

THE AGRICULTURAL CREDIT MARKET IN  
TRINIDAD AND TOBAGO

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I INTRODUCTION

Researchers, in our view, have placed little emphasis on agricultural finance in Trinidad and Tobago. This might be explained by (i) data problems, which are highlighted by the fact that even crude data pertaining to various aspects of the agricultural sector are unavailable and (ii) the possibility that the finance of agriculture may not be considered a major issue.

If the second explanation is correct and the financing of agriculture is taken for granted, then serious financial problems are likely to arise in the coming years as a result of (i) the pending economic slowdown and a possible fall in deposit growth in the banking system, thereby constraining growth in bank loans, and (ii) a reduction in government advances to the Agricultural Development Bank (A.D.B.), which lends to farmers at subsidised rates. Possible financial problems are likely to be related to the quantum of financial resources made available to the sector against that which is demanded. Other problems relate to changes in the term structure and interest rate charges on loans and the reaction of the agricultural sector to such charges.

To raise these issues is not to suggest that the financing of agriculture is the critical problem which faces the sector. Certainly, it is not the only one, for issues such as land reform, a guaranteed labour supply and the sector's role in overall economic development do need urgent attention.

Interviews conducted indicate that borrowing from formal financial institutions is an important form of financing for the agricultural sector, perhaps the main form. But this is not the only means, for farmers tap informal sources such as relatives and also draw on whatever personal savings are available. Indeed, representatives of the small foodcrop farmers, unlike those of the large estate owners, claim that own savings account for more than half of their total financial investment in agriculture.

Apart from the significance of formal financial institutions in the agricultural credit market, it is only with respect to these institutions that some reliable data are available. It must be emphasized that through dialogue and co-operation among researchers, loan and other institutions and the farmers and other users of agricultural credit themselves, that the data base can be built.

This paper attempts to describe, analyze and evaluate the market for agricultural credit in Trinidad and Tobago. In Section II the supply side of the market is examined. The institutions involved and their role in financing the sector is explored. This section identifies and discusses the pattern of distribution of agriculture credit over the past eight years and the constraints which shape the institutions' portfolios. Section III focuses on the demand side of the market. Despite the lack of data, it attempts to discuss the farmers' relationship with the loan institutions, highlighting the nature of their credit needs. Section IV of the paper attempts to draw together the previous two sections in a discussion and evaluation of the findings. Section V concludes the paper with some pertinent comments.

The agricultural sector is usually viewed as that sector which is concerned with the production and distribution of primary agricultural commodities including foodcrops, non-food crops and livestock. This view does not incorporate activities such as fertilizer production or the processing stages of the above commodities. These latter activities might be considered an extension of the agricultural sector more broadly defined to include primary or non-processing agricultural production as well as processing stages. The paper will deal with the financing of both aspects.

## II. THE SUPPLY OF CREDIT TO THE AGRICULTURAL SECTOR

### A. (1) The Commercial Banks

The commercial banks have been and still are the major financial intermediaries in this economy. Yet, out of a total of eight banks, two large ones account for the greater part of total agricultural loan balances. At the end of 1982, these two banks accounted for approximately \$155 million or 75 per cent of total outstanding loans of \$206.8 million. In 1979 however, these same two banks accounted for 42 per cent of total loan balances. This trend may be a reflection of an inability or unwillingness on the part of the smaller banks to engage in agricultural lending coupled with a reversed position with respect to the larger banks.

In the past, commercial banks have not extended more than about 2-4 per cent (depending on how broadly one defines the agricultural sector) of their total loan portfolio to the agricultural sector. The transfer of majority ownership and control of these intermediaries from foreigners to nationals has not changed this particular pattern of loan distribution. Such a pattern of distribution of the loan portfolio might be explained by :-

(i) the fact that commercial banks have historically been associated with the profitable distributive trades sector and therefore have not developed the expertise or the interest in agricultural lending;

(ii) the agricultural sector itself, as a whole, has not been able over the years, to develop the kind of resilience such as a firm asset base for instance, that would significantly lift its overall standard of credit-worthiness.

The standard of creditworthiness applied by commercial banks has been a source of much comment and criticism from time to time. The basic argument is that banks in developing countries which are either branches of metropolitan banks or even those which have been localised, maintain standards of loan appraisal which are more in line with the economic and social characteristics of metropolitan countries. While no bank can be expected to make uneconomic loans, in the case of Trinidad and Tobago the appointment of a specialised agricultural credit officer for instance may assist in ensuring a profitable agricultural credit portfolio. Only one bank has an officer so designated. Misinformation and general unfamiliarity with the agricultural sector appear to be serious drawbacks to increased agricultural lending on the part of the banks.

While loans to the entire agricultural sector, relative to that for other sectors, represent a small portion of commercial banks' total loan portfolio, it is arguable that the absolute amount is sizable. Indeed, commercial banks' loans outstanding to the agricultural sector increased from around \$46.0 million in 1973 to approximately \$251.0 million in 1980. This figure declined to \$196 million in 1982 (Table 1). Even in real terms, the increase between 1973 and 1980 is significant. Real loan balances more than doubled over the period to about \$95 million at the end of 1980.

Outstanding loans are unevenly distributed among the various sub-sectors. Over the last few years, between 30 and 50 per cent of total outstanding loans has been extended to the category Food and Non-Alcoholic Beverage, including Food Processing. At the end of 1982, this sector had a loans figure of \$93 million or 47.4% of the total agricultural loan portfolio. The sector receiving the second largest share of total loans over the last three years is Sugar and Molasses including Sugar Estates, whose share at the end of 1982 was 17.7 per cent. The Poultry industry has received an average of 14.2 per cent of total agricultural loans over the last four years, with its 1982 allocation amounting to \$26 million, making this industry the third most significant recipient of agricultural loans. Loans extended to the Cocoa, Coffee, Citrus and Coconut industries varied between \$4.3 million and \$6.3 million over the last four years which represents a relatively minor portion of total outstanding loans (Table 1).

TABLE 1  
COMMERCIAL BANKS' LOANS OUTSTANDING TO THE AGRICULTURAL SECTOR  
(\$M)

PURPOSE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Sugar Cane Planting	.3 (.7)	1.2 (2.7)	1.8 (4.1)	3.5 (6.6)	2.5 (2.2)	15.5 (22.1)	6.4 (5.0)	26.5 (20.5)	2.7 (1.3)	4.0 (2.0)
Sugar & Molasses including Sugar Estates	14.0 (30.5)	10.6 (23.6)	3.4 (7.7)	8.2 (15.4)	41.5 (36.2)	49.0 (35.1)	9.6 (7.4)	60.3 (23.9)	49.9 (23.9)	45.4 (17.7)
Cocoa, Coffee, Citrus, Coconuts	3.3 (7.2)	4.9 (10.9)	6.1 (13.9)	2.8 (5.3)	5.0 (4.4)	7.1 (5.1)	4.8 (3.7)	6.4 (2.5)	6.0 (2.3)	6.3 (3.2)
Total Export Agriculture	17.6 (38.3)	16.7 (37.2)	11.3 (25.7)	14.5 (27.3)	49.0 (42.8)	71.6 (51.4)	20.8 (16.4)	93.2 (35.9)	58.6 (25.0)	55.9 (22.9)
Poultry	2.1 (4.6)	3.6 (8.0)	4.3 (9.5)	5.4 (10.2)	8.2 (7.0)	11.6 (8.3)	15.9 (12.3)	34.6 (13.7)	36.6 (17.5)	26.0 (12.3)
Livestock Raising and Breeding	1.7 (3.7)	2.0 (4.4)	4.8 (10.9)	3.5 (6.6)	3.3 (2.8)	4.9 (3.5)	4.7 (3.6)	6.5 (2.6)	5.8 (2.3)	6.6 (3.4)
Fishing	.5 (1.1)	.6 (1.3)	1.1 (2.5)	1.9 (3.6)	3.7 (3.2)	3.2 (2.3)	3.0 (2.3)	6.6 (2.6)	18.7 (9.0)	11.2 (5.7)
Food & Non-Alcoholic Beverage including Food Processing	15.1 (32.9)	15.1 (34.4)	16.1 (36.7)	17.7 (33.3)	34.7 (30.3)	33.2 (23.7)	68.0 (52.7)	78.5 (31.1)	66.8 (32.0)	93.0 (47.4)
Agricultural Credit Society and Co-operative Societies	1.6 (3.5)	.9 (2.0)	0.4 (.9)	1.2 (2.3)	0.2 (.2)	0.3 (.2)	0.9 (0.7)	12.6 (5.0)	3.5 (1.7)	4.1 (2.2)
Other	7.3	6.0	5.9	8.9	15.4	14.6	16.3	19.2	19.1	10.0
Total Domestic Agriculture	28.3 (61.7)	28.2 (62.3)	32.6 (74.3)	38.6 (72.7)	65.5 (57.2)	67.8 (48.5)	108.8 (34.0)	158.0 (62.3)	150.4 (75.0)	151.1 (73.0)
TOTAL LOANS	45.9	44.9	43.9	53.1	114.5	139.4	129.6	251.2	209.0	206.8

SOURCE: Central Bank of Trinidad & Tobago.

Commercial bank loans for export agriculture (sugar cane planting; sugar and molasses including sugar estates; cocoa, coffee, citrus and coconuts) as a proportion of total loans, have declined from a four-year average of 33 per cent over 1974-1977 to 27 per cent over the period 1979-1982. Loans to the sugar-cane industry has always dominated the portfolio of loans extended to export agriculture, invariably accounting for 75 per cent. In contrast, the proportion of total commercial bank loans allocated to domestic agriculture increased from an average of 67 per cent over the four year period 1974-1977 to an average of 73 per cent over 1979-1982 (Table 1). Loans to 'Other Agriculture', averaged \$12 million over the ten-year period 1973-1982 and represent several miscellaneous items which available data do not identify. However, loans for machinery and equipment are thought to be a substantial item in the total.

Loans for processing industries have accounted for more than 50 per cent of the total agricultural loan portfolio over the past six years (Table 2). The pattern was generally the same in the early seventies. In effect, this means that at the end of 1982 for example, out of a total agricultural loan portfolio of \$206 million, commercial banks loaned approximately \$68 million for primary agricultural production or to "non-processing" enterprises.

TABLE 2  
COMMERCIAL BANKS LOANS OUTSTANDING TO THE AGRICULTURAL SECTOR:-  
ACTIVITY DISTRIBUTION (\$M)

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Sugar and Molasses Including Sugar Estates	14.0	10.6	3.4	8.2	41.5	49.0	9.6	60.3	49.
Food and Non-Alcoholic Beverage Including Food Processing	15.1	15.1	16.1	17.7	34.7	33.2	68.0	78.5	66.
<u>Total Processing</u>	29.1	25.7	19.5	25.9	76.2	82.2	77.6	138.8	116.
	63.4	57.2	44.4	48.8	86.6	59.0	59.9	55.2	55.
<u>Total Primary</u>	16.8	19.2	24.4	27.2	38.3	57.2	52.0	112.4	92.
	(36.6)	(42.8)	(55.8)	(57.2)	(33.4)	(41.0)	(40.2)	(44.8)	(44.)
<u>TOTAL PROCESSING AND PRIMARY LOANS</u>	45.9	44.9	43.9	53.1	114.5	139.	129.6	251.2	209.

SOURCE: Central Bank of Trinidad and Tobago.

1. Figures in italics are percentages.

This pattern of loan distribution can be explained by the supposedly higher standard of creditworthiness of the established food and beverage processing firms, which are in many instances branches of conglomerates and sugar factories and estates. These industries are usually well established, have significant collateral and their owners are well known to the banking community. The same cannot be said for the primary producing firms in the sector. On the demand side the financing requirements of those involved in non-processing activities may not have been as large as that of processing industries. This proposition needs to be empirically examined.

The bulk of total loans supplied by commercial banks is short to medium term i.e. one to five years. In order to ensure a reasonable degree of maturity synchronization, banks cannot extend large amounts of long term loans to the agricultural sector nor to any other sector for that matter. However, one of the largest commercial banks indicated that the greatest portion of its agricultural loans is for a period of between 1-5 years. Bridging finance forms a significant part of total short-term lending, with the A.D.B. the ultimate lender in several instances.

Apart from the quantity and term structure of loans supplied to the agricultural sector the lending cost of funds to this sector must also be considered. Commercial banks have no special rates for the agricultural sector. Bankers arrive at actual rates of interest after due consideration of administrative costs as well as risk and return factors as they perceive them. Banks however, have certain ratios which

reflect their appraisal of potential lending in those sectors (Ramkisson, 1982). The agricultural sector ranks low, reflecting low profit earning potential. At the end of 1982, the weighted average loan rate stood at 12.7 per cent - a 2.4 percentage point increase from 10.26 per cent in 1973.

The agricultural sector is not homogeneous with respect to risk or returns. The implication therefore is that within this sector rates of interest vary, such that lending costs to an established food processing firm may be lower than to a foodcrop farmer, if only because of the likely size of the loan in question.

#### (2) The Agricultural Development Bank (A.D.B.)

The Agricultural Development Bank (A.D.B.) was established in 1968 and replaced the Agricultural Credit Bank. Its primary function is to encourage and foster the development of agriculture, fishing and related industries as well as to mobilise funds for such purposes. Unlike the commercial banks, the major source of funding for this institution has been the Government and with increasing Government revenues since 1974, advances have increased substantially, averaging around 75 per cent of the institution's total source of funds.

Apart from government advances, other sources of funds for the A.D.B. have been government share purchases, borrowers' shares<sup>2</sup> the Inter American Development Bank and the Caribbean Development Bank. Farmers complain, that not only do they receive their loan minus five per cent for share purchases but they must pay interest on the entire loan. Further, they are not paid any dividends on their shares in the A.D.B. The effect of these conditions is to increase the effective interest rate of loans granted by the A.D.B.

The value of loans actually disbursed by this institution has increased tremendously since its establishment from \$0.5 million in 1969 to \$58.9 million in 1982 (Table 3). Loan approvals are even larger, ranging from \$2.1 million in 1969 to \$98.5 million in 1982. Outstanding loans to the agricultural sector by the Agricultural Development Bank also show a dramatic increase from \$20.7 million in 1975 to \$221.9 million in 1982 or an almost ten-fold increase (Table 4).

Such increases are largely explained by the transfer of financial resources from the petroleum sector to the agricultural sector by the government via the A.D.B. Thus while government advances in 1974 amounted to \$9.5 million, by 1979 advances amounted to \$86 million.

Unlike the commercial banks, the Agricultural Development Bank appears to have a much more even distribution of loans, over a wide range of activities. Over the last three years a significant proportion of

TABLE 3  
LOANS APPROVED AND DISBURSED BY THE AGRICULTURAL DEVELOPMENT BANK  
(\$M)

END OF YEAR	LOANS APPROVED	LOANS DISBURSED
1969	2.1	.5
1970	2.4	1.0
1971	4.2	2.4
1972	9.6	4.6
1973	7.2	5.4
1974	7.1	4.8
1975	8.8	9.3
1976	22.1	14.4
1977	40.4	38.0
1978	60.4	42.5
1979	84.9	42.5
1980	87.7	48.6
1981	77.4	46.3
1982	98.5	58.9

SOURCE: Agricultural Development Bank.

TABLE 4  
A.D.B.'s LOANS OUTSTANDING (\$M)

END OF YEAR	AMOUNT
1982	221.6
1981	177.8
1980	142.8
1975 <sup>e</sup>	97.3
1978 <sup>e</sup>	65.2
1977 <sup>e</sup>	36.7
1976	26.8
1975	20.7

SOURCE: Agricultural Development Bank.

e - Estimate.

total loans though has been disbursed for Fish, Dairy and Meat production (Table 5). Disbursements to this sector rose to \$18.3 million in 1982 or 31.1 per cent of total disbursements while broiler production received \$12 million or 20.4 per cent of the total.

A much broader classification of loans approved by the Agricultural Development Bank over the years indicates that between 1975 and 1982, loans for Land Purchase, Agro-Industry, Tractor and Machinery as a group shot up from about \$155,000 at the beginning of the period to \$47.1 million in 1982 representing about 48 per cent of total loans approved in 1982 (Table 6). This dramatic increase no doubt reflects some movement towards farm mechanization as well as higher inflation. On the other hand, over the same period, loans approved for the Agricultural Credit Societies (ACS) have declined from \$3.4 million in 1973 to \$2.5 million in 1982 after peaking at \$5.8 million in 1979<sup>3</sup>.

The A.D.B. allocates the greater part of its loan portfolio for primary production. This proposition is based largely on an estimation by the A.D.B. itself, in which it is claimed that less than twenty-five per cent of total loans extended is for processing activities. Available data do not allow a more precise conclusion. On this basis therefore in Table 7, total loan balances at the end of each year is broken up into a 25 to 75 ratio, to reflect the smaller proportion of loans for processing activities.



TABLE 5  
CASH DISBURSEMENT BY THE A.D.B. (\$M)

	1980	1981	1982
Total Crops	5.0	4.0	4.4
Total Fish			
Diary Meat	12.5	13.2	18.3
of which			
Broilers	6.2	3.3	12.0
Land Acquisition	4.2	6.9	12.0
Farm Building	3.3	3.7	3.2
Farm Machinery	5.9	4.4	3.0
Farm Vehicle	3.3	6.6	5.0
Other	7.9	5.8	13.0
TOTAL	<u>42.1</u>	<u>44.6</u>	<u>58.9</u>

SOURCE: Agricultural Development Bank.

AGRICULTURAL DEVELOPMENT BANK  
LOANS APPROVED BY MAJOR ACTIVITIES, 1973-1982

SOURCE	1982	1981	1980	1979	1978
Loans to Individuals (All Crops)	9,617,905	8,326,796	8,434,245	7,127,291	10,613,124
Fish, Dairy & Meats	22,921,661	18,291,711	24,391,468	21,522,173	20,036,970
All Other Activities	47,130,418	48,811,022	52,311,552	50,434,463	26,650,026
Loans to ACS	2,266,469	1,943,475	2,563,808	5,796,039	3,164,735
Total Loans Approved	<u>98,505,094</u>	<u>77,373,004</u>	<u>87,721,073</u>	<u>84,879,966</u>	<u>60,464,855</u>

SOURCE	1977	1976	1975	1974	1973
Loans to Individuals (All Crops)	5,670,343	3,244,606	2,042,956	1,299,239	1,608,197
Fish, Dairy & Meats	14,794,714	7,349,946	3,413,780	3,488,500	2,042,825
All Other Activities	17,227,016	8,570,356	2,628,788	1,677,037	155,315
Loans to ACS	2,673,002	2,994,266	708,464	1,808,994	3,992,277
Total Loans Approved	<u>40,373,105</u>	<u>22,159,174</u>	<u>8,793,988</u>	<u>8,233,770</u>	<u>7,198,614</u>

SOURCE: Agricultural Development Bank  
\* Land Transfer, Agro Industry, Tractor & Machinery

TABLE 7

AGRICULTURAL DEVELOPMENT BANK'S LOANS OUTSTANDING  
TO THE AGRICULTURAL SECTOR: ACTIVITY DISTRIBUTION  
(SM)

PURPOSE	1974	1975	1976	1977	1978	1979	1980	1981	1982
Processing Industries	4.3	5.2	6.7	9.2	16.3	24.3	35.6	44.4	55.4
Non-Processing Industries	12.9	15.5	20.1	27.5	46.9	73.0	107.2	133.4	166.4
<u>Total Loans</u>	17.2	20.7	26.8	36.7	63.2	97.3	142.8	177.8	221.8

SOURCE: Agricultural Development Bank

The loan rate of interest charged by the ADB has not been uniform but has varied at nominal rates of between 3 and 9 per cent. Some loans to the Agricultural Credit Societies for on-lending to the members have been lower than 3 per cent. Several adjustments have been made to the interest rate structure over the years, but all within the above range.

Over the last three (3) years, by far the greater part of the A.D.B.'s lending has taken place at a rate of 6 1/2 per cent. Between 1980 and 1982, over 80 per cent of total cash disbursements was made at 6 per cent (Table 8). It is interesting to observe also that while the proportion of disbursements at 3 per cent has gradually declined to 1 per cent in 1982, the proportion extended at 6 1/2 per cent has increased over the last three years to 90 per cent at the end of the same year. One can expect this trend to continue in coming years, with an increase in nominal lending rates which might perhaps reduce the currently high negative real rates of interest.

One of the underlying reasons for the establishment of the A.D.B., was the recognition that the development of agriculture requires significant amounts of medium to long-term finance. The A.D.B. defines short-term loans to be under 18 months to maturity, medium term loans as between 18 months to 10 years and long term loans, over 10 years. Before 1977 medium term loans represented between fifty and seventy-five per cent of total loans approved. Indeed, at the end of 1976 the proportional distribution of short, medium and long term loan approvals was 7.4 per cent, 73.7 per cent and 18.9 per cent, respectively (Table 9)

TABLE 8

A.D.B.'s CASH DISBURSEMENT BY RATES OF INTEREST (%)

RATE	1980	1981	1982
3%	15.7	12.3	10.0
6%	83.6	87.7	90.0
3½%, 7%, 9%	0.7	-	-
TOTAL	<u>100</u>	<u>100</u>	<u>100</u>

SOURCE: Agricultural Development Bank.

(-) - Indicate negligible amounts.

TABLE 9

A.D.B.'s LOANS APPROVED BY TYPE (%)

YEAR	TOTAL	SHORT-TERM	MEDIUM-TERM	LONG-TERM
1971	100	11.9	54.2	33.9
1972	100	4.1	85.5	10.4
1973	100	25.7	72.9	1.4
1974	100	18.4	70.0	11.6
1975	100	14.2	84.4	1.4
1976	100	7.4	73.7	18.9
1977	100	2.3	45.2	52.4
1978	100	3.8	38.0	58.2
1979	100	0.5	37.7	61.7
1980	100	0.5	25.8	73.7
1981	100	0.6	41.8	57.6

SOURCE: Agricultural Development Bank.

Since 1977 however, long term loans have predominated, representing more than half of total loans approved. In 1981, long term loans approved amounted to 57.6 per cent (\$31.6 million) and 0.6 per cent (\$0.4 million) for medium and short term loans, respectively.

If the use of loan approvals are somewhat questionable, actual cash disbursements by the ADB over the last three years also confirm that the major proportion of loans have been long term. Thus over the last three years out of a total disbursement figure of \$145.6 million, \$91.1 million (62.6 per cent) represented long-term lending, compared to \$52.6 million (36.1 per cent) and \$1.9 million (1.2 per cent) for medium and short-term lending, respectively (Table 10).

(3) Other Lending Institutions

If the agricultural sector is broadly defined to include food processing industries, then the Development Finance Company and other non-bank financial institutions do provide some assistance to the sector. While the amount of funds supplied is relatively small, it is important to note the fact, for it might be the case that these institutions are not being adequately tapped at the present time.

Detailed data are available only for the Development Finance Company (D.F.C.). Loans are extended for food and meat processing and

TABLE 10  
A.D.B.'s DISBURSEMENT TO AGRICULTURE BY TERM TYPES  
(\$M)

YEAR	TOTAL	LONG-TERM	MEDIUM-TERM	SHORT-TERM
1980	42.0	26.8	14.6	.6
1981	44.7	28.7	15.5	.5
1982	58.9	35.6	22.5	.8
1980 - 1982	145.6	91.1	52.6	1.9

SOURCE: Agricultural Development Bank.

fishing. Loans outstanding to these activities reached \$18.7 million in 1981 from \$2.2 million in 1975 (Table 11). Outstanding loans by the Finance Companies to the agricultural sector stood at \$7.6 million at the end of 1981. The D.F.C. is primarily involved in the medium to long end of the loan market (5-8 years) with approximately 90 per cent of its loan portfolio so structured. At the end of 1982 the loan rate of interest stood at 12 per cent.

(4) Subsidies

Government subsidies paid to the farmers and fishermen also represent financial flows to the agricultural sector. Such flows increased by \$27.1 million from \$1.9 million in 1973 to an estimated \$29.0 million in 1982, with significant amounts injected into land preparation, fertiliser and machinery and equipment (Table 14).

B. AGGREGATION OF THE SUPPLY SIDE

We have looked at the formal institutions which have financed the agricultural sector over the years. Essentially we have analyzed the quantity, term structure and interest rates of credit supplied to the agricultural sector. An attempt will now be made to aggregate across institutions. This exercise, it must be pointed out, is severely constrained by the absence of comparable data for all the institutions.

TABLE 11  
DEVELOPMENT FINANCE COMPANY'S LOANS OUTSTANDING  
TO THE AGRICULTURAL SECTOR (\$M)

PURPOSE	1975	1977	1979	1981
Food & Beverage	1.5	3.7	7.0	15.2
Fishing	.7	.7	.6	.3
Meat Processing	-	-	-	3.2
TOTAL	<u>2.2</u>	<u>4.4</u>	<u>7.6</u>	<u>18.7</u>

Source: Development Finance Company's Annual Report, Various Issues.

In order therefore to conduct the exercise it was necessary to make estimates and approximations. Wherever this was necessary, it is indicated. One therefore needs to treat the data and the related conclusions with a fair amount of caution.

Not unexpectedly, outstanding loans to the entire agricultural sector i.e. processing and non-processing activities by all major financial institutions increased dramatically to \$458.2 million in 1982 from \$64.1 million in 1974, a \$394.1 million increase which represents a 28 per cent annual average growth rate (Table 12). An examination of the data indicates that while the increase over the 1974-1982 period was relatively smaller (\$161.9 million), up to 1981 these intermediaries appear to have outstripped the Agricultural Development Bank (A.D.B.) as the major supplier of loans to the agricultural sector. This fact is interesting in view of the criticisms often levelled against the banks with respect to their agricultural lending. In 1982 however, the A.D.B. dominated, with loan balances figure of \$221.8 million (48.4 per cent) compared to the commercial banks' figure of \$206.5 million (45.1 per cent).

While nominal loan balances to the agricultural sector defined to include primary and processing activities, is sizable - \$458.2 million in 1982 - such balances to primary or non-processing agricultural activities alone is reduced by approximately 50 per cent to \$234.6

TABLE 12  
LOANS OUTSTANDING TO THE AGRICULTURAL SECTOR (\$M) <sup>1</sup>

INSTITUTION	1974	1975	1976	1977	1978	1979	1980	1981	1982
Commercial Banks	44.9 <i>70.1</i>	43.9 <i>65.8</i>	53.7 <i>66.1</i>	114.5 <i>73.6</i>	139.4 <i>66.6</i>	129.6 <i>55.3</i>	251.2 <i>62.2</i>	209.0 <i>51.5</i>	
A. D. B. <sup>2</sup>	17.2 <i>25.8</i>	20.7 <i>31.0</i>	26.8 <i>32.3</i>	36.7 <i>23.6</i>	65.2 <i>31.7</i>	97.3 <i>42.5</i>	142.8 <i>35.3</i>	177.8 <i>43.9</i>	
D. F. C. <sup>3</sup>	2.0	2.1	3.0	4.3	4.8	7.5	10.1	18.7	
Finance Houses <sup>4</sup>	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	N.a.	
<b>TOTAL</b>	<b>64.1</b>	<b>66.7</b>	<b>82.9</b>	<b>155.5</b>	<b>209.4</b>	<b>234.4</b>	<b>404.1</b>	<b>405.5</b>	

Source: Table 1; Table 14; The Development Finance Company, Annual Reports.

\* Percentages are in italics.

1. End of year data.

2. Totals for 1977 - 1979 are approximate.

3. 1982 figure is estimated.

4. N.a. Not available.

million in the same year. Over the last eight years, there appears to have been a generally even distribution of total loan balances from formal institutions, towards processing and non-processing activities (Table 13).

This pattern of distribution of financial resources raises certain issues with respect to agricultural policy. Firstly, it is not certain that an even distribution of financial flows to the agricultural sector as a whole i.e. processing and primary activities is a desirable distribution at this stage of agricultural 'development'. Secondly, a greater inflow of financial resources into the area of primary production need not result in an increase in agricultural output. If we assume that the vertical integration of the primary production and processing stages is a desirable goal then would the present allocation of financial resources achieve this goal? To attempt to address these issues requires much more research.

The difference in the method of classifying agricultural loans by the A.D.B. and commercial banks seriously hampers any detailed attempt at aggregating total agricultural loans by purpose. This is evident from Table 1 and Table 5 which show the commercial banks' and the A.D.B.'s classification, respectively. Nevertheless certain broad trends are apparent. Both commercial banks and the ADB appear to have concentrated substantial amounts of their funds on livestock production (particularly

TABLE 13  
TOTAL LOANS OUTSTANDING TO THE AGRICULTURAL SECTOR BY ACTIVITY (\$M)

ACTIVITY	1974	1975	1976	1977	1978	1979	1980	1981	1982
<u>TOTAL PROCESSING</u>	32.0 <i>49.9</i>	26.8 <i>40.2</i>	35.6 <i>42.3</i>	89.7 <i>47.7</i>	103.3 <i>49.3</i>	109.4 <i>46.7</i>	184.5 <i>55.7</i>	179.8 <i>44.3</i>	223.4 <i>48.9</i>
Commercial Banks	25.7	19.5	25.9	76.2	82.2	77.6	138.8	116.7	135.4
Finance Houses	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	7.6
A.D.B.	4.3	5.2	6.7	9.2	16.3	24.3	35.6	44.4	55.4
D.F.C.	2.0	2.1	3.0	4.3	4.8	7.5	10.1	18.7	22.0
<u>TOTAL PRIMARY</u>	32.1 <i>50.1</i>	39.9 <i>59.6</i>	47.3 <i>57.1</i>	65.8 <i>42.3</i>	106.1 <i>50.7</i>	125.0 <i>53.3</i>	219.5 <i>54.3</i>	255.7 <i>55.7</i>	234.8 <i>52.2</i>
Commercial Banks	19.2	24.4	27.2	38.3	57.2	52.0	112.4	92.3	68.4
A.D.B.	12.9	15.5	20.1	27.5	48.9	73.0	107.2	133.4	166.4
<u>TOTAL LOANS</u>	<u>64.1</u>	<u>66.7</u>	<u>82.9</u>	<u>155.5</u>	<u>209.4</u>	<u>234.4</u>	<u>404.1</u>	<u>405.5</u>	<u>458.2</u>

SOURCE: Tables 2, 7, and 11.

Notes:

1. Finance Houses and the D.F.C. focus on loans for processing activities.
2. Figures in italics represent percentages.

broilers), and the purchase of land, machinery and vehicles, especially in recent years. Lending for these purposes seems to be viewed as being relatively less risky and in the case of latter items, these items themselves could have been used as collateral.

The supply of loans by the two major institutions i.e. the Agricultural Development Bank and the commercial banks may be viewed as complementary in several respects. It can reasonably be postulated that there is a fair distribution of total agricultural loans for short, medium and long term purposes. This statement seems justifiable since the data indicated that the bulk of the A.D.B.'s loans finance medium-term and long term projects while commercial banks supply the short and medium term markets. Of course, the A.D.B. does provide a relatively small amount of short-term credit in the latter categories. Again, the data does indicate that while the commercial banks and D.F.C. focus their attention on processing activities, the A.D.B. concentrates on financing primary production activities.

Loan rates to the agricultural sector in general, range from the ADB's lower limit of 3 per cent to the commercial banks double digit rates (the weighted average rate stood 12.5 per cent in 1982). It can reasonably be assumed though that only a small portion of total agricultural loans are granted at 3 per cent. In 1982, for example, only about 11 per cent of A.D.B.'s cash disbursements took place at this rate. As a proportion of total disbursements (including commercial

banks) therefore, the figure must be much less than 11 per cent. A major reason that seems to explain the divergence in nominal loan charges is the fact that while interest-free government grants are A.D.B.'s major source of funds, commercial banks depend on deposits funds.

### III THE DEMAND FOR CREDIT IN THE AGRICULTURAL SECTOR

As already indicated the lack of adequate data, coupled with insufficient time in which to attempt collection of same, prevent a thorough analysis of the demand side of the agricultural credit market. Interviews with individual farmers, their associations and other users of agricultural credit will be of tremendous help in such analysis. Nevertheless, this analysis relies on the few interviews conducted, and whatever data are available.

The users of agricultural credit are not even close to what might be called a homogeneous group. They include small-scale foodcrop farmers, large cocoa, coffee, citrus and coconut estate proprietors, livestock farmers and branches of conglomerates involved in the food processing business. In fact, there are several associations representing the various interests. It was possible only to interview the representatives of foodcrop farmers and the owners of large estates of cocoa, coffee, citrus and coconuts.



In many instances borrowers deal with both the commercial banks and the Agricultural Development Bank (A.D.B.). Such behaviour might be explained by (i) a situation in which the different financing needs of borrowers are matched by the different maturity structure of loans offered by these Institutions, (ii) possible cost insensitivity on the part of borrowers despite the significant loan rate differentials between the two institutions; (iii) the fact that neither institution by itself is willing or able to supply the total quantum of funds demanded.

It is our view that the quantum of funds demanded does not significantly exceed that which is available. Farmers claim that with respect to the A.D.B. it is not that they do not get the funds but that it takes an exceptionally long time. They usually receive all the funds for which they apply.

Over the years the total value of loans demanded by the agricultural sector as a whole will have increased in real and in nominal terms. However, from the demand side, relevant data to substantiate this are unavailable. The number of loan applications received by the Agricultural Development Bank alone, stood at 1,419 in 1982. Comparative figures for earlier years are unavailable but were claimed to be much lower. The data show what might be considered a high ratio of cancellation of applications. In 1982 out of 1,366 loan applications processed, fifteen (15) per cent was cancelled. It is reasonable to expect that an increase in applications to the commercial banks also occurred.

While there seems to have been an overall increase in the demand for agricultural credit, the increase was disproportionate in relation to the individual subsectors. It was pointed out during interviews that increases in demand for loanable funds occurred in the livestock, vegetables and machinery and equipment subsectors. However, demand for loans from cocoa, coffee and citrus farmers declined.

Several factors might explain this particular pattern of loan demand. One of the favourable effects of the oil boom was to increase the effective demand for vegetables, poultry and foodstuffs in general. Prices rose, inducing farmers to expand production of these items, thereby almost certainly increasing loan demand in the process.

On the other hand, partly because of the weak linkages between the export staple sector and final products so derived e.g. chocolates from cocoa, dramatic increases in disposable income was not reflected in any substantial growth in product demand, output or in credit demand in these areas. Further, the demand for the export staples is largely a function of external developments. In general, conditions with respect to international markets and prices were not encouraging. It is probable that some shift in resources, including financial resources, into the more profitable production of vegetables and livestock from the cocoa, coffee and citrus-producing sectors also occurred over the seventies.

For reasons already mentioned it is impossible to analyze changes in the demand for credit in respect of the term structure of such credit. The farmers interviewed claim that the greater part of the credit they seek is medium and long term. To the extent that demand pressures were concentrated on land acquisition and building and machinery, it is arguable that similar pressures must have been reflected in the demand for longer term loans. The identification of the term structure of loan demand can certainly help in the formulation of appropriate lending policies, in such a way as to derive maximum benefit from available financial resources.

Farmers do not only consider nominal loan rate charges in evaluating their total borrowing costs. They are quite aware of the money value of time spent waiting in a queue and that legal and travelling expenses must also be considered as part of total borrowing costs. In short, they are conscious of the fact that borrowing costs comprise loan rate charges plus transactions costs. Indeed, the latter may exceed the former (Eburne, 1982). Within some limit, the lower are nominal loan rates, the higher transactions costs are likely to be.

The farmers' representatives understandably expressed their preference for the low nominal interest rates charged by the A.D.B. (3-9 per cent) and not surprisingly thought that commercial banks' loans rates (weighted average of 12.7 per cent at end of 1982), are too high. Nevertheless, several considerations substantially reduce the observed

interest rate differentials between the A.D.B. and commercial banks loan rates. Firstly, in the case of the commercial banks the period between loan application and disbursement is significantly shorter than that of the A.D.B. for in the case of the former the process can be completed within a week while in that of the latter the process may take several months on a comparable loan.

This longer waiting period, in the case of the A.D.B. may force a farmer to abandon a crop or may prevent fertilisation at the propitious time thereby increasing overall production costs. Secondly, as already noted, since farmers have to use five per cent of any loan granted by the A.D.B. to purchase shares in it, the effective cost of the loan must be higher than the initial rate quoted.

In sum, farmers have expressed some reservations towards borrowing from the A.D.B., notwithstanding its low nominal rate of interest. It is interesting to note that while food-crop farmers, who are usually small scale operators, claim to borrow more from commercial banks (though their share of total commercial bank borrowing is presumed to be relatively small compared to other groups of borrowers) the large estate owners on the other hand, claim that it is the A.D.B. which supplies them with the greater portion of their total borrowed funds. In response to a question on their reaction to increased A.D.B. loan rates both groups of farmers suggest that this will make matters worse and perhaps even rule out borrowing from the A.D.B. as a feasible option.

#### IV. AN EVALUATION OF SUPPLY AND DEMAND CONDITIONS

An attempt will be made to highlight major considerations with respect to the market for agricultural credit in Trinidad and Tobago. Perhaps the first consideration that should be dealt with is that of the equilibrium of the credit market. How does the supply of credit (quantity and maturity structure) match up to the demand? Based on responses received from the farmers' organisations, one cannot claim that an unsatisfied demand for agricultural credit exists. Very few loan demands are rejected. This applies both to the A.D.B. and commercial banks. In the case of the A.D.B. dissatisfaction arises from the long waiting period between loan application and loan disbursement and not because of a refusal to lend by the A.D.B. Also, farmers do not complain of loan receipts under the value of that which was applied for. Again, in the case of the A.D.B. farmers complain that while they do receive the total loan, it is usually disbursed in parts.

On the supply side, bankers claim that only a small percentage of applications have been turned down over the last few years. They feel that they can adequately supply the market for agricultural credit. The A.D.B. does admit to the charges made by farmers but counter that the controls are necessary to prevent an inappropriate use of funds and to ensure that only bona fide farmers are facilitated. Further, their goal is not strictly one of profit maximization.

With respect to the term structure of the credit market, some degree of matching seems evident, for while the commercial banks are short to medium term lenders the A.D.B. tends to emphasize medium and longer term loans. This loan supply structure appears to be in line with the demands of the farmers since they claimed that their demand for medium term credit significantly exceeds other term types.

The seeming 'order' of the agricultural credit market must be tempered by the fact that the demand for credit is itself influenced by supply conditions. In other words, borrowers can reasonably be expected to request the quantity and term structure of credit which they perceive to be much more easily available. While it is clear that substantial differences exist between nominal loan rates of interest charged by the formal financial institutions in the agricultural credit market, the effective loan rate of interest may only show marginal differences. The primary reason for this assertion is that transactions costs are believed to be substantial enough in the case of the A.D.B. to significantly 'pull up' total borrowing costs of farmers to a level close to that of the equivalent commercial banks' rates. If this assertion is in fact correct, then the A.D.B.'s claim of providing 'low cost' loans to the agricultural sector may be highly questionable though definitely well intentioned.

The case for adequate financing of the agricultural sector is usually based on the belief that there is some direct relationship between agricultural output and agricultural finance. In the light of this it will be interesting to examine some data for Trinidad and Tobago. The comparison will be made between real agricultural credit and real agricultural G.D.P. Since the former is largely concerned with primary agricultural production then the latter must also be so related. Thus, financial resource flows, which includes loans for primary agricultural production and producers' subsidies are deflated by the food indices for the particular years (Table 14).

Real agricultural credit as a per cent of real agricultural output increased over the 1975-1980 period, from 19.1 per cent in 1975 to 122.7 per cent at the end of the period (Table 15). After 1980 the ratio which was exceptionally high in that year, fell to the levels which prevailed in the 1976-1977 period.

TABLE 14

FINANCIAL FLOWS TO PRIMARY AGRICULTURAL ACTIVITIES (SH)<sup>1</sup>

	1975	1976	1977	1978	1979	1980	1981
Total Loans for Primary (Non-Processing) Activity	29.9	47.3	65.8	106.1	125.0	219.6	225.7
Change	7.8	7.3	18.6	30.3	28.9	84.6	6.1
Subsidies	3.4	3.7	4.2	4.1	7.4	7.7	16.1
<u>Total Change Plus Subsidies</u>	11.2	11.0	22.8	34.4	36.3	102.3	22.2
Total Flow (Deflated) <sup>1</sup>	11.2	10.4	20.1	27.9	25.8	61.0	11.4

SOURCE: Table 13; Government Printery, Accounting for the Petrodollar.

1. Total financial flows are deflated by the food index (1975 = 100).

TABLE 15

## COMPARISON OF REAL AGRICULTURAL CREDIT TO REAL AGRICULTURAL G.D.P.

End of Year	REAL AGR. CREDIT	REAL AGR. G.D.P.	REAL AGR. CREDIT REAL AGR. G.D.P. (%)
1975	11.2	58.8	19.1
1976	10.4	49.6	21.0
1977	20.1	53.6	37.5
1978	27.9	53.3	52.3
1979	25.8	51.2	50.4
1980	61.0	49.7	122.7
1981	11.4	54.4	21.0
1982	17.0	53.0	32.1

SOURCE: Table 14; Central Statistical Office.

An increased inflow of financial resources need not result in increased agricultural output. Indeed, the growth in agricultural credit was much faster than that of agricultural output over the 1975-1980 period. Agricultural output is not only determined by the cost and availability of financial resources but by factors such as infrastructural facilities and labour input. In response to a question as to the ranking of credit availability in terms of other problems associated with the agricultural sector, farmers placed it third or fourth.

### Endnotes

1. In this regard we wish to thank the following for their very generous assistance in one form or the other:- the Agricultural Development Bank (ADB), the National Foodcrop Farmers of Trinidad and Tobago, The Agricultural Society of Trinidad and Tobago, commercial banks and all others who have helped.
2. The A.D.B. Act of 1968 requires that all borrowers hold with the A.D.B. at least five (5) per cent of every loan in the form of shares.
3. The A.C.S. mainly finance their members who are usually small farmers and the relatively small proportion of loans which they have received over the years reflects their small scale of operation and poor financial management (Agricultural Development Bank, 1974).

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