, overlap, information flows and data standards between the institutions involved in loan operations should also be resolved at this time.
- iii) A **Debt Management Office (DMO)** should be established at an appropriate location to deal with the organizational arrangements for debt management. It is essential that the terms of reference of the DMO are drawn up and accepted by the government. These should be circulated within the administration and to all creditors. Staff with skills in loan operations and loan accounts; basic computer literacy; and knowledge and experience of loan instruments and capital markets should be recruited for the DMO if they are available in the country. It is also necessary to appoint a high level Debt Policy Committee to provide guidance on borrowing and guarantee levels and the terms of such loans, and establish ceilings for relevant debt indicators.
- iv) Training should be provided to the staff of the DMO in aspects of debt management that are relevant to the needs of the country. The training will take place at different stages during project implementation.
- v) A **well-defined legal and institutional framework** should be set up to monitor the contracting of loans, their utilization and repayment. The framework will cover loans by the government, parastatals and the private sector.
- vi) Data requirements for a DRMS project should be set out and **administrative arrangements** made for their compilation. These will cover all aspects of loan operations, including historical transactions for the period for which the government wishes to collect data. The information should cover the basic loan details and terms of repayment, which are available from loan agreements, and actual transactions covering loan disbursements and all debt service payments. When a project is being implemented, an inventory of past loans should be built up and the data updated regularly.
- vii) Once the data has been compiled, facilities are necessary for their storage, retrieval and analysis. Projects may initially involve the establishment of a sound manual system with computerization introduced when this is fully operational. At this stage, appropriate micro computers, the Xenix operating system which facilitates multi-user access, and the INFORMIX 4GL/SQL database management system, need to be purchased for the installation of the CS-DRMS software.
- viii) Once the system has been installed and the data has been compiled, planners can use the reports generated from the resulting database on external debt as a **decision support tool**.

#### 5.0 COUNTRIES IN WHICH CS-DRMS IS CURRENTLY OPERATIONAL

#### Commonwealth

Anguilla

Antigua & Barbuda Barbados

Bahamas Belize Botswana

British Virgin Islands Cayman Islands

Cook Islands Cyprus

Dominica

Ghana Grenada

Grenada Guyana

India Jamaica

Kenya

Lesotho

Maldives Mauritius Montserrat

Nauru Nigeria

Papua New Guinea Sierra Leone

Solomon Islands

Sri Lanka

St Kitts and Nevis

St Lucia

St Vincent and the Grenadines

Tanzania Tonga

Western Samoa

## Non Commonwealth

Fiji

Mozambique

Thailand

To be implemented in 1991

Bulgaria

Lao PDR

CS-DRMS has also been provided to the World Bank, the Caribbean Development Bank and the Eastern Caribbean Central Bank.

#### IDRC AND DEBT MANAGEMENT - HOW TO SEEK ASSISTANCE

6.0

The International Development Research Centre (IDRC), is a crown corporation created by the Parliament of Canada in 1970 to stimulate and support scientific and technical research by developing countries for their own benefit.

Support is provided through grants and technical advice from program staff. The grants are channelled through institutions in developing countries such as government departments, universities, research centres and non-governmental organizations. Projects are supported in the fields of agriculture sciences; health sciences; information and communication sciences; natural resources management; and the social sciences.

Within IDRC, financing the establishment of debt information systems is the responsibility of the Information Sciences Division. Its mandate is to:

- build indigenous capacity within developing countries for the effective management and utilization of information;
- b) improve systems, services and tools for managing and using information relevant to development research and change; and
- c) foster co-operation and co-ordination in development research by sharing information.

The CS-DRMS software is a debt management information system, and DRMS projects, which include this software, fall within the mandate of the Information Sciences Division which will assess all requests for assistance in this field. Accordingly, the Information Sciences Division of IDRC will entertain official requests for assistance in implementing DRMS projects submitted by an appropriate institution such as the Ministry of Finance, Central or Reserve Bank, and/or the Ministry of Planning or Treasury of any developing country.

For further information, please contact:

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The International Development Research Centre is a public corporation created by the Parliament of Canada in 1970 to support research designed to adapt science and technology to the needs of developing countries. The Centre's activity is concentrated in six sectors: agriculture, food, and nutrition sciences; health sciences; information sciences; social sciences; earth and engineering sciences; and communications. IDRC is financed solely by the Parliament of Canada; its policies, however, are set by an international Board of Governors. The Centre's headquarters are located in Africa, Asia, Latin America, and the Middle East.

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