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THE AGRICULTURAL CREDIT BANK OF JAMAICA: EVALUATION OF CURRENT PERFORMANCE, PROBLEMS AND RECOMMENDATIONS FOR THE FUTURE

(A report submitted to Dr. Keith Roache, Managing Director - Agricultural Credit Bank - Jamaica under the auspices of the USAID Mission Jamaica)

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May 1984

TABLE OF CONTENTS

		Page
I.	INTRODUCTION: LESSONS AND LEGACY FROM THE PAST .	1
II.	REVIEW OF RECENT PERFORMANCE OF THE AGRICULTURAL CREDIT BANK	4
	A. Growth and Composition of the Portfolio: Implications for Surplus and Deficits . .	5
	B. Operational (i.e. Lending) Costs and Related Issues in the Organizational Structure of the Agricultural Credit Bank (ACB)	13
	1. Transaction Costs and Loan Targeting Issues	13
	2. Non-Wholesaling Functions in a Wholesaling Institution	15
	3. Lending Costs and The P.C. Bank Network .	18
	C. Issues Surrounding the Interest Rate Spread, Equity, and Non-Interest Operational (i.e. Lending) Costs	22
	D. Loan Recovery Performance, Loan Decision Autonomy, and Savings Mobilization: Ingredients for Institutional Viability .	29
	E. Interest Rates, Technical Assistance Costs, Foreign Exchange Risks and Project Analysis: An Illustrative Example - The ACB USAID Project	42
	1. The Effective Rate of Interest Charged the ACB	44
	2. Present Value of the USAID Loan	45
	3. Interest Rates and Inflation	46
	4. Exchange Rate Risk	47
	5. Conclusions	49
III.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	50
	A. Summary and Conclusions	50
	B. Recommendations	59
	C. Appendix: Present Value Calculations of USAID Loan	66

LIST OF TABLES

		Page
Table 1	Loan Portfolio of ACB from April 1983 through January 1984 (Loans Outstanding in Millions of Jamaican Dollars)	6
Table 2	Income Statement for the Agricultural Credit Bank by Month from April 1983 through January 1984 Showing (Deficit) or Surplus (J$000).	10
Table 3	Major Sources of Interest Earnings for the ACB in 1983-84, in Percentages (J$000)	11
Table 4	Organization of Personnel in ACB by Major Functional Division -- Early 1984	17
Table 5	Monthly Trends in Lending Costs per Dollar Lent for New Loans from April 1983 through January 1984 (in J$000).	19
Table 6	Non-Interest Operating Expenses Associated with ACB Infrastructure Support to P.C. Bank Network and Lending Costs per Dollar for P.C. Bank Portfolio	20
Table 7	Profile of Interest Rates by Major Lending Agencies to the Agricultural Credit Bank in February 1984	24
Table 8	Time Profile of Arrears on Interest and Principal in the Total Portfolio of the Agricultural Credit Bank by the Extreme "Amount Due" Criterion (1/4/83) through 1/1/84). .	30
Table 9	Time Profile of Arrears on Interest and Principal on the Agricultural Credit Bank's Current Loan Portfolio with The Peoples Cooperative Banks (11/30/83 through 1/31/84)	31
Table 10	Paid Up Share Capital in the 39 Peoples Cooperative Banks Under the New Loan Program Administered Through the Agricultural Credit Bank from January 1983 through February 1984	40

THE AGRICULTURAL CREDIT BANK OF JAMAICA: EVALUATION OF CURRENT PERFORMANCE, PROBLEMS AND RECOMMENDATIONS FOR THE FUTURE

I. INTRODUCTION: LESSONS AND LEGACY FROM THE PAST

Recent research in various countries has clarified the common factors causing development bank failures in financing agricultural activities in lesser developed countries (LDCs). In brief, agricultural development banks have expanded their activities too rapidly into a narrow portfolio of risky clients. They have not charged interest rates high enough to cover their operational or lending costs to service a targeted portfolio with heavy administrative inputs and reporting requirements. These institutions have also commonly suffered from political intrusions that compromise their viability. Further, loan delinquency often grows due to the poor quality of financial services offered and the absence of sanctions. Donor and government funding predominates in the source of loanable funds, and local deposit and savings mobilization efforts are absent or minimized as an important source of funds. This compromises the autonomy of loan decisions as donors and governments force credit to be channeled to selected target groups regardless of costs, risks and returns.

Jamaica has experienced a variety of public sector agricultural loan programs that fit the above description in whole or in part. The decade of the 1970s saw the rise and

decline of agricultural lending through the commercial window of the Jamaica Development Bank and the small to medium sized farm loans in the SSFDP program. Both programs experienced high lending costs, low loan recovery and various degrees of political intrusion in loan decisions. In the end, neither program became viable and self-sustaining.

The Crop Lien Program, part of the Emergency Production Plan launched in 1977, was another unfortunate attempt at large scale public sector lending to agriculture. This time the Ministry of Agriculture became the major vehicle promoting and controlling the loan decisions through their network of extension agents. However the Ministry extension network did not assume any responsibility for collecting loan repayments, passing this more difficult task off onto the understaffed rural offices of the Peoples Cooperative Bank network. This patronizing action did not inspire great interest or create incentives for the P.C. bank staff to collect on a difficult portfolio when they had had no voice or role in the loan decision. Parliamentary suggestions that the program was an attempt to redress the income and welfare of small farmers strongly implied it was intended as an income transfer rather than a loan program. Poor client selection, subsidized interest rates, poor loan administration, low staff morale, the absence of sanctions (or likely rewards for those who would repay, in the form of additional loans) all gave the wrong signals to borrowers. The result was wholesale default.

Finally we have the history of the traditional loan portfolio administered by the Agricultural Credit Board throug the P.C. bank network. Refurbished from time to time by new injections of government funds, the Board would extend loan funds through the large network of small P.C. bank outlets. These were typically small seasonal loans (in principle) that more often than not became consumption loans (in practice). Loan decisions were allegedly made through local loan committees, however, in practice the Ministry of Agriculture (as in various disaster relief programs and the Crop Lien activity) or the A.C. Board through its loan officers could affect the loan granting decisions.

The most important features that summarize this loan activity were: (1) low loan recovery and high delinquency rates (ranging between 40 to 60 percent); (2) no effective savings mobilization activity, except for the marginally insignificant share capital contributions; (3) poor to non-existent accounting and bookkeeping procedures; and, (4) an unrealistically low interest rate (6%) in the face of rising inflation, thereby making it impossible to prevent an erosion of the real value of the asset portfolio or cover any respectable level of overhead costs to finance competent management and loan administration.

It is useful to have reviewed this past history of the four major public sector agricultural loan programs that dominated public policy initiatives in rural finance in

Jamaica in the 1970s. Since all four have collapsed or are being phased out of any active lending activity, it is important to be reminded of the factors that led to their demise. In brief it is important that the same mistakes are not repeated by a new generation of policymakers responsible for reforming rural financial market institutions in the country through the creation of the new Agricultural Credit Bank.

This report will first document and evaluate the performance of the Agricultural Credit Bank through 1983 and early 1984. Throughout, emphasis will be placed on the nature of the wholesale lending function that the new institution was designed to initiate in the Jamaican agricultural credit market. Following this evaluation we will then summarize our conclusions in light of the terms of reference set up for our assessment. We finally conclude with a set of recommendations for the ACB management and Board to consider in the future.

II. REVIEW OF RECENT PERFORMANCE OF THE AGRICULTURAL CREDIT BANK

Any assessment of the performance of the ACB should review the nature of its loan portfolio, its growth over time, clientele serviced, the surplus or deficit recorded in its income statement, lending costs, arrears rates and related financial performance indicators. The staff at the

ACB was unusually cooperative and alert to produce, on short notice, the necessary data and information to generate the performance indicators under review here.

A. Growth and Composition of the Portfolio: Implications for Surplus and Deficits

Table 1 presents the growth and composition of the portfolio (loans outstanding) of the Agricultural Credit Bank (ACB) from April 1983 through January 1984. The composition of the portfolio reflects the role of the ACB as the new "wholesaling" financial institution designed to replace and consolidate the three major public sector "retail" credit programs of the 1970s (i.e. the commercial window loans of the old Jamaica Development Bank, continuing obligations for collecting the outstanding loans for the discontinued SSFDP program and an important segment of the old Peoples Cooperative Bank portfolio of the Agricultural Credit Board). This consolidation into one institution permits a more effective coordination of lending for the agricultural sector and, among other benefits, prevents delinquent borrowers from going to other public sector credit programs for new income transfers (disguised as credit), a common practice in the 1970s. If nothing else this consolidation should constrain that kind of behavior and generate a better loan recovery record than that recorded in previous programs.

Table 1

Loan Portfolio of ACB from April 1983 through January 1984
(Loans Outstanding in Millions of Jamaican Dollars)

Loan Portfolio	1983 April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	1984 Jan.
1. P.C. Banks										
a) Short term	$ 2,905	$ 3,882	$ 4,830	$ 5,003	$ 5,319	$ 5,788	$ 6,187	$ 7,172	$10,256	$ 7,744
b) Long term	2,617	3,383	4,475	5,449	6,740	7,391	8,343	9,442	9,789	11,221
Subtotal (1a + 1b)	$ 5,522	$ 7,265	$ 9,305	$10,452	$12,059	$13,179	$14,530	$16,614	$20,045	$18,965
2. Commercial Banks	$ 5,280	$ 5,280	$ 5,280	$13,090	$13,090	$13,090	$13,090	$15,745	$22,509	$22,509
3. Subtotal (1 + 2)	$10,802	$12,545	$14,585	$23,542	$25,149	$26,269	$27,620	$32,359	$42,554	$41,474
4. SSFDP Loans	--	--	--	--	--	--	--	$22,098	$21,833	$21,448
Total (1+2+3)	$10,802	$12,545	$14,585	$23,542	$25,149	$26,269	$27,620	$54,457	$64,387	$62,921

SOURCE: ACB files.

If we ignore the inherited SSFDP portion of the portfolio, we see that there has been substantial growth of the ACB's portfolio over this period from 10.8 million to 41.4 million J. dollars (Table 1). The P.C. bank portfolio accounts for 45 percent of this total in January 1984 and the commercial bank portfolio 55 percent. Throughout the year the long term portfolio of the P.C. bank portfolio weighs slightly more than the short term portfolio.

Two features should be kept in mind in evaluating this performance: (1) the rapid increase in the portfolio in such a short time, and; (2) the clientele serviced in the two major segments of the portfolio. The rapid increase in this portfolio is noteworthy. By January 1984 the ACB had issued loans amounting to roughly 19 million J. dollars to the subset of 39 Peoples Cooperative Banks which it inherited from the former Agricultural Credit Board portfolio covering 115 P.C. banks. This contrasts with only 10 million J. dollars recorded in this loan portfolio in the late 1970s when it was under the auspices of the Agricultural Credit Board. Moreover, and this is the main point, well over half of that former portfolio consisted of unrecoverable loans and the remainder largely aged rather than recent loans. In contrast the current Agricultural Credit Bank portfolio to the subset of 39 P.C. banks is made up entirely of new loans and, as we shall see shortly, on-lent by the P.C. banks to a small farmer clientele that is remarkably free of arrears

(even in the face of a 100 percent increase in the final borrower's lending rate from 6 to 12 percent).

Rapid loan disbursement is frequently taken by international donors as a sign of good performance. This is a very mistaken view when rapid loan disbursement is not coupled with responsible procedures to ensure creditworthy loans and effective loan recovery performance. Donor evaluation teams that rank initial rapid disbursement highly are rarely around three to five years later when these programs are buried in a sea of growing arrears, undermining the very viability and credibility of the institutions.

It is indeed fortunate to note that this rapid increase in liquidity to the small farmer P.C. bank clientele of the ACB portfolio, an annual increase far in excess of what this network has ever traditionally managed, has occurred without serious arrears and delinquency as will be pointed out later. This speaks well for the management skills of the ACB in administering this traditionally difficult and risky clientele and, in particular, preparing the P.C. bank staffs to adopt procedures that protect the viability of their loan activity.

The second issue mentioned above, i.e. the composition of the portfolio, refers to the contrasting clientele serviced through the wholesaling of loans for on-lending through the commercial banks compared to that serviced through on-lending

through the P.C. bank network. The former clientele represents a more established and less risky farm enterprise or agricultural enterprise subset of borrowers while the latter clientele is made up of a more risky small farmer subset of borrowers. It is important that the ACB be able to diversify its risks in managing its total portfolio. Thus it is both logical and advisable that the legitimate and important liquidity needs of commercial bank borrowers should form an important part of the ACB's overall lending activity. Secondly, in using the relatively low cost intermediary services of the commercial bank for on-lending, the ACB is able to partially offset the high costs it incurs in servicing the large and growing small farmer portfolio in its P.C. bank network. Risk diversification and cost economies suggest that the current division of activity between these two broadly defined clienteles is appropriate and commercial bank on-lending activity should always play an important role in the ACB portfolio.

Tables 2 and 3 present the monthly income statement of the ACB from April 1973 through January of 1984 and the sources of interest earnings over the same period. Not surprisingly the bank has been registering losses (deficits) except for the most recent months recorded in the table when it registered its first successive surpluses. The predominant pattern of losses is associated with the high level of lending costs incurred with the necessity of incorporating a large

Table 2

Income Statement for the Agricultural Credit Bank
by Month from April 1983 through January 1984 Showing (Deficit)
or Surplus (J$000)

Income Statement	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.
Revenue	117	111	144	174	211	218	259	369	639	666
Operating Expenses Before Interest Charges	281	391	367	440	433	402	528	452	489	395
Surplus/(Deficit) Before Interest Charges	(164)	(280)	(223)	(266)	(221)	(183)	(268)	(83)	149	267
Interest Charges	--	--	--	--	--	--	--	147	74	73
Extra-Ordinary Items	--	3	--	--	--	--	--	--	23	--
Surplus/Deficit for Month	(164)	(277)	(223)	(266)	(222)	(183)	(268)	(230)	99	194

SOURCE: ACB files.

Table 3

Major Sources of Interest Earnings
for the ACB in 1983-84, in Percentages (J$ 000)

Sources	April	July	Oct.	Dec.	Jan.
1. Interest Earnings on Loans to P.C. Banks	41% ($72)	60% ($115)	61% ($234)	31% ($123)	17% ($110)
2. Interest Earnings on Loans to Commerical Banks	54 (96)	28 (54)	35 (133)	19 (196)	34 (229)
3. Interest Earnings on Loans in the SSFDP Loan Portfolio	0 (--)	0 (--)	0 (--)	19 (120)	18 (119)
4. Interest Earnings on Equity Capital Held in Fixed Time Deposits	5% ($ 8)	12% ($ 23)	4% ($ 16)	31% ($199)	31% ($208)
Total Percent	100	100	100	100	100
Total J$(000)	$176	$193	$383	$638	$666

SOURCE: ACB files.

and expensive non-wholesale infrastructure to service the loan administration and managerial needs of the subset of P.C. banks. Table 3 highlights the fact that the recent surpluses recorded for December and January have grown out of the sharp rise in interest earnings on equity capital and the SSFDP portfolio coming on stream in recent months.

This performance should be interpreted properly. With the SSFDP and other equity contributions coming on line recently, it is not surprising that they would emerge as important sources of interest earnings. There is no reason why these potential funding sources should necessarily be loaned out immediately to the commercial bank or P.C. bank portfolios. As pointed out earlier, the already rapid disbursement of loans, especially those through the P.C. bank network, speaks well for the initiative of ACB officials. One would not want to push this too rapidly. Otherwise the wrong signals would be transmitted to final borrowers, namely, that the ACB-PC system is more interested in "moving" money than in effective loan recovery. There is sufficient evidence that the ACB portfolio expansion has been generally well-balanced between term structure and final borrower clientele. In the meantime existing equity resources are being intelligently invested with promising deposit rates of return that will allow for even larger portfolio expansion in the future. The issue to be examined here is the level and structure of lending or operational costs in the ACB, the subject of the next section.

B. Operational (i.e. Lending) Costs and Related Issues in the Organizational Structure of the Agricultural Credit Bank (ACB)

1. Transaction Costs and Loan Targeting Issues

The transaction costs of financial intermediation in lesser developed countries (LDCs) have received increased attention in recent years. These costs can be broken down into the implicit or explicit non-interest expenses incurred by depositors, lenders and borrowers. For our purposes lenders costs will receive major attention. Since the AC Bank is not designed to be a depository institution, lenders costs here refer to the non-interest operational costs incurred by the institution to on-lend external donor funds to selected clientele.

Until recently it has not been widely recognized that "loan targeting" by external donors (i.e. end-use requirements that funds reach specified or targeted final borrowers) is very costly to on-lending institutions. In requiring these institutions to service a specific clientele such as small farmers of various characteristics in terms of net worth, farm size, crop composition, etc., the external donor (or local government) adds to the search and screening costs through more complicated labor intensive and resource intensive accounting, documentation and reporting procedures. Recent studies of the operational costs of lending institutions in several LDCs subject to these targeting intrusions into their cost structures have established that these costs can range between 10 and 20 percent of the loan portfolio.

An additional cost burden incurred in targeting is supervisory and technical assistance expenses. In many cases this strategy can imply the creation of a costly infrastructure of specialized personnel and support services for final borrowers. Field surveys have invariably discovered that this heavy overlay of bureaucratic personnel is invariably ineffective in persuading or forcing final borrowers to carry out the alleged end use for the loan when it isn't already in the self interest of the farmer or final borrower to do so. The fungible diversion of resources to alternative uses is difficult and costly to prevent. More to the point here is that a lending institution shouldn't be forced to act as a loan policeman concerning the end-use of funds. If it is in the interest of the final borrower to carry out the project anyway, the supervisory resources are unnecessary. If it is not in his interest to do so, he will find ways to use these funds to maximize his utility through various tactics of credit diversion regardless of supervisory personnel. Hence resources are expended with little to no effect on the outcome.

In summary, lending costs for LDC development banks can become onerous when targeting and supervisory costs begin to dominate the portfolio. When these constraints are combined with interest rate ceilings, narrow administrative margins in donor projects and poor loan recovery efforts, the result is quick decapitalization and institutional unviability.

2. Non-Wholesaling Functions in a Wholesaling Institution

This long preamble on transaction costs and, in particular, lending costs associated with targeting criteria is necessary in order to place the current ACB institutional initiative in perspective. The ACB receives a large proportion of its funds from external donors in which targeting criteria operate in one form or another to add to its lending costs. Despite being designed as a "wholesaling" institution, namely, an intermediary that passes on external funds to other "retail" institutions downstream who on-lend to final borrowers, the ACB has discovered it has acquired a portfolio with high rather than low lending costs. In short the "wholesaling" activity of the ACB includes an important and growing element of non-wholesale responsibilities with their administrative overlay of infrastructure costs.

These non-wholesaling responsibilities are indeed central to the functioning of the institution. For the most part they entail supervisory and management counseling for the network of 39 P.C. banks recently incorporated into the ACB portfolio through the IDB/IFAD project funds; and, more recently, the establishment of the Agricultural Development Unit (ADU) within the ACB to service the AID sponsored medium to long term investment projects for agrobusiness export enterprises in the Commercial Bank network. This latter activity has led to the expansion of staff specialists in project analysis in the ACB to evaluate the rate of return to longer term investment

projects within this portfolio. The major infrastructural expense, however, is associated with the P.C. Bank network which will form the major part of the ensuing analysis.

In Table 4 the staff of the ACB is disaggregated between Cooperative Institution Personnel largely in the field (servicing the P.C. Bank network) and General Administration and Support Staff in Kingston. The dominant role of the P.C. Bank network in the ACB cost structure grows out of the large number of personnel (80 persons) specifically hired to service this network. This number represents 57 percent of the total number of staff hired in the ACB as of February 1984.

The other project specific activity requiring a separate infrastructure is the previously mentioned AID supported Agricultural Development Unit (ADU) servicing longer term investment projects for export enterprises through the commercial bank network. Ten specialists have been hired for this unit as can be seen in Table 4. When the P.C. Bank personnel and ADU staff are combined (80 plus 10) the total (90 personnel) represent roughly 64 percent of the total number of personnel in the ACB which are carrying out non-wholesaling infrastructure support activities within the institution.

These findings highlight the fact that institutions such as the ACB cannot restrict themselves to the traditionally and narrowly defined wholesaling functions in a lesser

Table 4

Organization of Personnel in ACB
by Major Functional Division -- Early 1984

		Number Personnel		
I.	Cooperative Institutions Personnel (The 39 P.C. Bank Network)			
1.	Parish Supervisors in Field	12		
2.	Credit Officers in Field	39		
3.	Support Staff in Parish Offices in Field	22		
	Total Field Personnel		73	
4.	Coop. Inst. Officials in Kingston Office	5		
5.	Coop. Inst. Support Staff in Kingston Office	2		
	Total Coop. Inst.			80
II.	General Administration and Support Staff--Kingston			
1.	General Management (4 Senior Mgrs.; 5 Support Staff)	9		
2.	Personnel Staff (1 Officer; 7 Office Staff)	8		
3.	Internal Administration (2 Officers; 4 Support Staff)	6		
4.	Auditing Staff (5 Auditors; 1 Support Staff)	6		
5.	Accounting Staff (8 Accountants; 5 Staff)	13		
6.	Legal Staff (2 Officers; 7 Staff)	9		
7.	Agricultural Development Unit (Servicing Commercial Bank Portfolio) 6 Specialist-Technicians; 4 Staff	10		
	Total Kingston Staff			61
	Grand Total Personnel			141

SOURCE: ACB Personnel Roster--February 1984.

developed country with imperfectly developed capital markets and weak retail lending institutions. The ACB necessarily has to engage in non-wholesaling technical assistance not ordinarily associated with wholesale banking in more developed countries. In time, of course, it would be advisable for the ACB to spin off this infrastructure into the retail units themselves as they acquire the capacity to carry on these loan activities on their own. Then the ACB could find itself performing the more traditionally structured wholesale intermediation role with a much smaller staff and budget.

3. Lending Costs and The P.C. Bank Network

Tables 5 and 6 set forth data on the lending cost scenario of the ACB. In Table 5 total non-interest operational costs are presented from April 1983 through January 1984. Expressed as a percent of the outstanding portfolio of new loans issued during this period (or as a cost per Jamaican dollar lent), lending costs ranged between a low of 4.5 percent and a high of 32 percent. The monthly fluctuations are characteristic of a rapidly changing volume of new loans. More germane to our point is the accumulated total in the last column of Table 5. This shows that the accumulated costs per dollar lent over this 10 month time period was 12.56 cents (or 12.56 percent). This is an implicit weighted average of the lending costs incurred to service the new loans issued in the lower cost commercial bank portfolio and the higher cost P.C. Bank portfolio throughout this 10 month period.

Table 5

Monthly Trends in Lending Costs per Dollar Lent for New Loans
from April 1983 through January 1984
(in J$000)

Lending Costs	1983 April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	1984 Jan.	Total(1)
1. Non-Interest Operating Expenses (by month)	$281	$ 391	$ 367	$ 440	$ 433	$ 402	$ 528	$ 452	$ 489	$ 399	$ 4,187
2. Loans Issued (by month) excl. SSFDP Loan Portfolio	873	1,775	2,110	1,277	9,518	1,314	1,672	5,060	7,260	2,413	33,272
3. Cost per J$ Lent	32.19c	22.13c	17.39c	34.46c	4.54c	30.59c	31.58c	8.93c	6.74c	16.54c	12.56c

(1) This final column measure is the accumulated expenses, loans and cost per J$ lent incurred during the entire period.

SOURCE: ACB files.

Table 6

Non-Interest Operating Expenses Associated with ACB Infrastructure Support to P.C. Bank Network and Lending Costs per Dollar for P.C. Bank Portfolio

Expense Category	P.C. Bank Percent[a]	Year to Date Expenses on P.C. Banks Activity: July 1983	Sept. 1983	Jan. 1984	Jan. 1984 as Multiple of July 1983
	(1)	(2)	(3)	(4)	(5)
1. General Admin. Expenses	70	$ 363,802	$ 598,304	$ 1,094,735	3.0
2. Cooperative Institutions	100	650,735	978,633	1,744,522	2.7
3. Technical Services	65	39,538	61,074	108,344	2.7
4. Legal Services	35	21,836	32,877	60,600	2.7
5. Accounting Services	70	53,814	86,153	157,029	2.9
6. Auditing Services	80	58,976	84,648	131,718	2.2
7. ADU Expenses	0	--	--	--	--
8. Project Expenses	100	12,427	19,231	37,983	3.0
9. Total P.C. Bank Related Lending Costs		$ 1,201,128	$ 1,860,920	$ 3,334,931	2.7
10. P.C. Bank Portfolio (Loans Outstanding)		$10,452,000	$13,179,000	$18,965,000	
11. Lending Costs per J. Dollar Lent		11.49¢	14.12¢	17.58¢	

[a]These percentages refer to the share of each cost category that can be associated with servicing the P.C. bank portfolio and network. The shares were derived from interviews with ACB officials.

SOURCE: ACB files.

Table 6 breaks out these lending costs in greater detail for the higher cost P.C. Bank portfolio within the ACB. The expenses of the eight major administrative categories were disaggregated into those associated with support services for the P.C. Bank network and those directed to other ends. The percent of each cost category associated with P.C. Bank support is set forth in Column 1 with the actual J. dollar expenses adjusted accordingly and set forth for three benchmark months from July 1984 through January 1984. Finally, the sum total of these year-to-date accumulated expenses are set forth in a ratio to the year-to-date loans outstanding in the P.C. Bank portfolio to create the lending costs per J. dollar lent (line 11, Table 6) in July 1983, September 1983 and January 1984.

Table 6 shows that these non-interest operational (i.e. lending) costs have risen from 11.49 to 14.12 to 17.58 percent over this period. As expected these costs are on the high side compared to the overall weighted average lending cost reported in the final column and row of Table 5 (12.56 percent).

This relatively high level of non-interest lending costs grows out of the burden of non-wholesale infrastructure expenses that have to be incurred by the ACB to conform to the targeted criteria of servicing the P.C. Bank network effectively. It should be remembered that this network had an unpromising legacy from its former high delinquency relationship with the

Agricultural Credit Board and occasional political intrusion from the Ministry of Agriculture through such default ridden schemes as the Crop Lien Program. These top-down patronage relationships did not reward local initiative or develop local managerial talent or decision making skills. Consequently when the ACB inherited 39 local P.C. Banks from this weak network, it is not surprising that they had to invest heavily in an infrastructure to turn these small local banks around. In short they had to be made into viable entities that could repay the ACB's wholesale funds that were on-lent through their retail system.

A separate Cooperative Institutions Department has been set up in the ACB covering the expenses of 39 credit officials, 12 Parish officers and numerous support staff in the field and in Kingston (see Table 4). Additional central office personnel in Technical Services, Legal Services, Accounting and Auditing devote substantial amounts of their time in periodic audits of these banks and extensive technical assistance efforts are directed towards improving the budgeting, management and loan recovery procedures. The net result is a relatively high level of lending costs as seen in the data of Table 6.

C. Issues Surrounding the Interest Rate Spread, Equity, and Non-Interest Operational (i.e. Lending) Costs

The non-interest operational (i.e. lending) costs documented and discussed in the previous sections are far in

excess of any interest rate margins included for administrative expenses in current donor programs. Table 7 outlines the ruling interest rates associated with the repayment obligations that the ACB has with its major donor institutions. For example the combined IDB and IFAD rates average out to 3 percent. The ACB in turn on-lends these monies to the P.C. Bank network at 8 percent who in turn loans these funds out to their rural clients at the recently established 12 percent loan rate. Hence the spread allowed for the administrative costs of the ACB is 5 points (i.e. 3 percent vs. 8 percent) while the lending costs to service this P.C. constituency are almost 4 times that amount. Even if one were to include the additional 4 point spread allowed within the P.C. Bank network (creating a 9 point spread) the lending costs associated with servicing this network within the ACB alone (i.e. 17.58 percent in Table 6) come to roughly double that amount.

If the ACB were forced to live within these narrow margins alone and, at the same time, comply with servicing the targeted P.C. Bank clientele with its expensive infrastructure support, it clearly couldn't remain institutionally viable. However the IDB has allowed the ACB to collect on the outstanding loan obligations of the old IDB-SSFDP program and use these loan recoveries as a base for equity capitalization within the ACB. As was seen in the income statement (Table 2), the flow of SSFDP loan recoveries is now making a

Table 7

Profile of Interest Rates by Major Lending Agencies to the Agricultural Credit Bank in February 1984

Government of Jamaica (GOJ)	2%
Canadian International Development Agency[1]	--
Inter-American Development Bank (IDB)	2
IFAD	4
USAID	3
World Bank	10.4
Caribbean Development Bank (CDB)	11.25%

SOURCE: ADB files.

1. The CIDA funds are in the form of a grant.

contribution to the capital base of the ACB and should make a sufficient difference in time in allowing the institution to subsidize its infrastructure expenses to support its P.C. Bank network. This will relax the constraint of the narrow interest rate spread.

A remaining problem in this IDB-IFAD relationship to the P.C. Bank portfolio is an interest penalty of one half of one percent on any undisbursed funds. Given the requirements that land titles are necessary for these loans, and, given the fact that land titles are in a precarious state for most small farmers in Jamaica, this introduces natural delays in the P.C. Bank's ability to move the money fast enough into loans with secure title without interest penalties being exacted on undisbursed balances in the ACB. The IDB-IFAD criteria reflect the counterproductive and dangerous criteria of judging the success of a program by the rapidity with which funds are disbursed. A more sensible approach would reward an institution for careful professional loan evaluation and loan recovery efforts. In short, institutional viability should form the basis for penalty or rewards, not the rapidity of disbursement.

The remaining donor interest rates in Table 7 raise additional questions and discussion. The AID rate of 3 percent is associated with ACB on-lending through its commercial bank channels at 12 percent who in turn loan out to these longer term export enterprise investment projects at 15 percent. This

creates a 9 point spread for the ACB and a 3 point spread for the participating banks. The growing Agricultural Development Unit will add to the infrastructure costs of servicing this portfolio. It is still too early to judge the field experience of this specialized portfolio. Nevertheless a separate evaluation of the generally favorable project analysis behind this program will be set forth in a following section of this report.

The 3 point spread for the private banks should be sufficient for the present for two reasons. First these funds are not subject to reserve requirements (which in effect adds an additional 1 to 2 points to the spread) and, second, the first cut of clients are relatively well established and represent reduced risks. However the more this portfolio expands, the riskier will be the clientele drawn in and the greater the pressure to ask the ACB (and AID) to offer loan guarantees to reduce these risks. This should be resisted. Widespread use of loan guarantees will tend to take the starch or rigor out of the loan evaluation procedures in the banks with the consequent rise in potential delinquency in the program. Loan guarantees should be dealt with on a careful case by case basis and only resorted to in a limited manner.

The World Bank interest rate is quite high in Table 7 for their export oriented portfolio. However the ACB initially benefited from a large equity contribution in this program

which was to create a firm base for servicing this portfolio with a small interest rate spread. Unfortunately, the economic stabilization criteria growing out of recent IMF negotiations with Jamaica prevent the government from honoring this previously established understanding of increased equity or capitalization for the ACB from the government budget. Continuing constraints on expanding government expenditures to service these commitments for equity financing argue for a renegotiation of the interest rate spread to allow for a more viable coverage of prospective lending costs in this program or a substantial reduction in the cost-increasing elements associated with donor "targeting" requirements in the program. Again, the emphasis should be on institutional viability, not targeted clientele (at the expense of institutional viability).

A final feature of the equity issue merits discussion. Some international donors like to establish very low debt equity ratios in their loan programs through institutions such as the ACB. The World Bank, for example, currently requires a debt equity ratio of 3 to 1 for their programs in the ACB. This practice has grown out of two concerns: (1) a desire to force local governments to increase their equity contributions to local financial institutions; (2) a concern to induce cautious lending behavior in a risky environment or in an institutional setting that has previously experienced a poor loan recovery record.

Unfortunately such low ratios seriously compromise the possibility of expanding loans sufficiently to earn enough interest income to cover an expensive infrastructure of operational costs designed to service targeted clientele. When the possibilities for increased equity contributions are compromised, as they are in the current IMF influenced environment in Jamaica, an increase in this ratio is called for, particularly if the institution has a reasonable loan recovery record. Commercial banks typically operate with debt equity ratios between 15 to 20 to 1 in the U.S. while smaller regional banks function within ratios of 12 to 14 to 1. It would not be unreasonable to allow this ratio to rise to 8 to 1 for the ACB, providing their current respectable loan recovery performance is maintained.

In concluding this section on lending costs, it should be noted that the rather high lending costs recorded in Tables 5 and 6 have, in large part, grown out of the need to put most of the expensive infrastructure in place before the portfolio expands sufficiently to generate the interest income to cover these costs. Put differently, there exists an element of excess capacity in the current infrastructure base of the ACB which can presumably service a larger portfolio thereby reducing the operational costs per Jamaican dollar lent.

At the same time, increased interest earnings from an expanding portfolio in the future will add to the ACB's capital base and allow for increased subsidization of an expensive portfolio with targeted clientele. However, this optimistic

scenario of a possible decline in lending costs per J. dollar lent rests on two important assumptions: (1) that there will not be any significant cost-increasing elements associated with portfolio expansion; and (2) there will be effective loan recovery of the outstanding and future loan portfolio. In the former case it is hoped that future portfolio expansion will not be saddled with further targeting costs. In the latter case it is important to evaluate the current arrears record of the ACB to determine if loan recovery will make an effective contribution to the lowering of future costs per J. dollar lent.

D. Loan Recovery Performance, Loan Decision Autonomy, and Savings Mobilization: Ingredients for Institutional Viability

Tables 8 and 9 summarize the loan recovery (i.e. delinquency) performance of the ACB accounts. It is natural to assume that if the P.C. Banks and the commercial banks are effectively repaying the ACB, then they are effectively collecting from their final borrower clients. In Table 8 data is presented on the time profile of arrears for the total portfolio from April 1983 through January 1984. The criterion used to determine arrears in this table is the most rigorous utilized in delinquency studies, i.e. the ratio of amount due (but unpaid) to the amount due for a specified time period. In this case we have first established the amount due during the previous quarter in column 1 (including installments on long term loans). We then subtracted out the amount actually repaid during the quarter (column 2).

Table 8

Time Profile of Arrears on Interest and Principal
in The Total Portfolio of The Agricultural Credit Bank
by The Extreme "Amount Due" Criterion (1/4/83 through 1/1/84)

Dates	Amount Due During Previous Quarter (1)	Amount Repaid During Previous Quarter (2)	Amount Due But Unpaid During Previous Quarter (3)	Arrears Rate Col. 3/Col. 1 (4)
1. Principal				
a) April 1st 1983	$ 18,148	$ 2,570	$ 15,578	86%
b) July 1st 1983	234,348	122,305	112,042	48
c) October 1st 1983	687,449	411,784	275,665	40
d) January 1st 1984	$1,032,172	$874,785	$157,387	15%
2. Interest				
a) April 1st 1983	$ 44,828	$ 945	$ 43,883	98%
b) July 1st 1983	127,046	63,174	63,872	50
c) October 1st 1983	219,023	110,783	108,239	49
d) January 1st 1984	$ 299,865	$219,846	$ 80,019	27%

SOURCE: Data derived from ACB files.

Table 9

Time Profile of Arrears on Interest
and Principal on the Agricultural Credit Bank's
Current Loan Portfolio with The Peoples Cooperative Banks
(11/30/83 through 1/31/84)

Aging Arrears Periods	Long Term Loans		Short Term Loans		Total	
	Interest Arrears	Principal Arrears	Interest Arrears	Principal Arrears	Interest Arrears	Principal Arrears
	(1)	(2)	(3)	(4)	(5)	(6)
1. As of Nov. 30th 1983						
a) 1-30 days	--	$11,000	--	$132,500	--	$143,500
b) 31-60 days	--	--	--	--	--	--
c) 61-90 days	$ 9,568	--	$ 3,635	71,580	$ 13,204	71,580
d) Over 90 days	--	--	--	--	--	--
2. As of Dec. 31st 1983						
a) 1-30 days	173,286	11,000	127,108	714,017	300,394	725,017
b) 31-60 days	--	--	--	500	--	500
c) 61-90 days	--	--	--	--	--	--
d) Over 90 days	--	--	--	12,153	--	12,153
3. As of January 31st 1984						
a) 1-30 days	--	$11,000	--	172,500	--	183,500
b) 31-60 days	$118,113	--	$ 62,534	433,564	$180,647	433,564
c) 61-90 days	--	--	--	--	--	--
d) Over 90 days	--	--	--	$ 3,257	--	$ 3,257

SOURCE: ACB files

The remainder (column 3) represents the amount due but unrepaid during the previous quarter. The arrears rate is the ratio of column 3 to column 1.

Before commenting on the results several comments are in order. This criterion, as mentioned above, is very rigorous in that all loans one day overdue are considered delinquent. Even commercial banks do not consider an account delinquent until it passes 30 days overdue. Clearly some of the commercial banks and some P.C. Banks repay their obligations to the ACB only during this first 30 day period and thus are technically delinquent. Clearly this is not a serious arrears status.

Nevertheless this "amounts due" ratio is useful in capturing the installment repayment record for long term loans which are frequently overlooked or improperly monitored in more relaxed arrears measures. For example, the "amount due" approach avoids the error of the more commonly used ratio of total arrears to total loans outstanding. This latter measure grossly understates the true arrears situation since the denominator in this ratio (i.e. total loans outstanding) includes many loans or parts of loans not yet due, especially long term loans. It was precisely the misuse of this latter measure that mislead the former Jamaica Development Bank authorities into thinking they didn't have a serious arrears problem in the mid-seventies. If they had used an "amounts due" measure they would have seen that as early as 1974 they had a persistent arrears rate of 80 percent, instead of the 4 to 8 percent that the latter measure

showed at that time. Injections of new long term loan funds with only a small "due" amount inflated the denominator of the total arrears/total loans outstanding ratio and obscured the growing arrears problem emerging on the due amounts.

With these comments in mind it is useful to look at the loan recovery performance of the ACB through the perspective of this admittedly more severe "amounts due" criteria in Table 8. Even though this may tend to overstate the seriousness of the arrears measure, the trend in the ratio is revealing and informative. Here we see that the ACB has done a commendable job in reducing this arrears ratio through time. By early 1984 the initially high ratios of arrears on principal (panel 1) and interest (panel 2) had declined consistently to 15 and 27 percent respectively. No doubt the high levels registered in early 1983 reflect the initial sorting out process associated with launching the portfolio and establishing loan recovery procedures within the institution. It is promising to see that these administrative guidelines, now in place, are becoming effective and generating more prompt loan recovery.

Table 9 presents the arrears record for the more risk prone and potentially more delinquent P.C. Bank portfolio. Columns 5 and 6 highlight the fact that initial arrears are quickly reduced so that no significant aging of arrears has yet occurred in this portfolio. For example, panel 1, column 6 shows that an initial arrears on principal of $143,500 (1-30 days) was reduced to only $500 in the next quarter (panel 2, line 6)

in the 31-60 days arrears category. By the same token, column 6 shows that the arrears of $71,580 as of November 30, 1983 in the 61-90 day category had been reduced as of January 31, 1984 to only $3,257. The constant $11,000 arrears on principal recorded on long term loans in column 2 reflects the fact that one P.C. Bank always repays its due installment on the 31st day each quarter, hence the arrears never ages.

In summary the ACB has demonstrated an excellent loan recovery performance during its first major year of loan operations. Tables 8 and 9 underscore the fact that initial arrears are only transitory and fortunately do not age or mature into persistent arrears, thereby jeopardizing the viability of the institution. This is a remarkable performance for a public sector agricultural credit bank in Jamaica, as our introductory remarks to this report testify. Furthermore the fact that this excellent loan recovery is also occurring within the portfolio of the 39 P.C. Banks under the auspices of the ACB speaks well for the tuteledge and technical assistance role of the ACB in transforming these rudimentary and previously delinquent-prone cooperative banks into viable rural financial institutions. In this regard the ACB has proven to be a far more effective intermediary with the P.C. Bank network than the Agricultural Credit Board.

Moreover, it should be emphasized that this impressive P.C. Bank performance has emerged within a more realistic and higher interest rate environment (raised from 6 to 12 percent)

in the midst of an economic recession in Jamaica. Small rural clients have not had any problem in repaying their loans to the P.C. Banks at a 12 percent interest rate (or at a 15 percent rate on loans the P.C. Bank management issues with their own share capital). Thus the alarm and concern in certain circles in Jamaica that interest rates should not have been raised from the time immemorial level of 6 percent since farmers could not repay loans at this rate is not based on fact. Small farmers can and do repay loans at realistic market rates of interest if the incentive is there to do so. This incentive grows out of a respect farmers have for a financial institution that takes its business seriously, carefully monitors its loan recovery performance to maintain solvency and offers the guarantee that more money will be available for future loans for customers that repay their debt obligations. In short farmers would have no incentive to repay their loans to a delinquency-ridden unviable institution since they could see this institution could not reward them with new loans in the face of their rapidly decapitalized portfolio.

Two final comments are pertinent here. First it is important that the P.C. Banks maintain autonomy or independence in their loan decision making. The ACB has been careful not to intrude upon the independent decision making process of the loan committees within the P.C. Banks. Top-down political intrusion into this process by the ACB, the Ministry of Agriculture, or any other entity would weaken the rigor these committees are currently

exercising in evaluating clients and following up with loan recovery efforts. This has been proven repeatedly in the Jamaican setting, the most recent manifestation being the notorious Crop Lien Program of 1977-78.

Loan decision autonomy guarantees much more effective loan evaluation and client selection screening processes at the local level where the clients are personally known by members of the loan committee. Conscientious and determined loan recovery efforts through local community "peer pressure" are also a part of this process that grows out of this scenario of autonomy in loan decision making. In short the officials in the P.C. Banks will feel "personally responsible" for their actions and will see to it that they create a well performing portfolio.

Recent efforts to contract loans overseas, such as the negotiations associated with the prospective Italian line of credit for the importation of selected agricultural machinery, can be counterproductive if they interfere with and damage this local-level loan decision making autonomy at the P.C. Bank level. It is to be hoped that officials in the Ministry of Agriculture do not repeat the mistakes they made with their earlier Crop Lien Program by ordering the financing of this imported machinery to "Ministry-selected" clientele and forcing the local P.C. Banks to then collect on these loans. Nothing could do more damage to the recent carefully nurtured loan recovery performance of these institutions than to force them into

servicing this unpromising patronage clientele of the Ministry. There is no reward or incentive in servicing someone else's portfolio. This portfolio may very well contain clients the local loan committees had previously rejected or with whom they had poor experiences. Once the autonomy of local loan decision making is breached, loan recovery will decline and institutional viability will be eroded with serious consequences not only for the local P.C. Banks but for the ACB as well.

In light of the close and effective working relationship the ACB has recently created with its P.C. Bank network, it is essential that no international negotiations occur involving the prospective use of this network for international-source funds without involving ACB officials directly as key participants in these negotiations. Given the important mandate the government has given to the ACB to restructure and reform agricultural finance in Jamaica, and, given the complex and difficult taks involved in carrying out this mandate, it is illogical and counterproductive to have officials, other than ACB officials, negotiate international loan agreements that directly affect the ACB and their on-lending retail institutional clientele. No Ministry of Agriculture or Finance official could be expected to understand the subtle implications that international agreements can have on loan targeting costs, interest rate margins, loan evaluation procedures, etc. all of which come back to affect the operating environment and institutional viability of the ACB.

A second and final comment of importance here centers on the need to emphasize savings mobilization efforts within the P.C. Bank network. Increased local mobilization of resources can create even greater loan autonomy with own-source funds. Local savings mobilization also creates the image that these institutions are truly "local" and not a mere retail appendage of a highly targeted and directed national or international credit delivery network. This will enhance loan recovery and reduce delinquent behavior since local borrowers are typically more conscientious about repaying loans from institutions associated with local money from local depositors. Finally, increased savings from local depositors will naturally force loan committees and local P.C. Bank managers to be more rigorous and disciplined in evaluating credit and ensuring loan recovery since they realize they will be held accountable to the local community of depositors and shareholders. In the end, rural leadership talent will be fostered as these small communities acquire greater autonomy and independence from political intrusion and patronage control as their rural financial institutions grow and mature on a base of locally mobilized resources.

The ACB appreciates the relationship between effective savings mobilization and institutional autonomy. During the last year they have begun promoting this process within their P.C. Bank network by requiring that borrowers use 5% of their loan gained through ACB loan lines to purchase shares within their local P.C. bank (up to a maximum share contribution of 1,500 J. dollars

per loan). Table 10 shows that over the year almost one million J. dollars have been capitalized in P.C. Bank shares as a result of this policy. Given the fact that the P.C. banks can loan out the money (without any targeted interference) at 15 percent and, given the fact that their loan recovery has been excellent in this past year, many of the P.C. Banks will be in a position to pay out promising dividends on their shares. This is the first time this has happened in recent memory in most of these institutions. This action should do much to enhance the image of these banks as viable institutions. At the same time, shareholders will take a greater interest in effective loan administration since their "stake" in the institutions would now be much larger than previously.

The final and most important step in this savings mobilization effort, however, should be the creation of savings accounts separate from share account activity. Currently P.C. Bank borrowers are depositing their undisbursed funds in nearby branches of commercial banks. Thus the P.C. Banks are foregoing their potential base of locally mobilized deposits by not offering savings account service to their loan customers. In the end commercial banks benefit from the increased liquidity generated by the cash flow of P.C. Bank loans.

At the same time the creation of savings account facilities broadens the range of services the P.C. Banks can offer to their customers, thereby improving the quality of its loans in the minds of its clients. Borrowers will be more concerned to honor and repay loans to institutions that offer them a broader

Table 10

Paid Up Share Capital in the 39 Peoples Cooperative Banks Under the New Loan Program Administered Through the Agricultural Credit Bank from January 1983 through February 1984

January	$ 44,085.59
February	12,454.73
March	31,316.07
April	52,303.54
May	85,189.10
June	75,380.23
July	36,971.40
August	59,936.41
September	147,030.30
October	95,753.66
November	85,630.91
December	73,047.17
January (1984)	58,957.05
February	104,587.62
TOTAL	$962,643.48

SOURCE: ACB files.

range of services, including the high probability of new loans for customers in good standing. Savings account data also generate valuable information to the lenders on the economic resources and general credit-worthiness of current and prospective borrowers. These "scope" economies that allow institutions the prospect of economizing on the cost of generating valuable information for loan evaluation purposes can be important in creating sound financial institutions. For this to happen, it is helpful that this savings activity take place within the same institution as the loan activity. Since depositors or savers in any financial market are far more numerous than borrowers, the opening of savings accounts will allow the P.C. Banks to service an widerbased (and a lower income) clientele than that serviced by their loan activity alone. In the end, a good savings account record can act as the catalyst to successfully negotiate a loan from the same institution.

While ACB officials generally recognize the importance of encouraging savings mobilization efforts beyond the current share account dimension, they feel a bit more time is necessary to insure that the P.C. Banks can effectively manage the liquidity associated with savings account activity. These institutions will have to prove to their communities that they are not delinquent-prone institutions any longer, that they are managing a growing loan portfolio responsibly and are therefore in a position to offer and attract savings deposits. A useful compromise here would be to choose several well-run P.C. Banks as a laboratory to act as a pilot project within which savings deposits

would be offered at attractive rates of interest. The loan activity serviced by these funds would, of course, not be subject to any of the targeted criteria of external funds. Therefore, the loan committees could establish their own interest rates on loans and deposit any unloaned balances in interest bearing accounts through the auspices of the ACB.

As this experience grows and more P.C. Banks choose to offer the service, the ACB could offer its services as a manager of the system's accumulated surplus deposits that do not immediately find a loan outlet in the banks in question. In doing so, however, the ACB must pay an attractive rate of interest to the banks for the opportunity cost of using these funds and insure that the P.C. banks can access these funds for local on-lending in the future with minimal transaction costs. Local savings deposit mobilization efforts of this nature could rapidly expand the domestic resource base of well-managed P.C. Banks with an excellent loan recovery record. At the same time, the growth and transformation of these rudimentary cooperative banks into more full-service instituions will allow the ACB to transfer some of its current technical assistant infrastructure into these institutions and alter its operating role to that of a true wholesaler and centralized funds manager for the system as a whole.

E. Interest Rates, Technical Assistance Costs, Foreign Exchange Risks and Project Analysis: An Illustrative Example - The ACB USAID Project

The ACB necessarily finds itself involved in detailed project appraisals with international donor funding. This, in turn, implies

that many elements may affect the true cost incurred by the ACB in accepting these projects. Among these elements are the degree of equity vs. loan funding, requirements on debt equity ratios for on-lending activity, the degree to which technical assistance costs are financed by equity or loans that must be repaid, the foreign exchange risk, end-use or targeting and reporting requirements and interest rate ceilings. Obviously the greater the mix of these diverse elements, the more difficult and complex is the task to evaluate their collective impact on the effective rate of interest paid by the ACB for the use of these project monies.

The recent loan agreement arrived at between the ACB and USAID illustrates many of these issues. This project is designed to allow the ACB to wholesale loans out to commercial banks at 12 percent who in turn re-lend the funds to agro-export enterprises at 15 percent. The banks are expected to make long term investment loans only to small to medium size firms largely engaged in processing "local" agricultural raw materials for export. This creates targeting and reporting costs in defining firm size and the percent of raw material supply from local suppliers vs. imports. Also the long term nature of the loan requires project analysis to estimate long run rates of return. Thus an expensive technical assistance division has been set up within the ACB (i.e. the Agricultural Development Unit) to assist in the project evaluation of prospective clients initially picked by the banks.

We have found it useful to use a present value measure to evaluate the effective rate of interest incurred by the ACB in accepting the terms of the project. Among other things our exercise shows that the ACB officials were correct in accepting the project since the effective rate of interest turned out to be acceptable though more than twice as high as the nominal rate explicitly set forth in the project.

1. The effective rate of interest charged the ACB

The nominal interest rate charged the ACB by USAID on the $8.5 million project loan is 2% with a 10 year moratorium on principal, then a 15 year period of repayment of both interest and principal. An accurate calculation of the effective rate of interest would take into account training and consulting costs incurred by the ACB not recovered from its loans. Technical assistance costs reduce the net amount lent to the ACB, and hence raise the effective rate of interest.

The technical assistance component designed for the project was not granted as a part of the capitalization equity for the ACB (i.e. the ideal method to incorporate these costs in LDC institutions) but rather as a part of the loan funds which were to be repaid in the future. These were initially established at 2.3 million (plus $900,000 of pre-investment consulting)--a rather large part of the total project not able to be loaned out to earn interest income. However, through negotiations the ACB was able to lower this to $1,132m with the balance available for loans. Thus technical costs of $1,132m plus $900m of

pre-investment consultancy effectively reduce the net amount available to ACB for re-lending by approximately $2,000m. Consequently, it is assumed here that a net amount of $6,500m is lent to the ACB for re-lending to commercial banks. It is assumed that the ACB repays USAID 170m for 10 years, then 661.5m for 15 years thus repaying 8,500m over 25 years at 2% with a 10 year grace period.

By setting the present value of the stream of payments of 170m for 10 years and 661.5m for 15 years equal to 6,500m, the effective rate of interest on the USAID loan comes to 4.75%. Consequently, technical costs raise the effective rate of interest charged the ACB. Nevertheless, the effective rate is relatively low in real terms, thanks in large part to the earlier reduction of the technical assistance component by 1,168m which we view as an appropriate step taken jointly by USAID and the ACB.

2. Present Value of the USAID Loan

The ACB can re-lend approximately 6,500m from the USAID loan at 12% to Commercial Banks. We assume the loan is renewed over 25 years yielding 828.75m in receipts to the ACB each year. During the first 10 year period, the ACB pays USAID interest of 170m, yielding net flow of receipts to the ACB of 658.75m for 10 years, then with payments by the ACB of 661.5 for 15 years to USAID, there is a net flow of 167.25m to the ACB for 15 years. For a detailed explanation of the calculations behind these estimates see the Appendix to this report.

The present value of this net stream of payments to the ACB is $3,311m when discounted at the opportunity cost of ACB Funds (17.5%, the certificate of deposit rate.) Deducting initial technical assistance costs of 2,000m yields a net present value gain to the ACB of $1,311. This sum contributes to the viability of the ACB as a financial institution. The calculation serves to underline the appropriateness of the negotiations that led to the $1,168 reduction in the technical cost component of the loan. Without this reduction, the USAID loan would not have contributed to the viability of the ACB. Further reductions in the technical cost component would be appropriate in light of ACB's role as a wholesale financial institution in this loan.

3. Interest rates and inflation

The ACB is to play a wholesale role in re-lending the USAID funds to the Commercial Banks at 12%, and the Commercial Banks are to make Agro-business loans at 15%, all rates in terms of J$. In light of the GOJ's policy of negative real rates of interest and USAID's intent to promote Agro-business, a 15% rate on Agro-business loans appears appropriate. A comparable "free" rate is 17.5% on certificates of deposit. Consequently, the expected real rate of interest charged Agro-borrowers is negative if the expected rate of inflation exceeds 15%. This is quite likely since for 1983 the inflation rate was 16.7% (Bank of Jamaica) and preliminary

January, 1984 figures indicate an acceleration in inflation. Further, part of the official exchange rate depreciation of the J$ via the re-activated exchange auction procedure on March 20th, 1984 will get passed on to domestic prices. The overvalued J$ temporarily suppresses inflation among some classes of traded goods, but increased transactions on the street market serve to adjust Jamaican prices towards equilibrium levels; even in the absence of official depreciation. The latter will probably occur as part of the Stand-by Agreement between the IMF and the GOJ, and its impact will be a sharp but temporary rise in the inflation rate. Consequently, the 15% final loan rate is likely to represent a -5 to -6% negative real rate in the short-run. This is consistent with GOJ's implicit ceilings on nominal rates, and does effectively promote agro-business. The medium term prospect for inflation is uncertain, largely depending upon whether the IMF program of reducing the fiscal deficit from 17 to 9 percent of GDP and restraining growth of domestic credit to 12% is implemented in a vigorous fashion. Parenthetically the 12% credit growth ceiling for 15 months from January 1, 1984 has already been broken.

4. Exchange rate risk

Currently, the J$ is substantially overvalued at 3.25 J$ per $U.S. while the street rate is around 4$ per U.S.$. Consequently any Jamaican borrower whose interest and liabilities are in terms of U.S. dollars is subject to substantial exchange rate risk. In particular, should the official rate devalue

say 23% to move toward an equilibrium rate under IMF encouragement, a borrower whose payments are dollar denominated is likely to be forced to default. Sharp depreciations in Chile and Mexico have illustrated this phenomenon. To the extent that domestic prices of goods and real assets such as farms in Jamaica rise to offset the deduction, exchange rate risk is lessened. However, in the current context, prices would not rise in proportion to the depreciation of the J$ since the depreciation is not taking place from an equilibrium position but rather from a situation of a largely overvalued J$. Further, even if all prices in Jamaica were to rise in the same proportion, nominal assets denominated in J$ such as currency and GOJ bonds would fall in real value. Indeed, since the ultimate cause of exchange rate depreciation in the case of Jamaica has been Bank of Jamaica finance of fiscal deficits creating domestic credit growth and an accompanying loss of reserves, it is appropriate for the Bank of Jamaica to assume the exchange rate risk on the USAID loan to the ACB. In essence, devaluation is created by an increase in domestic credit while the exchange rate loss offsets the nominal increase in domestic credit. For the Bank of Jamaica, a paper loss offsets a paper gain. It is appropriate that the financial institution responsible for exchange rate risk essentially reimburse borrowers who are subjected to this risk. Consequently, it is appropriate that the Bank of Jamaica assume this risk with the USAID loan to the ACB, as is the case. A forward market in U.S. dollars

could in principle allow private borrowers to hedge against exchange rate risk, however this is not currently possible in Jamaica.

5. Conclusions

1. The USAID loan to ACB is at an effective interest rate of 4.75% and has a net present value to the ACB of approximately $1,311m.
2. The reduction of the technical assistance component by $1,168m. was appropriate, otherwise, the net present value of the USAID loan would have been only 143,000, not an amount sufficient to contribute to the ACB's viability as a financial institution.
3. It is appropriate that the Bank of Jamaica assume the exchange rate risk entailed in the USAID loan since exchange rate losses are only paper losses to the Bank of Jamaica. Alternatively, a large J$ devaluation would entail substantial losses to agro-business in Jamaica if final loans were denominated in U.S. dollars since agricultural prices in J$ are controlled. It is sufficient that the nominal interest rate in J$ reflect expected inflation rates plus a real rate of return minus a desired subsidy to agro-business.
4. Inflation appears to be accelerating in the short-term and will continue to accelerate with exchange rate depreciation. Final borrowers of the USAID loan at 15% in J$ will thus experience negative real rates of interest in the immediate future. However, if the IMF program is successful in the

medium term the 15% nominal rate will represent a positive real rate of interest.

5. A slightly negative real rate of interest to agro-business would accomplish the objective of stimulating this sector. Further, a nominal rate of 15% is just slightly below other loans currently made to agro-business in Jamaica.

6. It is recommended that the ACB should develop a computer program to rapidly analyze the present value of each international loan prospect in order to rank their desirability. Further, this simple technology would provide a framework for rejecting international loan offers that put in jeopardy the ACB's long-run viability as a financial institution. Understandably, the GOJ has an "accept foreign exchange at any price" attitude in the current economic context. The ACB should be prepared to resist this.

III. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Summary and Conclusions

The decade of the 1970s saw the rise and fall of numerous public sector programs and institutions designed to increase the flow of agricultural credit to the agricultural sector in Jamaica. Several international donor agencies along with the Jamaican government were responsible for the initial design and performance of these initiatives in expanding rural finance through such institutions as the Jamaican Development Bank (under World Bank auspices), the Self-Supporting Farmer Development Program (under the auspices of the Interamerican Development Bank),

the Crop Lien Program (under the auspices of the Ministry of Agriculture) and the Peoples Cooperative Bank Network (under the auspices of the Agricultural Credit Board).

Without exception these programs left a legacy of low loan recovery, high delinquency, no savings mobilization, high lending costs with unrealistically low rates of interest, inequitable loan allocations, decapitalized portfolios and institutional defaults. All these programs are terminated or currently being phased out of loan activity. In this institutional setting the predominant criteria for success was rapidity of loan disbursement to targeted clientele of agricultural borrowers. The institutional viability of the programs managing or channeling these funds was never considered an important element in program design or program performance. In the end a large amount of international and domestic resources were involved in ad-hoc income transfers with high transaction costs to selected clientele with unexpected and largely disappointing impacts on production and welfare in the agricultural sector of Jamaica.

The Agricultural Credit Bank was created in the early 1980s to fill the void left by the demise of these ill conceived programs. It was originally designed to be an institution wholesaling agricultural credit from external and government sources to selected retail institutions such as commercial banks and a subset of 39 Peoples Cooperative banks. It was not to engage in any direct retail lending to final borrowers.

On the whole the ACB has conformed to these objectives, having created a well balanced portfolio by risks, costs, and term structure, however, several elements of confusion are evident in the stated goals and objectives of the bank set forth in its original statutes. Two distinctly different approaches are apparent. On the one hand statements are made that the ACB shall "carry on in Jamaica the business of an agricultural credit bank in all its branches and to transact and do all matters and things incidental thereto...", or the ACB shall be "making loans to any persons engaged in agriculture.. on the other hand, frequent references are made to the effect that the bank will not be engaged in any direct loan retailing to final borrowers.

At the same time there is language to the effect that the ACB should tailor its lending activities to conform to a national agricultural development plan, improve the welfare and meet the credit needs of small farmers. However reference is also made to the important objective of maintaining institutional viability, recognizing the fungibility of credit (i.e. the wide possibilities for credit diversion or substitutability from diverse sources) and therefore the fruitlessness of attempting to channel or direct this credit in client or enterprise-specific directions.

One approach emphasizes planning goals with its focus on meeting specified clientele targets, the other emphasizes costs, returns, and long run viability. The former highlights

the agricultural sector and the farmer, the latter underscores the importance of the lending institutions. It is important to keep in mind that emphasizing the planning or "credit needs" approach frequently leads to unviable institutions and programs as these goals are promoted regardless of risks, costs and returns. The rural financial market legacy of the 1970s in Jamaica clearly underlines that painful truth.

In light of the confusion surrounding its role in the rural financial market setting of Jamaica, the ACB has compromised by adapting some non-wholesaling responsibilities (i.e. technical assitance to the P.C. Bank network and project analysis expertise for the commercial banks), but maintaining its non-retail status in that it does not deal directly with the final borrower. In our judgment this is correct and we feel it is counterproductive to push the ACB any further in the direction of retail lending. By the same token we feel that the demands made upon the ACB to report on the characteristics or socio-economic profile of final borrowers served by the P.C. Bank network or the commercial banks is a costly nuisance that serves no useful purpose. On the contrary such demands force the ACB to pass on transactions costs to their retailing partners to document and prepare these data which detract from more useful loan administration responsibilities. It also implicitly forces the ACB into loan accounting and reporting activity within their retail associates that compromises the ACB's wholesale status and weakens the loan and managerial autonomy of the retail institutions.

The essential reporting activity for which the ACB should be held accountable is the performance of their own portfolio with these institutions as set forth and analyzed within this report. This should cover the size, allocation and term structure of their portfolio along with their income statement, documentation of operating costs and loan recovery performance. Conceivably additional reporting activity on the operational costs per J. dollar lent and loan recovery performance within the P.C. Bank network could be undertaken since these data are useful for evaluating the growing viability and maturity of these banks and potential problem areas. In short the data are useful for decisionmaking purposes on institutional viability for both the P.C. Banks and the ACB. The current MIS information survey being implemented by the ACB for the P.C. Banks is precisely directed towards this end and should be encouraged.

The organizational structure, systems and procedures of the ACB appear sound and well designed to service the two distinct clientele in their institutional portfolio. The P.C. Bank network requires a substantial field staff with important managerial and technical assistance responsibilities to train and prepare the 39 P.C. Banks to manage their new portfolios satisfactorily. The low delinquency and refreshingly high loan recovery record within these hitherto delinquency-prone cooperative banks during 1983 speaks well for the organizational framework of the ACB and the sound lending policies they are inculcating within these institutions. Of particular importance

here is the sensitivity that the ACB reflects in respecting the loan decisionmaking autonomy of the P.C. Banks. This has instilled confidence and a sense of responsibility in the loan committees and local management thereby promoting effective loan recovery in these institutions.

At the same time the ACB has directly promoted substantially increased capitalization of the P.C. Bank network placing them in a position to declare a meaningful dividend for their shareholders for the first time in recent memory. It is to be hoped that in the future this locally mobilized resource base can expand from share capital to include separate savings facilities. This will allow these institutions to compete effectively with branches of commercial banks for deposits drawn from the increased liquidity and income of their own borrowers as well as other members in the community. An increase in locally mobilized resources will allow the P.C. Banks to earn a higher rate of return since they can loan out these resources without any high cost targeting requirements or interest rate ceilings. This increased economic independence will free them from the constrained dependency on external funds and build up a firm base for local rural leadership and managerial talent to grow and mature.

In short the ACB has done a commendable job in becoming the first public sector institution that can achieve viability in Jamaica. It's excellent, indeed unprecedented, loan recovery record, particularly in formerly delinquent-prone rudimentary Peoples Cooperative Banks, deserves recognition. The ACB has

carried out an impressive task of expanding the portfolio of agricultural credit through commercial banks, and more importantly, the subset of Peoples Cooperative Banks under their purview. This expansion of credit has clearly improved the liquidity and economic opportunities for agricultural borrowers in Jamaica in the midst of the world recession.

Moreover the excellent loan recovery and low delinquency associated with this expansion, especially within the P.C. Bank clientele, has occurred in part because of higher interest rates, even in the face of worsening economic conditions in Jamaica. This speaks well for the technical assistance and backstopping support of ACB personnel in the P.C. Bank network. Lending costs have been high, however, it is expected that the continued expansion of the portfolio, without political intrusion from other circles, will lower the costs per J. dollar lent and establish for the first time in Jamaica a viable self-sustaining public sector credit program.

It is important to recognize the essential role higher interest rates have played in supporting the institutional viability of both the ACB and the subset of P.C. banks retailing the ACB loan monies. Contrary to conventional wisdom, raising the interest rates from 6 to 12 percent (a 100 percent increase) did not compromise the marketing and effective recovery of loans through the P.C. banks even in the face of an economic recession. The ACB Board should be sensitized to the importance of realistic and flexible interest rates in attaining institutional

viability and not undercut or compromise the ACB senior management's interest in continuing to rely upon this policy. The ACB management should be free to raise interest rates even further in the future if inflation should substantially increase. Otherwise serious negative real rates of interest will emerge and institutional viability threatened.

Despite this commendable performance, problem areas exist. Non-interest, lending (i.e. operational) costs averaged 12 percent per J. dollar lent through 1983 for the entire portfolio and almost 18 percent in the P.C. bank portfolio under the ACB. These costs are currently above the interest rate spreads in many of these programs, forcing the ACB to rely on equity support. External donor funds carry high targeting costs and require an expensive infrastructure of supervisory and technical assistance personnel and administratively costly documentation and reporting requirements. On the whole the ACB has created an effective organizational framework to carry out these responsibilities, however, it was necessary to set up this infrastructure in advance of much of the future portfolio it is expected to service. Thus in the first years of effective loan activity the operational costs per J. dollar lent are necessarily high. In time these costs will decline as more of the portfolio comes on line. It is hoped this expected decline in lending costs per J. dollar lent will not

be compromised by further cost increasing targeting, technical assistance and documentation requirements by international donors. Also any deterioration in the quality of the loan portfolio causing a decline in loan recovery could have negative repercussions on costs, and, in time, jeopardize institutional viability.

In light of these potential risks it is strongly advised that no new international negotiations for external source loans to agricultural borrowers occur without direct participation by senior ACB officials. Negotiators from other ministries such as Agriculture or Finance would not be in a position to appreciate the implications of these neogtiations for lending costs and loan recovery risks within the ACB.

By the same token institutional autonomy should be respected, particularly at the retail level in such settings as the P.C. banks. Good loan recovery (and low delinquency) is associated with careful loan evaluation procedures and, of equal importance, a sense of responsibility for the portfolio of clients chosen. Autonomy or independence in loan decision-making at the local level is essential to build that confidence and sense of responsibility to follow up with rigorous monitoring and conscientious loan recovery efforts built on local peer pressure tactics. Top-down bureaucratic interference with this process through the imposition of ministry or ACB selected clients implicitly disparages these local efforts to build the confidence and capability to manage a local loan portfolio. In some cases ministry selected clients may even have been

rejected for previous loans by local loan committees. Forcing loans onto these committees from above and then expecting them to follow up with loan recovery efforts for a portfolio they did not choose voluntarily is both illogical and counter-productive. One would merely have a repeat of the Crop Lien Program fiasco.

Fortunately the ACB recognizes and respects the benefits associated with independent loan decisionmaking at the local level and has carefully nurtured this process in their P.C. banks. Unfortunately, there have been sporadic attempts in other circles to interfere implicitly with the independence of local loan committees in the P.C. bank network by attempting to pre-select farmer clients for negotiated lines of credit and then handing the difficult and time consuming job of loan recovery over to the P.C. banks. This has apparently occurred in the Ministry of Agriculture's recent negotiations associated with the Italian line of credit for the importation and financing of agricultural machinery and tractors to Ministry selected clients. This misguided effort should be resisted and local loan decisionmaking kept intact.

B. Recommendations

1. The excellent performance of the ACB detailed in our assessment is, in part due, to the fact that the senior management is comprised of professionals with a banking background. Given the fact that institutional viability is an important objective set forth for the ACB (a goal

with which we strongly agree), it is important that the senior management largely be comprised of staff with a banking background. Civil servants transferred into senior management positions from a non-banking background do not have a comparative advantage in dealing with banking questions adequately, as the evidence of the 1970s substantiates in the failed public sector credit programs in Jamaica.

2. The wholesaling function of the ACB has been co - ceivably misunderstood due to ambiguities in its founding statutes. The current operating style of the ACB strikes us as a sensible compromise. Namely, the ACB can undertake the responsibility of initially absorbing some non-wholesale infrastructure costs of technical assistance, especially to service the subset of Peoples Cooperative Banks under their purview; however, the ACB should not be held responsible for the final loan decisions of the P.C. bank loan committees. This is properly the business of the retail bank itself. Nor should the ACB be expected to make any report on the final borrowers of funds retailed through the P.C. bank network.

3. As made clear in recommendation number 2 above, the ACB is correct in not interfering with the independent loan decisionmaking process within its

retail outlets. It is important that the ACB Board support the ACB senior management in this stance and help it resist attempts by other institutions and circles which may try to force the ACB to adopt retail lending or reporting activities or interfere with the loan decisionmaking process within the retail institutions with whom the ACB is currently operating.

4. It is essential that senior ACB management be actively involved in all negotiations for lines of credit that will pass through the ACB institutional network. Negotiators from other ministries or entities acting allegedly on behalf of the ACB do not have a comparative advantage in recognizing the subtle implications of how given loan agreements could affect the operating procedures, lending costs and portfolio risks in the ACB setting.

5. It is strongly advised that a high level professional from the Bank of Jamaica be included on the Board of the ACB. Given the detailed and complex negotiations associated with international donor programs, and the expertise and experience that Bank of Jamaica officials have in international financial negotiations and IMF and World Bank agreements among others, their counsel and advice could add valuable guidance to the Board and the ACB.

6. It is also recommended that the Chairman of the Board of the Agricultural Credit Bank be someone who does not have any responsibilities within the ACB or within the Agricultural Credit Board. Otherwise an implicit conflict of interest could occur in that individuals from either of these institutions have a vested interest in their current institutional commitments that could compromise the objectivity needed for this leadership position.

7. It is recommended that the ACB not expand too rapidly to incorporate new P.C. banks to the subset of 39 banks currently comprising their portfolio. These banks require an expensive technical assistance infrastructure generating high operational (i.e. lending) costs for the ACB as amply documented in this report. Prematurely adding more cost-increasing responsibilities to this system now could overwhelm the current excellent efforts to attain institutional viability and push the ABC into a deteriorating portfolio of loans.

8. Given the high lending costs recorded in this study, international donors should be made sensitive to the cost-increasing nature of targeting requirements in their programs. Efforts should be made to minimize these expensive supervisory, documentation and reporting requirements and emphasize instead, documentation and reporting of institutional viability

rather than borrower-level characteristics.

9. Insofar as possible, equity should be used to cover technical assistance costs rather than loan funds. If IMF stabilization agreements make it impossible for the government of Jamaica to honor equity contributions to the ACB designed in current international donor agreements, then renegotiations are called for with international donors. These negotiations should try to offset the unavailability of equity contributions with reduced targeting and technical assistance requirements (as stated in number 8 above), wider loan margins and increased debt equity ratios.

10. Interest penalties on undisbursed funds should be removed. This misguided policy rewards rapid loan disbursement at the expense of careful loan evaluation and documentation. Institutional viability rather than rapid disbursement should become the major criteria of evaluation.

11. Loan guarantees to reduce risk inherent in servicing selected clientele in the ADU or other programs should be minimized and resorted to only on a limited case by case basis. Over zealous use of guarantees weakens the rigor of loan evaluation and loan recovery efforts in participating institutions thereby jeopardizing institutional viability.

12. The ACB should develop a computer program to rapidly analyze the present value of each international loan prospect in order to rank their desirability. This can provide a simple but effective framework (see Appendix to this report) to reject international loan offers that put in jeopardy the ACB's long run viability as a financial institution. At the same time ACB management may want to consider adopting a loan recovery measure similar to the "amounts due" criterion (discussed in this report) for internal discussion and monitoring purposes.

13. It is correct that the foreign exchange risk in all international (dollar loan) agreements with the ACB be assumed by the Bank of Jamaica. Section II (E.4) sets out the justification for this position.

14. Finally, it is important that international donors, Jamaican government officials and board members of the Agricultural Credit Bank recognize and support the ACB management in implementing a realistic and flexible interest rate policy for final borrowers in the ACB portfolio. It has been amply demonstrated in this report that <u>the higher interest rates</u> recently instituted within the P.C. bank portfolio of the Agricultural Credit Bank <u>did not constitute a problem</u> for small farmer borrowers even in the face of reduced economic activity in Jamaica.

Excellent loan recovery here is a testament to the feasibility of a realistic interest rate policy that adjusts to the inroads of inflation. This played a crucial role in contributing to the institutional viability of the restructured P.C. bank network within the ACB and to the viability of the ACB itself. The senior management of the ACB should be given the freedom to continue to adjust these rates to changes in inflation and increases in costs not covered by equity.

APPENDIX

Present Value Calculations of USAID Loan

The ACB borrows $8,500m from USAID at 2% repaying 170m per year for 10 years then 661.5m per year for the remaining 15 years. In the first year, the ACB also incurs extra technical costs of $2,000m, and lends $6,500m (8,500m - 2,000m technical assistance) to the Commercial Banks at 12% for 25 years yielding a stream of $828.75m per year. (Since the exchange rate risk is borne by the Bank of Jamaica, all figures are expressed in U.S. dollars).

The net present value of the USAID loan is calculated by discounting the net stream of payments to the ACB $658.75m for 10 years then $167.25m for 15 years at a market interest rate, the certificate of deposit rate of 17.5% is used, then deducting initial technical costs from the discounted value of the stream, or:

$$\text{Net Present Value} = \sum_{i=1}^{10} \frac{658.75}{(1.175)^i} + \sum_{i=11}^{25} \frac{167.25}{(1.175)^i} - 2{,}000 = \$1{,}311$$

Effective interest rate calculations of USAID loan

With technical costs of $2,000m, the ACB effectively borrows only $6,500m paying $170m per year to USAID for 10 years the $661.52 for another 15 years. Finding the rate of interest which makes the present value of this stream equal to 6,500m gives the internal rate of return, or:

$$6{,}500 = \sum_{i=1}^{10} \frac{170}{(1+r)^i} + \sum_{i=11}^{25} \frac{661.52}{(1+r)^i}$$

which gives r = 4.75%.