# APPENDIX

# A MANAGEMENT ACCOUNTING & REPORTING SYSTEM

FOR
INTERNATIONAL
DEVELOPMENT
RESEARCH CENTRE

**P. S. ROSS & PARTNERS**

MANAGEMENT CONSULTANTS
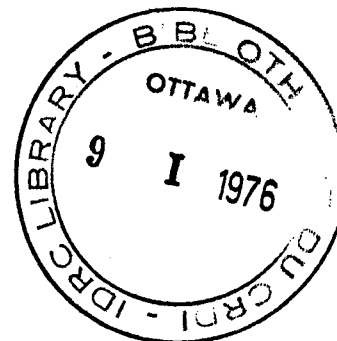
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# APPENDIX

A.  DESCRIPTION OF THE SYSTEM ELEMENTS

B.  DETAILED IMPLEMENTATION PLAN AND
    SCHEDULE

C.  A DISCUSSION OF COMPUTING POWER AND
    SPECIFIC APPLICATIONS

**P. S. ROSS & PARTNERS**

# A. DESCRIPTION OF THE SYSTEM ELEMENTS

## 1. PREFACE

This section of the Appendix presents a preliminary description of the reports to be produced by the management accounting and reporting system, the data elements required to produce these reports, their associated coding structures and the principal sources for data to be collected.

The reporting system is described in considerable detail for the conventional planning and results reporting functions. However, a further reporting area, that of program evaluation, was beyond the scope of this study. This area requires considerable effort by IDRC management and staff to determine the qualitative and quantitative measurement to be applied.

The data elements required for the report production are of three distinct types. The General Ledger consists of the information required to produce the financial statements and budget and actual comparative reports. Information concerning Program Projects is for use in the production of reports related to projects that are in either the pre-signing or post-signing stages. It includes the completion dates for significant events and forecasts of cash flows. The last set of data, the General Journal, is closely related to the requirements of an accounting system, since it consists of all the entries posted to the General Ledger.

A further feature that is fundamental to the relationship between the data and the reports is the development of well structured coding systems. The major coding systems proposed are described in this Appendix. However, the allocation of the actual code numbers will be carried out in the detailed design stage.

The detailed specification of procedures governing the collection of basic data will be undertaken during detailed design. In principle, data should be collected at the earliest point in its life - at the source if possible - and should be authorized for use in the system. No change in form should have taken place prior to its entry into the system. The system itself will perform the required processing of data. Sources for the required data are listed in this Appendix.

## 2.  REPORTS

Illustrations of the proposed reports are presented in the following pages, along with narratives which explain the purpose, content and production frequency of each.  The reports proposed in this system are:

a) Balance Sheet
b) Statement of Operations
c) Summary Analysis of Expenses
d) General Administration Expenses - Departmental Summary
e) General Administration Expenses - Departmental Cost Analysis
f) Project Administration Expenses - Divisional Analysis by Object
g) Project Administration Expenses - Activity Cost Analysis
h) Project Expenses - Divisional Summary by Object
i) Project Expenses - Divisional Summary by Activity
j) Project Expenses - World Area Analysis by Activity
k) Project Expenses - Divisional Analysis of Commitments by Purpose
l) Project Expenses - Activity Summary by Object
m) Project Expenses - Activity Summary by Project
n) Project Financial Report
o) Project Status Report
p) Cash Management Plan
q) Divisional Cash Requirements Forecast
r) Projected Divisional Cash Flow
s) Divisional Appropriation/Commitment Status
t) Divisional Administration Cost Ratios by Activity
u) Program Cost Ratios - Administration
                         - Salary
                         - Travel

TITLE:            BALANCE  SHEET

PURPOSE:          To show the financial position of the Centre.

FREQUENCY:        Monthly

DESCRIPTION:      This report groups the assets and liabilities into
                  contemporary accounting classifications and shows
                  the comparative figures for the same month in the
                  prior year.

# BALANCE SHEET

Period Ended

| | 1973 | 1972 |
|---|---|---|

## ASSETS

CASH

MARKETABLE SECURITIES

ACCOUNTS RECEIVABLE

PREPAID EXPENSES

## LIABILITIES AND SURPLUS

ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

ADVANCES - C.I.D.A.

SURPLUS

TITLE:               STATEMENT  OF  OPERATIONS


PURPOSE·             To show the operating results of the Centre.


FREQUENCY:           Monthly


DESCRIPTION·         This report shows amounts for the year to
                     date of:

                         (1)  revenue by principal sources,
                         (2)  expenses for projects and
                              administration,
                         (3)  excess of revenue over expenses,
                              and
                         (4)  surplus, including adjustments.

                     Comparative figures for the same period in the
                     prior year also are presented.

# STATEMENT OF OPERATIONS

| | Period Ended | |
|---|---|---|
| | 1972-1973 | 1971-1972 |
| **REVENUE** | | |
| GOVERNMENT GRANT | | |
| INTEREST | | |
| OTHER | | |
| | | |
| **EXPENSES** | | |
| PROJECT | | |
| ADMINISTRATION | | |
| | | |
| EXCESS OF REVENUE OVER EXPENSES | | |
| SURPLUS – BEGINNING OF PERIOD | | |
| SURPLUS – END OF PERIOD | | |

TITLE:          SUMMARY ANALYSIS OF EXPENSES


PURPOSE:        To present an analysis of operating costs by
                major program and administrative area.


FREQUENCY·      Monthly


DESCRIPTION:    This report presents in summary form for
                the year to date the project expenses by
                program areas and the administration expenses
                by program area and administrative area
                (responsibility centre).

                Comparison is made to the equivalent period
                in the prior year as well as with the current
                annual budget and the budget for the current
                year to date.

# SUMMARY ANALYSIS OF EXPENSES

Period Ended

| | Budget | | Actual To Date | |
|---|---|---|---|---|
| | Fiscal Year Ending March 31, 1973 | Year To Date | 1972-1973 | 1971-1972 |
| **PROJECT EXPENSES** | | | | |
| AGRICULTURE, FOOD AND NUTRITION SCIENCES | | | | |
| SOCIAL SCIENCES AND HUMAN RESOURCES | | | | |
| INFORMATION SCIENCES | | | | |
| POPULATION AND HEALTH SCIENCES | | | | |
| INTERNATIONAL ASSISTANCE | | | | |
| CANADA AND DONOR AGENCIES | | | | |
| **ADMINISTRATION EXPENSES** | | | | |
| PROJECT ADMINISTRATION | | | | |
| AGRICULTURE, FOOD AND NUTRITION SCIENCES | | | | |
| SOCIAL SCIENCES AND HUMAN RESOURCES | | | | |
| INFORMATION SCIENCES | | | | |
| POPULATION AND HEALTH SCIENCES | | | | |
| INTERNATIONAL ASSISTANCE | | | | |
| CANADA AND DONOR AGENCIES | | | | |
| GENERAL ADMINISTRATION | | | | |
| BOARD OF GOVERNORS | | | | |
| CHAIRMAN OF THE BOARD | | | | |
| PRESIDENT | | | | |
| SECRETARY | | | | |
| TREASURER | | | | |
| DIRECTOR OF ADMINISTRATION | | | | |
| TOTAL ADMINISTRATION | | | | |
| TOTAL EXPENSES | | | | |

TITLE:                  GENERAL ADMINISTRATION EXPENSES
                             DEPARTMENTAL SUMMARY


PURPOSE:                To present an analysis of the current status of
                        departmental administration expenses.


FREQUENCY·              Monthly


DESCRIPTION:            This report presents for each non program
                        administrative function or department the
                        object breakdown of expenses.  Budget
                        and prior year's figures are also shown.

# GENERAL ADMINISTRATION EXPENSES

# DEPARTMENTAL SUMMARY

Department
_____

Responsible   Person
_____

Period   Ended

| | Budget | | Actual | |
|---|---|---|---|---|
| | Fiscal   Year | Year | | |
| | Ending | To | 1972- | 1971- |
| | March 31, 1973 | Date | 1973 | 1972 |
| **SALARIES** | | | | |
| **BENEFITS** | | | | |
| **TRAVEL** | | | | |
| **EQUIPMENT** | | | | |
| **SUPPLIES** | | | | |
| **OTHER** | | | | |

TITLE:               GENERAL ADMINISTRATION EXPENSES
                             DEPARTMENTAL COST ANALYSIS

PURPOSE:        To present a detailed analysis of administration
expenses for each functional cost centre within
a department.

FREQUENCY:     Monthly.

DESCRIPTION:   This report presents for each departmental cost
centre a summary by object of expenses for the
current year to date.  Total and year to date
budgets and prior year's expenses also are shown.

# GENERAL ADMINISTRATION EXPENSES

# DEPARTMENTAL COST ANALYSIS

Function

Responsible   Person

Period   Ended

|  | Budget | | Actual | |
| --- | --- | --- | --- | --- |
|  | Fiscal Year Ending March 31, 1973 | Year To Date | 1972-1973 | 1971-1972 |
| SALARIES |  |  |  |  |
| BENEFITS |  |  |  |  |
| TRAVEL |  |  |  |  |
| EQUIPMENT |  |  |  |  |
| SUPPLIES |  |  |  |  |
| OTHER |  |  |  |  |

TITLE:          PROJECT ADMINISTRATION EXPENSES
                DIVISIONAL ANALYSIS BY OBJECT


PURPOSE:        To present an analysis of project administration
                expenses in the division.


FREQUENCY:      Monthly


DESCRIPTION:    This report presents a divisional summary by
                object of the administration expenses which
                support program activities.  Total and year to
                date budgets and prior year's expenses also
                are shown.

# PROJECT ADMINISTRATION EXPENSES

## DIVISIONAL ANALYSIS BY OBJECT

Division

Responsible Person

Period Ended

| | Budget | | Actual | |
|---|---|---|---|---|
| | Fiscal Year Ending March 31, 1973 | Year To Date | 1972- 1973 | 1971- 1972 |
| SALARIES | | | | |
| BENEFITS | | | | |
| TRAVEL | | | | |
| EQUIPMENT | | | | |
| SUPPLIES | | | | |
| OTHER | | | | |

TITLE:              PROJECT ADMINISTRATION EXPENSES
                               ACTIVITY COST ANALYSIS

PURPOSE:      To present an analysis of administration
expenses for each activity in the program
area.

FREQUENCY:    Monthly

DESCRIPTION:  This report presents for each activity in the
program area the year to date administration
expenses by object. Total and year to date
budgets and prior year's expenses also are
shown.

# PROJECT ADMINISTRATION EXPENSES

# ACTIVITY COST ANALYSIS

**Activity**

**Responsible   Person**

**Period   Ended**

|  | Budget | | Actual | |
|---|---|---|---|---|
|  | Fiscal   Year   Ending   March 31, 1973 | Year   To   Date | 1972-   1973 | 1971-   1972 |
| **SALARIES** | | | | |
| **BENEFITS** | | | | |
| **TRAVEL** | | | | |
| **EQUIPMENT** | | | | |
| **SUPPLIES** | | | | |
| **OTHER** | | | | |

TITLE:                          PROJECT  EXPENSES
                        DIVISIONAL  SUMMARY  BY  OBJECT


PURPOSE:         To present an analysis of project costs by object
                 within the division.


FREQUENCY:       Monthly


DESCRIPTION:     A separate report for each program division will
                 show project expenses by object for the year to
                 date compared to the expenses for the comparable
                 period in the prior year.

# PROJECT EXPENSES

## DIVISIONAL SUMMARY BY OBJECT

Division

Responsible   Person                                   Period   Ended

|  | 1972-1973 | 1971-1972 |
|---|---|---|
| GRANTS | | |
| SUPPLIES | | |
| RENT | | |
| EQUIPMENT | | |
| TRAINING | | |
| TRAVEL | | |
| CONSULTANTS | | |
| CONFERENCES | | |
| OTHER | | |

TITLE:                        PROJECT  EXPENSES
                    DIVISIONAL  SUMMARY  BY  ACTIVITY

PURPOSE:          To present an analysis of the project expenses
                  for each activity in the program area in terms of
                  budget and actual expenses.

FREQUENCY:        Monthly

DESCRIPTION:      This report presents for each activity in the
                  program area the expenses for the year to date.
                  Total and year to date budgets and prior year's
                  expenses also are shown.

# PROJECT EXPENSES

## DIVISIONAL SUMMARY BY ACTIVITY

*Agriculture, Food And Nutrition Sciences*
Division

*J. Hulse*

Responsible    Person                                          Date    Prepared

| | Budget | | Actual | |
|---|---|---|---|---|
| | Fiscal    Year Ending March 31, 1973 | Year To Date | 1972- 1973 | 1971 1972 |
| CROPS | | | | |
| FISHERIES | | | | |
| ANIMALS | | | | |
| FORESTRY | | | | |
| NUTRITION  AND  HOME SCIENCES | | | | |
| RURAL  DEVELOPMENT SYSTEMS | | | | |
| DIVISIONAL  ACTIVITY PROJECTS | | | | |

TITLE:                    PROJECT  EXPENSES
               WORLD  AREA  ANALYSIS  BY  ACTIVITY


PURPOSE:       To provide an analysis of project costs and
               commitments by world area for the year to
               date.


FREQUENCY:     Quarterly


DESCRIPTION:   This report will present for each world area
               the dollars committed and spent to date in the
               current year by program area and activity.

# PROJECT EXPENSES

# WORLD AREA ANALYSIS BY ACTIVITY

| World Area | | Period Ended |
|---|---|---|

| | Commitment 1972 - 1973 | Expense 1972 - 1973 |
|---|---|---|
| **AGRICULTURE, FOOD AND NUTRITION SCIENCES** | | |
| CROPS | | |
| FISHERIES | | |
| ANIMALS | | |
| FORESTRY | | |
| NUTRITION AND HOME SCIENCES | | |
| RURAL DEVELOPMENT SYSTEMS | | |
| DIVISIONAL ACTIVITY PROJECTS | | |
| **POPULATION AND HEALTH SCIENCES** | | |
| **SOCIAL SCIENCES AND HUMAN RESOURCES** | | |
| **INFORMATION SCIENCES** | | |

TITLE:                    PROJECT  EXPENSES
            DIVISIONAL  ANALYSIS  OF  COMMITMENTS  BY  PURPOSE


PURPOSE:        To analyze by activity area within each division
                the purpose of commitments made during the
                current year.


FREQUENCY:      Quarterly


DESCRIPTION:    This report shows for each activity within a
                division the purposes for which the commitments
                during the current year were made.

# PROJECT EXPENSES

## DIVISIONAL ANALYSIS OF COMMITMENTS BY PURPOSE

_Agriculture, Food And Nutrition Sciences_
Division

_J. Hulse_
Respsonsible   Person

Period   Ended

|  | Training | Research | Productivity Improvement | Etc. | Total |
|---|---|---|---|---|---|
| CROPS |  |  |  |  |  |
| FISHERIES |  |  |  |  |  |
| ANIMALS |  |  |  |  |  |
| FORESTRY |  |  |  |  |  |
| NUTRITION AND HOME SCIENCES |  |  |  |  |  |
| RURAL DEVELOPMENT SYSTEMS |  |  |  |  |  |
| DIVISIONAL ACTIVITY PROJECTS | _____ | _____ | _____ | _____ | _____ |
| TOTAL | ====== | ====== | ====== | ====== | ====== |

TITLE:                     PROJECT  EXPENSES
                    ACTIVITY  SUMMARY  BY  OBJECT


PURPOSE:          To analyze the expenses by object for each
                  activity in a program area.


FREQUENCY:        Monthly


DESCRIPTION:      This report will show for each program
                  activity the project expenses by object for
                  the year to date compared to the same period
                  in the prior year.

# PROJECT EXPENSES

# ACTIVITY SUMMARY BY OBJECT

Activity

Responsible   Person

Period   Ended

|  | 1972-1973 | 1971-1972 |
|---|---|---|
| GRANTS |  |  |
| SUPPLIES |  |  |
| RENT |  |  |
| EQUIPMENT |  |  |
| TRAINING |  |  |
| TRAVEL |  |  |
| CONSULTANTS |  |  |
| CONFERENCES |  |  |
| OTHER |  |  |

TITLE:                          PROJECT  EXPENSES
                         ACTIVITY  SUMMARY  BY  PROJECT


PURPOSE:          To present for each activity area the status of
                  each project in terms of commitment, and
                  budgetted and actual expenses.


FREQUENCY:        Monthly


DESCRIPTION:      This report will present for each committed
                  project in each activity area the committed
                  amount of the project, the actual expenses for
                  the current year to date and for the period
                  from the project beginning to date and the
                  budgetted expenses for the current year and
                  for the period from the project beginning to
                  date.

# PROJECT EXPENSES

## ACTIVITY SUMMARY BY PROJECT

*Agriculture, Food And Nutrition Sciences – Crops*
Activity

*J. Hulse*
Responsible     Person

Perlod Ended

| | Commitment | Expenditure To Date | | Expenditure Current Year | |
|---|---|---|---|---|---|
| | | Budget | Actual | Budget | Actual |
| BREAD FROM COMPOSITE FLOURS | | | | | |
| SORGHUM BREEDING | | | | | |
| GRAIN LEGUMES | | | | | |
| TRITICALE OUTREACH | | | | | |

TITLE:          PROJECT FINANCIAL REPORT


PURPOSE:        This report is intended to be used in
                conjunction with the Project Status Report
                to determine the qualitative and quantitative
                status of a project.


FREQUENCY:      Whenever there is a change in financial
                information or at least every six months.


DESCRIPTION:    This report will present a statement of
                project expenses by object showing the
                amount committed, the expenses for the
                year to date and the expenses from the
                project beginning to date.  The budget
                figures for expenses to date and for the
                current year will be shown in total only.

# PROJECT FINANCIAL REPORT

Project

Responsible Person

Period Ended

| | Commitment | Expenditure To Date | | Expenditure Current Year | |
|---|---|---|---|---|---|
| | | Budget | Actual | Budget | Actual |
| **GRANT** | | | | | |
| **SUPPLIES** | | | | | |
| **RENT** | | | | | |
| **EQUIPMENT** | | | | | |
| **TRAINING** | | | | | |
| **TRAVEL** | | | | | |
| **CONSULTANTS** | | | | | |
| **CONFERENCES** | | | | | |
| **OTHER** | | | | | |

TITLE:              PROJECT STATUS REPORT


PURPOSE:            To indicate for all projects that have been
                    identified the present status in terms of
                    progress from identification to completion


FREQUENCY:          At least every six months or when there has
                    been any significant change in information
                    concerning the project.


DESCRIPTION:        The report is broken down into five categories:

            1.    The first section present information
                  on the grantee.

            2.    The second gives information on the
                  project status as it proceeds through
                  the IDRC process from identification
                  to completion.

            3.    The third section describes the project
                  and states its purpose.

            4.    The fourth category monitors informa-
                  tion on the events in the project. These
                  events may be in terms of project
                  financial reports, project technical
                  reports, project visits, workshops, or
                  other significant events. The definition
                  of the events will be determined for each
                  project at the time of its commitment.

            5.    The fifth category serves to monitor the
                  anticipated schedule of disbursements.

        Certain sections of this report will not be applicable
        until the project has reached the commitment stage.

# PROJECT STATUS REPORT

Division

Date Prepared

Activity

File Number

Project

Responsible Person

---

Regional Office

Project

Funding

Grantee

Grantee Country

Grantee Contact

Title

---

Current Status

Date Identified

Term

Date Appropriated

I.D.R.C. Funding

Date Committed

Other Funding

Date Completed /Discontinued

---

DESCRIPTION

---

| EVENT | Date | | | COMMENT |
|-------|------|---|---|---------|
| | Original Plan | Latest Plan | Actual | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |

DISBURSEMENT SCHEDULE

| AMOUNT | Date | | | COMMENT |
|--------|------|---|---|---------|
| | Original Plan | Latest Plan | Actual | |

TITLE:               CASH MANAGEMENT PLAN


PURPOSE:             To provide a basis for investment decisions
                     in the ensuing twelve month period.


FREQUENCY:           Monthly


DESCRIPTION:         This report shows in summary form the cash
                     requirements and resources, as well as
                     excesses or deficiencies of cash over the
                     ensuing twelve months. The reliability of
                     the estimate is indicated by the breakdown
                     of the requirements.

International Development Research Centre

# CASH MANAGEMENT PLAN

*January 1973*
Date Prepared

| | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CASH REQUIRMENTS** | | | | | | | | | | | | |
| ADMINISTRATION | $ 100,000 | 100,000 | 110,000 | 110,000 | 115,000 | 105,000 | 135,000 | 115,000 | 115,000 | 120,000 | 120,000 | 140,000 |
| PROJECTS- | | | | | | | | | | | | |
| COMMITTED | 100,000 | 200,000 | 75,000 | 275,000 | 350,000 | 650,000 | 300,000 | 125,000 | 50,000 | 10,000 | 600,000 | 500,000 |
| APPROPRIATED | | | 30,000 | 45,000 | | 10,000 | 20,000 | 55,000 | 60,000 | 400,000 | 25,000 | 50,000 |
| UNAPPROPRIATED | | | | | 5,000 | 10,000 | 40,000 | 60,000 | 15,000 | 25,000 | 35,000 | |
| CONTINGENCY | | | | | 5,000 | 10,000 | | | | | | 50,000 |
| TOTAL | 200,000 | 300,000 | 215,000 | 430,000 | 475,000 | 785,000 | 495,000 | 355,000 | 230,000 | 555,000 | 780,000 | 740,000 |
| | | | | | | | | | | | | |
| **CASH RESOURCES** | | | | | | | | | | | | |
| GOVERNMENT GRANT | 4,200,000 | | | | | | | | | | | |
| INVESTMENT MATURING | | 100,000 | 175,000 | 450,000 | 375,000 | 600,000 | 545,000 | 200,000 | 300,000 | 400,000 | 600,000 | 740,000 |
| | 4,200,000 | 100,000 | 175,000 | 450,000 | 375,000 | 600,000 | 545,000 | 200,000 | 300,000 | 400,000 | 600,000 | 740,000 |
| CASH- EXCESS (DEFICIENCY) | $ 4,000,000 | (200,000) | (40,000) | 20,000 | (100,000) | (185,000) | 50,000 | (155,000) | (70,000) | (155,000) | (180,000) | |

TITLE:             DIVISIONAL  CASH  REQUIREMENTS  FORECAST


PURPOSE·          To indicate by division and activity the
                  future requirements for cash on projects
                  committed, appropriated and under
                  consideration.


FREQUENCY·        Quarterly


DESCRIPTION·      This report presents for each division and
                  activity the current year's commitments
                  from either current or previous appropria-
                  tions, the prior year's commitments yet
                  unpaid and the payments to date in the current
                  year to yield the total of unpaid commitments.
                  These, plus appropriations not committed in
                  the current or previous years, plus projects
                  yet unappropriated, determine the total cash
                  requirements for the division.

# DIVISIONAL CASH REQUIREMENTS FORECAST

*Agriculture, Food And Nutrition Sciences*

Division

J. Hulse

Responsible Person

January 1973

Date Prepared

| | 1972-1973 Commitments From 1972/1973 Appropriation Budget | 1972-1973 Commitments From Prior Years Appropriations | Unpaid Commitments Of Prior Years As At April 1,1973 | Payments Current Year | Total Unpaid Commitments | 1972-1973 Appropriations Not Committed | Prior Years Appropriations Not Yet Committed | Total Uncommitted Appropriations | Total Unappro. Projects | Total Cash Requirements |
|---|---|---|---|---|---|---|---|---|---|---|
| **AGRICULTURE** | | | | | | | | | | |
| **CROPS** | | | | | | | | | | |
| **FISHERIES** | | | | | | | | | | |
| **ANIMALS** | | | | | | | | | | |
| **FORESTRY** | | | | | | | | | | |
| **NUTRITION & HOME SCIENCES** | | | | | | | | | | |
| **RURAL DEVELOPMENT SYSTEM** | | | | | | | | | | |
| **DIVISIONAL ACTIVITY PROJECTS** | | | | | | | | | | |

TITLE:          PROJECTED  DIVISIONAL  CASH  FLOW


PURPOSE:        To analyze for each division the expected
                flow of cash on projects committed, appro-
                priated and under consideration and to
                compare the total requirements with the
                expected cash available during the same
                period.


FREQUENCY:      Quarterly


DESCRIPTION:    This divisional report indicates at the
                activity level the expected timing for
                disbursement of funds on projects.
                Separate totals are shown for projects
                committed, appropriated but not com-
                mitted and under consideration.  The
                total is compared to expected cash avail-
                able for projects over this same time
                frame to indicate the extent to which
                further projects may be developed, appro-
                priated and committed.

# PROJECTED   DIVISIONAL   CASH  FLOW

*Agriculture, Food And Nutrition Sciences*
Division

*J. Hulse*
Responsible  Person

Date   Prepared

| | Total Cash Requirements | 1972-1973 | | | | 1973-1974 Payment | 1974-1975 Payment | 1975-1976 Payment |
|---|---|---|---|---|---|---|---|---|
| | | 1st  Quarter | 2nd  Quarter | 3rd  Quarter | 4th  Quarter | | | |
| CROPS- COMMITTED | | | | | | | | |
| -APPROPRIATED | | | | | | | | |
| - UNDER CONSIDERATION | | | | | | | | |
| FISHERIES- COMMITTED | | | | | | | | |
| -APPROPRIATED | | | | | | | | |
| -UNDER CONSIDERATION | | | | | | | | |
| OTHER- COMMITTED | | | | | | | | |
| -APPROPRIATED | | | | | | | | |
| -UNDER CONSIDERATION | | | | | | | | |
| TOTAL- COMMITTED | | | | | | | | |
| -APPROPRIATED | | | | | | | | |
| -UNDER CONSIDERATION | | | | | | | | |
| CASH  BUDGET | | | | | | | | |
| AVAILABLE | | | | | | | | |

TITLE:          DIVISIONAL APPROPRIATION/COMMITMENT
                            STATUS


PURPOSE:        To identify the balance available for appropriation
                in the current year for each division and activity.


FREQUENCY:      Monthly


DESCRIPTION:    This report indicates the total of the current
                year's appropriation budget, the commitments,
                appropriations and projects under consideration
                and the balance available for new projects.  This
                is presented by activity within the division.

# DIVISIONAL APPROPRIATION/COMMITMENT STATUS

*Agriculture, Food And Nutrition Sciences*

Division

*J. Hulse*

Responsible Person

Date   Prepared

| | 1972–1973 Appropriation Budget | Commitments From 1972–1973 Appropriation Budget | 1972–1973 Appropriations Not Yet Committed | Under Consideration | Balance Available |
|---|---|---|---|---|---|
| CROPS | | | | | |
| ANIMALS | | | | | |
| FISHERIES | | | | | |
| FORESTRY | | | | | |
| NUTRITION AND HOME SCIENCES | | | | | |
| RURAL DEVELOPMENT SYSTEMS | | | | | |
| DIVISION ACTIVITY PROJECTS | | | | | |

TITLE:          DIVISIONAL ADMINISTRATION COST RATIOS
BY ACTIVITY

PURPOSE:       To provide various measures of cost performance
for activities within a division.

FREQUENCY:    Quarterly

DESCRIPTION:   This report will show for each activity the ratio
of administration costs to project dollars com-
mitted, appropriated and disbursed in the current
year.

# DIVISIONAL ADMINISTRATION COST RATIOS BY ACTIVITY

*Agriculture, Food And Nutrition Sciences*

Division

Date Prepared

| | Project $ Com. | Project $ Approp. | Project $ Spent | Direct $ Admin. | Admin. / Com. | Admin. / Approp. | Admin. / Spent |
|---|---|---|---|---|---|---|---|
| CROPS | | | | | | | |
| FISHERIES | | | | | | | |
| ANIMALS | | | | | | | |
| FORESTRY | | | | | | | |
| NUTRITION AND HOME SCIENCES | | | | | | | |
| RURAL DEVELOPMENT SYSTEMS | | | | | | | |
| DIVISIONAL ACTIVITY PROJECTS | | | | | | | |
| OTHER | | | | | | | |
| TOTAL | | | | | | | |

TITLE:              PROGRAM  COST  RATIOS


PURPOSE:            To provide for each division certain relevant
                    cost ratios to program expenses as partial
                    measure of performance.


FREQUENCY:          Quarterly


DESCRIPTION:        These reports show for each division the ratios
                    of divisional administration costs, divisional
                    salary costs and divisional travel costs to
                    selected costs and other values.

# PROGRAM ADMINISTRATION COST RATIOS

Date    Prepared

| | Agriculture, Food And Nutrition Sciences | Population And Health Sciences | Social Sciences And Human Resources | Information Sciences |
|---|---|---|---|---|
| **RATIO OF TOTAL ADMIN. COSTS TO** | | | | |
| I. NUMBER OF EMPLOYEES | | | | |
| 2. NUMBER OF PROFESSIONALS | | | | |
| 3. NUMBER OF PROJECTS UNDER ADMINISTRATION | | | | |
| 4. NUMBER OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 5. VALUE OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 6. VALUE OF PROJECTS UNDER ADMINISTRATION | | | | |
| 7. VALUE OF PROJECTS APPROPRIATED CURRENT YEAR | | | | |
| 8. PROJECT CASH OUTLAY CURRENT YEAR | | | | |

International Development Research Centre

# PROGRAM SALARY COST RATIOS

Date    Prepared

| | Agriculture, Food And Nutrition Sciences | Population And Health Sciences | Social Sciences And Human Resources | Information Sciences |
|---|---|---|---|---|
| **RATIO OF SALARY COSTS TO** | | | | |
| 1. NUMBER OF EMPLOYEES | | | | |
| 2. NUMBER OF PROJECTS UNDER ADMINISTRATION | | | | |
| 3. NUMBER OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 4. VALUE OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 5. VALUE OF PROJECTS UNDER ADMINISTRATION | | | | |
| 6. VALUE OF PROJECTS APPROPRIATED CURRENT YEAR | | | | |
| 7. PROJECT CASH OUTLAY CURRENT YEAR | | | | |

# PROGRAM TRAVEL COST RATIOS

| | Agriculture, Food And Nutrition Sciences | Population And Health Sciences | Social Sciences And Human Resources | Information Sciences |
|---|---|---|---|---|
| **RATIO OF TRAVEL COSTS TO** | | | | |
| 1. NUMBER OF EMPLOYEES | | | | |
| 2. NUMBER OF PROFESSIONALS | | | | |
| 3. NUMBER OF PROJECTS UNDER ADMINISTRATION | | | | |
| 4. NUMBER OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 5. VALUE OF PROJECTS COMMITTED CURRENT YEAR | | | | |
| 6. VALUE OF PROJECTS UNDER ADMINISTRATION | | | | |
| 7. VALUE OF PROJECTS APPROPRIATED CURRENT YEAR | | | | |
| 8. PROJECT CASH OUTLAY CURRENT YEAR | | | | |

## 3. FILES AND CODING STRUCTURES

The information necessary to produce the reports previously presented will be maintained in terms of three distinct functions:

* The General Ledger

* The Program Projects

* The General Journal

This section describes in general terms the purpose and content of the files to be maintained. A detailed data or file base structure will be developed at the time of detailed design.

Inherent in the maintenance of information on file are several coding structures. The purpose and structure of these codes are presented and, in some cases, a preliminary allocation of codes has been set out to serve as a basis for use in the later detailed design.

a) <u>General Ledger File</u>

PURPOSE:      To store the information required for financial reporting on the affairs of the International Development Research Centre.

GENERAL DESCRIPTION:

The file contains one record for every General Ledger account number code. The account number code identifies the type and classification of the account. Additionally, it identifies for project expenses the program and activity to which the expense is to be allocated, and for administrative expenses the responsibility centre. It provides also for the identification of the expense by object.

Included in every revenue and expense account is the provision for recording the budget amount as well.

While the file contains the appropriation budget details by program and activity, it does not contain the amount appropriated. The actual amount appropriated is stored on the Program Projects File.

CONTENT:

| <u>Element Name</u> | <u>Description</u> |
| --- | --- |
| Account Number Code | The unique identifier for a General Ledger File record. |
| Account Name | The name of the account record in the form it is to appear on the Trial Balance Report. |
| Financial Statement Line Indicator | The line of the financial statements in which this account balance is to be included. |

| Element Name | Description |
|---|---|
| Account Balance | Assets and Liabilities: Contains the month-end balances for the current financial year and the first three months subsequent to the current financial year.

Revenue and Expenses: Contains each month's revenues or expenses for previous and current financial years and the first three months of the next financial year. |
| Revenue and Expense Budgets | Revenues: The annual approved or planned budget for this and the next year (by quarter) and for the next five years by year. This may be revised periodically for the current year. It will reflect the budget approved by the Board for the current year and for next year when possible.

Expenses· The annual approved or planned budget for this year and the next five years with the current and next year by month and the remaining by year. In the case of administration expenses, it is by responsibility centre and in the case of program/ project expenses, by program and activity. In the second case, for program/projects, the actual expenses are not collected on this record but at a lower level of detail where the object is specified. |
| Approved Appropriation Budget | The annual budget for appropriations for this year and the next five years by year. The details of the appropriation budgets are not recorded on the General Ledger File. |
| Actual Expenses Prior Years | The total expended for a project in the years prior to the last financial |

| Element Name | Description |
|---|---|
| | year. This only applies to project expense accounts and is recorded by object. |
| Committed Amount | The amount committed by object in expenses for each project. It is the total dollars committed to the project as a result of a signed agreement. The actual dollars are accumulated at the same level for comparison against the committed amount. |

b) <u>Program Projects File</u>

PURPOSE:        To store the information required for the control of potential or signed projects.

To store information on the forecasted cash flows resulting from signed projects and the forecast of cash flows that could result from potential projects.

GENERAL DESCRIPTION·

The file contains information on projects from the time of identification through the signing of an agreement, the disbursement period of the project, and up to the completion of any follow-up stage.

The information is both for descriptive and project control purposes. It provides the facility to report on the completion of events that are identified as being meaningful for project control purposes.

The facility is provided for storing financial data including forecasts of the cash disbursements for the project.

CONTENT:

| Element Name | Description |
| --- | --- |
| Program/Activity | The primary program/activity within which the project is administered. |
| Project Number | A unique number that identifies the project. |
| Project Name | The abbreviated name commonly used to refer to the project. |
| Project Description | A brief description of the project. |
| Purpose | The major purpose of the project. |

| Element Name | Description |
|---|---|
| Term of the Project | The forecast number of years from agreement date to final disbursement date. |
| Type of Funding | A code identifying the type of funding that is being made available by IDRC<br>    e.g. External Grant |
| Other Funds | The amount of funds to be contributed by other agencies or the grantee. |
| Grantee Name | The name of the grantee organization. |
| Grantee Contact and Title | The name of the contact in the grantee organization and the title of the position. |
| Country of Grantee | A code identifying the country of the grantee. |
| Responsible IDRC Staff Member | The name of the staff member at IDRC who is responsible for the project. |
| Region/Office | A code identifying the region or office responsible for the administration of the project. |
| Project Status | A code identifying the stage the project is at:<br>    e.g.    Identified<br>            Approved<br>            Appropriated<br>            Committed<br>            Signed<br>            Completed |
| Termination Date | The date identified in the agreement by which the last disbursement must be made. |
| First Identification Date | The actual date the project was identified as ready to be entered into the system. |
| Appropriation Date | The actual date of the appropriation approval. |

| Element Name | Description |
|---|---|
| Commitment Date | The actual date on which the agreement is deemed to have taken effect. |
| Completion Date | The date on which the project was considered by IDRC to be completed or discontinued. |

**Subsidiary Project Control Information** - one item per event to be controlled.

| | |
|---|---|
| Event Number | The number that identifies the event. This number may be the same as that used in a planning document such as a critical path network. |
| Description | A brief description of the event. |
| Original Completion Date | The original planned completion date. This is not normally changed after the project reaches the committed status |
| Revised Completion Date | The revised completion date. This date is revised as required during the life of the project. |
| Actual Completion Date | The date on which the event was completed. |

c) General Journal File

PURPOSE·     To maintain a record of each entry posted to
             the General Ledger File.

GENERAL  DESCRIPTION:

             This file carries a complete record of all entries
             posted to the General Ledger File.  The records
             are created at the time that a financial transaction
             enters the system.

CONTENT:

| Element Name | Description |
|---|---|
| Account Number Code | The number of the account to which the entry was posted. |
| Effective Date | The effective date of the journal entry. |
| Amount | The debit or credit amount of the posting. |
| Description | A brief description of the transaction. |
| Entry Number | The document number on which the entry was recorded for input to the system. |

d) General Ledger Account Number Code

PURPOSE:    To identify a General Ledger Account.

STRUCTURE:  The code is a numeric 12 position number.
            The code is made up of five sub-codes.  The
            sub-codes are described in detail in the
            following pages of this Appendix.

```
┌─────────────────────┐
│ x│xx│x│xxx│xxxxx     │
│  ┊  ┊ ┊   ┊          │
│ x┊  ┊ ┊   ┊          │        Account Type
│  ┊  ┊ ┊   ┊          │
│  ┊xx┊ ┊   ┊          │        Account Classification
│  ┊  ┊ ┊   ┊          │
│  ┊  ┊x┊   ┊          │        Expense Segment
│  ┊  ┊ ┊   ┊          │
│  ┊  ┊ ┊xxx┊          │        Responsibility Centre
│  ┊  ┊ ┊   ┊          │            (Administration expenses only)
│  ┊  ┊ ┊xxx┊          │        Program and Activity Code
│  ┊  ┊ ┊   ┊          │            (Project expenses only)
│  ┊  ┊ ┊   ┊xxxxx     │        Project Number (Project
└─────────────────────┘            expenses only)
```

d) i) <u>Account Type Code</u>

PURPOSE: To identify the type of account, i.e., asset, liability, revenue or expense.

STRUCTURE: It is a one position, numeric code, with the following codes allocated:

1 - Asset
2 - Liability
3 - Revenue
4 - Expense
5 - Contract Funds

d) ii)    Account Classification

PURPOSE:      To identify, within each account type, the
              nature of the account itself.


STRUCTURE:    It is a two position numeric code.


| Account Type | Account Code | | Account Classification |
|---|---|---|---|
| Assets | 1 | 01 | Petty cash |
| | | 02 | Bank general (Toronto Dominion) |
| | | 03 | Bank overseas (Royal) |
| | | 06 | Bank general (Hong Kong and Shanghai) |
| | | 07 | Bank general (Royal Bank of Canada - Bogota) |
| | | 20 | Federal government grants receivable |
| | | 21 | Other grants receivable |
| | | 30 | Accounts receivable - standing travel advance |
| | | 31 | Accounts receivable - staff travel advance |
| | | 32 | Accounts receivable - staff other |
| | | 33 | Accounts receivable - deposit accounts |
| | | 34 | Accounts receivable - projects |
| | | 35 | Accounts receivable - other |
| | | 40 | Short term investments |
| | | 41 | Canadian Savings Bonds |
| | | 50 | Long term investments |
| | | 60 | Accrued interest |
| | | 65 | Prepaid expenses |
| | | 70 | Deferred charges   program commitments |
| Liabilities | 2 | 01 | Accounts payable - trade |
| | | 02 | Accrued rent |
| | | 03 | Accrued travel |

| Account Type | Account Code | | Account Classification |
|---|---|---|---|
| Liabilities | 2 | 06 | Wages payable |
| | | 07 | Other payable |
| | | 09 | Payroll clearing |
| | | 10 | Columbian income tax |
| | | 11 | Federal income tax |
| | | 12 | Canada pension plan |
| | | 13 | Unemployment insurance |
| | | 14 | Quebec income tax |
| | | 15 | Quebec pension plan |
| | | 16 | Quebec health insurance |
| | | 17 | Ontario health insurance |
| | | 18 | Ontario Blue Cross dental plan |
| | | 19 | Ontario Blue Cross foreign coverage |
| | | 20 | Foreign hospitalization |
| | | 21 | Supplementary death benefits |
| | | 22 | Group surgical and medical plan |
| | | 23 | Public service management insurance |
| | | 24 | Long term disability insurance |
| | | 25 | Supplementary retirement benefits |
| | | 26 | Teachers Insurance Annuity Association |
| | | 27 | Public Service Superannuation |
| | | 28 | Civil Service Cooperative Society |
| | 2 | 35 | Program commitments |
| | | 45 | Provision for contingencies |
| | | 50 | Surplus |
| Revenues | 3 | 01 | Government grants |
| | | 02 | Contract income |
| | | 03 | Consulting income |
| | | 04 | Investment income |
| | | 05 | Endowment income |
| | | 06 | Other income |
| | | 07 | Prior years adjustments |
| Expenses | 4 | 01 | Salaries |
| | | 02 | Employee benefits |
| | | 03 | Casual help |
| | | 04 | Honoraria |

| Account Type | Account Code | | Account Classification |
|---|---|---|---|
| Expenses | 4 | 05 | Allowances – overseas |
| | | 06 | Allowances – rental |
| | | 07 | Allowances - other |
| | | 08 | Professional and special services |
| | | 09 | Travel |
| | | 10 | Govenors meetings and travel |
| | | 11 | Relocation expenses |
| | | 12 | Utilities |
| | | 13 | Telephone, telegram, telex |
| | | 14 | Office supplies and expenses |
| | | 15 | Office furniture and equipment |
| | | 16 | Equipment rental |
| | | 17 | Postage |
| | | 18 | Translation services |
| | | 19 | Printing and duplicating |
| | | 20 | Insurance |
| | | 21 | Publication |
| | | 22 | Freight and express |
| | | 23 | Bank charges and exchange |
| | | 24 | Local mileage and parking |
| | | 25 | Training |
| | | 26 | Hospitality |
| | | 27 | Public relations |
| | | 28 | Membership fees |
| | | 29 | Seminars, meetings and conferences |
| | | 30 | Renovations |
| | | 31 | Others |
| Contract Funds | 5 | 01 | Bank account |
| | | 02 | Accounts receivable |
| | | 03 | Short term investments |
| | | 04 | Deferred charges |
| | | 10 | Accounts payable |
| | | 11 | Program commitments |
| | | 12 | Surplus |
| | | 13 | Contract income |
| | | 14 | Investment income |
| | | 15 | Program expenses |
| | | 16 | Bank charges |

d) iii)   Expense Segment Code

PURPOSE:         To identify whether an expense has been
                 incurred for a project or for administration
                 purposes.  This code is only used with
                 respect to expenses.

STRUCTURE:   It is a one position numeric code:

                      1   -   Administration
                      2   -   Project

d) **iv)a) Responsibility Centre Code**

PURPOSE: To identify a position within the organization that has responsibility for control of administration expenses.

STRUCTURE: It is a three position, numeric code that identifies the position of an individual within the organization as having budget responsibilities. This code is used only with an expense not directly attributable to an approved project.

| | |
|---|---|
| 100 | Board of Governors |
| 110 | Chairman |
| 120 | President |
| 200 | Secretary |
| 300 | Treasurer |
| 400 | Director of Administration |
| 410 | General Administration |
| 420 | Conferences |
| 430 | Publications |
| 440 | Purchasing |
| 450 | Registry |
| 460 | Personnel |
| 500 | Director, Agriculture, Food and Nutrition Sciences |
| 600 | Director, Population and Health Sciences |
| 700 | Director, Information Sciences |
| 800 | Director, Social Sciences and Human Resources |
| 900 | Vice-President - International Assistance |
| 950 | Vice-President - Canada and Donor Agencies |

d) iv) b) Program and Activity Code

PURPOSE: To identify program areas and the activities within each program

STRUCTURE: This is a three position, numeric code, of which the first position identifies the program area and the second and third positions identify the activities. This code is used only with an expense directly attributable to an approved project.

| | | |
|---|---|---|
| 1 Agriculture, Food and Nutrition Sciences | 01 | Crops |
| | 02 | Fisheries |
| | 03 | Animals |
| | 04 | Forestry |
| | 05 | Nutrition and Home Sciences |
| | 06 | Rural Development Systems |
| | 20 | Divisional Activity Projects |
| | | |
| 2 Population and Health Sciences | 01 | Fertility Regulation Methods |
| | 02 | Family Planning - Action Research |
| | 03 | Demography and Population |
| | 04 | Health Sciences |
| | 20 | Divisional Activity Projects |
| | | |
| 3 Information Sciences | 01 | International Information Systems |
| | 02 | International Development Research Centre Library |
| | 20 | Divisional Activity Projects |
| | | |
| 4 Social Sciences and Human Resources | 01 | Process of Modernization and Change |
| | 02 | Applied Social Sciences |
| | 03 | International and Regional Research Networks |
| | 20 | Divisional Activity Projects |
| | | |
| 5 International Assistance | 01 | Liaison |
| | 20 | Divisional Activity Projects |

6  Canada and Donor          01    Liaison
      Agencies               20    Divisional Activity Projects

d) v)    Project Number Code

PURPOSE:        To provide a unique code for projects or
                potential projects.

STRUCTURE:      This is a five position, numeric code. The
                code is assigned at the time that the project
                is first identified and is retained throughout
                the life of the project.

```
+-----------+
| xx¦xxx    |
|   ¦       |
| xx¦       |
|   ¦       |
|   ¦xxx    |
+-----------+
```

                Year of the project identification.

                Serial from 001 for a given year.

e) <u>Financial Statement Line Indicator Code</u>

PURPOSE:          To indicate in which line on the Financial Statements an account balance is to be included.

STRUCTURE:        It is a three position numeric code.

f) <u>Country Code</u>

PURPOSE: To identify each country with a specific code.

STRUCTURE: It is a three position, numeric code. This code is arranged such that all countries in the same world area (region) will fall in the same block of numbers.

g) Region/Office Code

PURPOSE:              To provide a code that identifies an
IDRC administrative region or office.

STRUCTURE:         The code is a two position, numeric
with the first code (00) reserved for the
Head Office in Ottawa and the remaining
assignable as follows:

| | |
|---|---|
| 01 to 20 | Canadian Offices |
| 30 to 99 | Overseas Offices |

h) <u>Project Purpose Code</u>

PURPOSE:

To provide a code to describe the end use or purpose of a project.

STRUCTURE:

It is a two position numeric code. The following is a preliminary list of what these purposes might be:

01    Training - Seminar
02    Training - Conferences
03    Training - Academic
04    Training - On the job
05    Research - Development of capability
06    Research - Studies in specific areas (e.g.
                    Health, Agriculture)
07    Information collection and distribution
08    International coordination
09    External liaison
10    Project identification
11    Productivity improvement

i) Event Number Code

PURPOSE:            To identify the events in the life of a
                    project that are to be monitored for
                    project control purposes.

STRUCTURE:          A two position, numeric code, serially
                    assigned to identify the events within a
                    project that are to be monitored. The
                    event number may be directly related to
                    a project critical path network if desired.
                    In any event, it is intended as a flexible
                    tool for program management activity.

j) <u>Project Status Code</u>

PURPOSE:                To identify the status of a project.

STRUCTURE:              This is a two position, numeric code that
                        is associated with a potential or actual
                        signed project agreement.  This is the
                        standard IDRC status identifier which
                        operates independently of individual event
                        code patterns.

            1    Identified by discussion or proposal submission
            2    Recommended by Program Director
            3    Approved in principle
            4    Recommended to the President by the Project
                     Committee
            5    Recommended to the Executive Committee by
                     the President
            6    Recommended to the Board of Governors by the
                     Executive Committee
            7    Approved by the Board of Governors
            8    Agreement signed by the Grantee
            9    Agreement completed
            10   Project not recommended
            11   Project lapsed
            12   Project rejected

k) Type of Funding Code

PURPOSE:          To identify the type of funding being
                  supplied to the project.

STRUCTURE:        This is a one position numeric code.
                  The following types of funding are cur-
                  rently in use at IDRC:

                      1    External grant
                      2    Centre partnership grant
                      3    Centre administered grant

# 4. INPUT DATA

There are three types of input associated with each kind of input data. These are:

        a) descriptive
        b) file maintenance
        c) routine

Descriptive data provides such information as General Ledger Account name or project name. File maintenance data are concerned with adding, removing and correcting records on the file. Routine data are associated with journal entries and project control information of a regular operating nature. In this section of the Appendix, the nature and sources of all of these types of input data are identified.

## a) Descriptive Information

| | Source |
|---|---|
| General Ledger Account Name | Accounting |
| Project Names | Program |
| Responsible Program Officer Names | Program |
| Grantee Name | Program |
| Grantee Contact and Title | Program |
| Project Description | Program |
| Project Purpose | Program |
| Other Funds in the Project | Program |
| Event Descriptions | Program |
| Term of the Project | Program |
| Type of Fundings Provided | Program |
| Country Code of Grantee | Program |
| Region | Program |
| Project Status Code | Secretary, Program |
| Termination Date | Program |

## b) File Maintenance Information

| | |
|---|---|
| New General Ledger Accounts | Accounting |
| New Projects | Program |
| Financial Statement Line Indicator | Accounting |
| Removal of General Ledger Accounts | Accounting |
| Removal of Projects | Program |

c) Routine Operating Information

| | Source |
|---|---|
| General Ledger Journal Entries | Accounting |
| Approved Cash Budget | Accounting |
| Approved Appropriation | President |
| Committed Amount | Accounting |
| Commitment Date | Program |
| Appropriation Date | Program |
| Date Project Identified | Program |
| Forecast of Cash Disbursement | Program |
| Actual Completion Date | Program |

## B.  DETAILED IMPLEMENTATION PLAN AND SCHEDULE

The detailed implementation plan and schedule presented in this Appendix identifies the tasks involved and the expected time frame for the implementation of the system.  The program is divided into eight phases.  Phases A to G are concerned with the design and implementation of the proposed computer system itself.  Phase H is a short term phase designed to introduce immediate modifications to the current management accounting process.  The short term modifications introduced in this phase will be consistent with the proposed computer system design.

The program schedule presents the estimated elapsed time for each task.  The starting and completion points have been carefully interrelated to ensure that prerequisite tasks are completed.  The time scale is shown as elapsed weeks from the start of the schedule.  The chart scale is one week to each column.  Adjustments to the schedule may be required following the selection of the staff for implementation of the plan, if the level of available resources falls short of the expectation upon which this plan is based.

# INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

## DETAILED SYSTEM DESIGN
## AND IMPLEMENTATION PLAN
## AND SCHEDULE

| REFERENCE | | PROGRAM STEPS | PROGRAM SCHEDULE IN WEEKS |
|---|---|---|---|
| Phase | Task | | 4 · 8 · 12 · 16 · 20 · 24 · 28 · 32 · 36 · 40 · 44 · 48 |
| A | | ORGANIZATION AND START-UP | |
| | 1 | Agree and arrange for IDRC staffing and other support requirements. | |
| | 2 | Obtain the necessary office accommodation. | |
| | 3 | Formalize the regular progress reporting procedure and internal reporting processes. | |
| | 4 | Specify standard practices for system design and programming. | |
| | 5 | Specify documentation standards for system design, programming and operations. | |
| | 6 | Specify the unit program testing procedures and responsibility. | |
| | 7 | Specify the system testing procedures and responsibility. | |
| B | | DETAILED SYSTEM DESIGN | |
| | 1 | Confirm the conceptual system design. | |
| | 2 | Specify details of coding structure and their related codes. | |
| | 3 | Obtain approval for the coding structure. | |
| | 4 | Complete detailed report designs. | |
| | 5 | Obtain approvals on the detailed report designs. | |
| | 6 | Design files. | |

# INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

## DETAILED SYSTEM DESIGN
## AND IMPLEMENTATION PLAN
## AND SCHEDULE

| REFERENCE | | PROGRAM STEPS | PROGRAM SCHEDULE IN WEEKS |
|---|---|---|---|
| Phase | Task | | 4  8  12  16  20  24  28  32  36  40  44  48 |
| B | 7 | Design input formats and relate to interim source documents. | |
| | 8 | Reconcile the file design with the inputs and reports. | |
| | 9 | Design program processing logic and identify the programs required. | |
| | 10 | Prepare detailed program specifications. | |
| | 11 | Agree on procedures to be used to select a contract programming firm. | |
| | 12 | Invite bids from selected contract programming firms. | |
| | 13 | Select the firm to be used and arrange contract. | |
| | 14 | Review the schedule and revise where necessary. | |
| C | | **PROGRAM DEVELOPMENT** | |
| | 1 | Brief programmers. | |
| | 2 | Obtain acceptance by the programmers of the program specifications. | |
| | 3 | Code programs.* | |
| | 4 | Develop test data for program testing. | |
| | 5 | Unit test the programs.* | |
| | 6 | Review tested programs and documentation as being complete and ready for system testing. | |

\* Basic activity undertaken by contract programmers. Supervision by system designers.

P. S. ROSS & PARTNERS

# INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

## DETAILED SYSTEM DESIGN
## AND IMPLEMENTATION PLAN
## AND SCHEDULE

| REFERENCE | | PROGRAM STEPS | | PROGRAM SCHEDULE IN WEEKS (4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48) |
|---|---|---|---|---|
| **Phase** | **Task** | | | |
| D | | SYSTEM TEST | | |
| | 1 | Review the schedule and revise where necessary. | | ~20 |
| | 2 | Develop additional system test data where required. | | ~26 |
| | 3 | Develop program and system operation procedures. | | ~26 |
| | 4 | Design testing process. | | ~26 |
| | 5 | Prepare and test the necessary job procedures. | | ~28 |
| | 6 | Process and check the systems test data. | | ~30 |
| | 7 | Accept programs as system tested. | | ~34 |
| E | | IMPLEMENTATION | | |
| | 1 | Review the schedule and revise where necessary. | | ~20, ~36 |
| | 2 | Brief IDRC staff on the nature of the new system. | | ~21 |
| | 3 | Identify conversion data sources. | | ~22 |
| | 4 | Train the required personnel. | | ~24–40 |
| | 5 | Design forms and procedures for conversion data collection. | | ~22 |
| | 6 | Collect and prepare conversion data. | | ~24–30 |
| | 7 | Convert and commence parallel operation. | | ~38 |
| | 8 | Collect parallel operation data. | | ~24–48 |
| | 9 | Obtain IDRC management acceptance. | | ~48 |

P. S. ROSS & PARTNERS

# INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

## DETAILED SYSTEM DESIGN
## AND IMPLEMENTATION PLAN
## AND SCHEDULE

| REFERENCE | | PROGRAM STEPS | | PROGRAM SCHEDULE IN WEEKS |
|---|---|---|---|---|
| Phase | Task | | | 4  8  12  16  20  24  28  32  36  40  44  48 |
| F | | **STAFF SELECTION AND TRAINING** The additional IDRC staff requirements will be identified early. The process of selection and training will be ongoing through the project. | | |
| G | | **MANAGEMENT AND QUALITY CONTROL** These functions continue over the life of the plan. | | |
| H | | **INTRODUCTION OF SHORT TERM MODIFICATIONS TO THE MANAGEMENT ACCOUNTING PROCESS** | | |
| | 1 | Identify extent of changes to be made. | | |
| | 2 | Identify staffing requirements. | | |
| | 3 | Specify documentation requirements. | | |
| | 4 | Design and obtain approval for proposed reports. | | |
| | 5 | Design source documents and related clerical procedures. | | |
| | 6 | Specify system controls. | | |
| | 7 | Test system. | | |
| | 8 | Train IDRC personnel. | | |
| | 9 | Implement new system. | | |
| | 10 | Follow up the problems and review adequacy of procedures and controls. | | |

# C. A DISCUSSION OF COMPUTING POWER AND SPECIFIC APPLICATIONS

This Appendix discusses the nature of IDRC requirements for computer power in greater technical detail than is presented in the body of the report. The information is based on the discussions which P. S. Ross & Partners' staff conducted with the management and staff at IDRC, and on the Digital Methods Ltd. feasibility study report on the implementation of ISIS at IDRC. The requirements of the proposed management accounting and reporting system, as analyzed by P. S. Ross & Partners, form the final element of information.

Based on the discussions held, it appears that the computer power requirements of IDRC can be grouped into three categories:

* Batch business data processing

* On-line data entry

* Computational

The proposed management accounting and reporting system is a business data processing system that is most suited to being operated in a batch environment. The ISIS system, on the other hand, requires the capability of both on-line data entry and batch processing. The last type, computational power, is required for statistical analysis work in the various program areas.

In the design and implementation of any proposed system, we recommend that IDRC adhere to a philosophy that will enable the Centre to follow an orderly plan of computer power procurement. At this time, there does not appear to be sufficient justification for IDRC to have an in-house computer. However, this position could alter in the future. Accordingly, IDRC should pay careful attention in the design and implementation of any computer system to avoid closing off future procurement options. This can be done by imposing constraints on the design of the systems. Any constraints introduced must, of course, be reviewed to ensure that they do not seriously affect the efficiency of a system. However, at the present time, the nature of the computer requirements outlined in this Appendix are such that, by following the policy described above, the Centre can take three independent routes in satisfying the current computing power requirements, while, at the same time, retaining the flexibility of combining these at a later date.

# 1. Proposed Management Accounting and Reporting System Computer Requirements

The conceptual system design presented in this report should result in the creation of a series of programs that operate on a batch computer system. The computer system will be of medium size, with the capability of handling programs that use as many as seven files including card reader and line printer files. Since we recommend that the system be programmed in COBOL, the system must be capable of compiling and running COBOL programs with seven files. The mix of tape and disk input/output files is dependent upon the particular detailed system design that is actually developed. However, the constraints on the detailed system design should be such that the system will be capable of being operated on an in-house computer of the minimum configuration required by the present ISIS system. Though some modification undoubtedly will be required to achieve this, these should not add measurably to the costs of the design and implementation or to the operating cost of the system. The recommendations with regard to the computer configuration to be utilized is based on the possibility that at some time in the near future IDRC may decide to implement the ISIS system at a local computer utility, converting later to a medium size computer configuration located within IDRC. The computer configuration envisaged now must be capable of conversion to such an in-house system with a minimum of programming and system effort.

## 2. ISIS Computer Requirements

The Digital Methods Ltd. (DML) report recommends that IDRC install ISIS at Alphatext with a one year contract and that IDRC consider the option of re-coding the system for a small computer. In the event that the second recommendation led to budget savings, an in-house computer installation could become a possibility.

In our review we were concerned with the impact that the operation of the ISIS system would have on IDRC's requirement for computer power. The philosophy recommended by P. S. Ross & Partners to govern the procurement of computing power is similar to that presented by DML in their report. Hence, in reviewing the report, we were concerned with the DML recommendations with respect to the immediate acquisition of computer power and the likely configuration of the in-house computer that would result.

In terms of the DML recommendations for the procurement of computer power, we are satisfied with the validity of their approach.

While DML did not carry out an exhaustive study of the IDRC in-house computer requirements, the likely dimensions of the configuration were identified as:

* IBM 360/30 or equivalent

* 128K core

* 4 tapes

* 3 disk drives

* 1 line printer

* 1 card reader

Accordingly, we recommend that the detailed system design for the management accounting and reporting system take account of these dimensions as a design constraint.


3. Other Computer Usage Requirements

In the course of our discussions with the management of IDRC, one further requirement for computer power was identified, that of statistical analysis capability. The demands come from in-house projects and as the result of requests from the grantees on funded projects. The frequency of such work is spasmodic and of varying volume. The problems are capable of being solved on the in-house Hewlett-Packard computers, on any of the service bureaus or university computing centres in Ottawa, or at some site more convenient to the grantee. Accordingly, we recommend that IDRC treat each requirement on its merits and direct it to the most appropriate source of computer power. At such time as these requirements become more significant or IDRC considers the procurement of an in-house computer system, this policy should be reassessed.