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The Crop Lien Programme: Implications of A Credit Project Transformed into an Ad Hoc Income Transfer Programme

ABSTRACT

This study assesses an attempt by the Jamaican government to use unsecured credit as an instrument for rapid expansion of domestic food crop production by small farmers. It is concluded that the production objective was not achieved, while substantial resource misallocation and serious inequity resulted.

OVERALL PROGRAMME REVIEW

The Crop Lien Programme, launched in the late 1970s, rapidly became the most controversial credit programme in Jamaica, and one of the most discussed development efforts in the second term of the Manley Administration [1976-1980]. The controversy grew out of several factors. First, the credit resources provided by the Crop Lien Programme were substantial by any measure, amounting to almost 22 million Jamaican dollars in the three years since its inception in mid-1977 (see Table 1). The injection of resources in fiscal year 1977/78 far surpassed the flow of credit from any other credit source servicing agriculture, i.e. the commercial banks, the Agricultural Credit Board (ACB) or the Jamaica Development Bank (JDB).

A second element of controversy surrounded the programme's operational locus in the Ministry of Agriculture rather than in an established financial intermediary or existing credit organization. Aside from the usual bureaucratic rivalries associated with any new development initiative, questions arose about the feasibility of having a non-financial, line Ministry whose personnel have little experience in managing credit programmes, undertake a credit initiative of this magnitude. The fact that three years after its inception moves were undertaken to transfer this programme (in whole or in part) into the JDB further highlights the relevance of this initial concern.

Other elements of the controversy grew out of the debate on the alleged social benefits generated by the programme. The programme was designed and defended as an integral part of the 1977 Emergency Production Plan (EPP). The major objective of the EPP was to promote a rapid expansion of domestic foodstuff production to compensate for the shortfalls in food imports resulting from the severe foreign exchange shortage in the country from early 1977 onwards. In effect Jamaica promoted a foodstuff import-substitution programme with an increase in output (and consequent savings of foreign exchange) as a major goal of the EPP and of the Crop Lien Programme that was financing the EPP.

At the same time an implicit equity criterion was introduced into the programme in that the only farmers eligible for loans were those who did not have any loans from traditional formal sources or other public sector credit programmes. This was an indirect way to try to direct the

loans to smaller farmers who presumably grew more foodstuff crops than larger-sized farmers. The feeling was that foodcrop farmers are mainly those farmers with holdings of no more than 5 acres of arable land, the lower end of the farm size scale used by the JDB's Self Supporting Farmers Development Programme (SSFDP) (i.e. 5 to 25 acres).

Given the credit crunch and liquidity constraints operating in the commercial banking network at that time, along with the decline in the credit flows in the established public sector programmes (the ACB, the JDB and the SSFDP) in 1977/78, one wonders whether the Emergency Production Plan could not have had a larger impact on the output of domestic foodstuffs through an infusion of resources into these established channels (especially the SSFDP) rather than attempting to reach the allegedly small farm non-borrower through a programme operated from the Ministry of Agriculture.

Another element adding to the controversy was the failure to consider the social costs of launching and running this programme. Such costs include not only the direct costs of administration, but also the indirect costs of detouring extension agents from more important tasks to administer the crop lien loans and the degree to which the lax administration hurt other credit programmes. The almost wholesale delinquency of the portfolio brought this issue to a head. In the end, the alleged credit programme became an implicit income transfer mechanism. This, of course, raises an additional question common to all budgetary transfers, namely, who are the beneficiaries and who is implicitly paying for this transfer in terms of the incidence of the tax system (or the incidence of the inflationary tax) on society at large? Finally there is the question of the opportunity cost of having used scarce resources in this fashion rather than for other purposes with possibly greater returns to society.

The rest of this article will discuss some of the issues in the light of general information on the programme and evidence gathered from a farm-level survey of the recipients of crop lien loans in the Parish of St. Catherine. Each in its own way offers insights into some of the issues raised above.

Table 1 sets forth the principal national-level performance indicators of the Crop Lien Programme. The large injection of resources in its first year of operation (1977/78) and subsequently rapid decline in the following year is testimony to the declining budgetary and political support to maintain the programme at the high level with which it began. The unusually high arrears data in Panel B of Table 1 explains an important cause for the decline in support for the programme. When delinquency in a credit portfolio reaches 95 per cent, one has an astounding indicator of failure and a rapid transformation of a credit programme into a presumably unintended income transfer. The lack of repayment of these short term seasonal production loans further meant that no revolving fund could be developed to service future loan capacity. Only continued budgetary transfers could accomplish that end and even the loan programme's administrators did not presume to demand continued transfers of the same magnitude. The net result was a declining real value in the portfolio until its suspension in 1981.

The most common defense of the programme by Ministry officials is based on the argument that, delinquent or not, the programme at least was responsible for the rapid increase in the domestic output of foodstuffs recorded in calendar year 1978. Admittedly there was a substantial increase in domestic agricultural output in that year. However, the major factors behind this performance were the ideal rainfall conditions (compared to earlier years) in combination with the absence of any devastating floods, hurricanes, or other weather conditions that occasionally played havoc with the island's agriculture. Evidence to support the hypothesis

TABLE 1: SELECTED PERFORMANCE INDICATORS OF THE CROP LIEN PROGRAMME, 1977–80

A. Loan and Output Data – Island Wide

Year[1]	No. of Farmers Receiving Loans	Total Loans Granted (in current J$)	In 1974 Constant J$: Total Loans Granted	In 1974 Constant J$: Average Loan Size	In 1974 Constant J$: Loan $ per Ton	Total Tons Foodstuffs Produced by C.L. Farmers	Crop Lien Tonnage Output as % of Total Food Output on Island
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1977/78	32,283	$12,857,598	$8,316,290	$257	$565	14,716	3.2%
1978/79	6,259	4,708,177	2,477,988	396	60	41,123	7.3
1979/80	5,447	4,253,403	1,942,193	357	95	20,512	4.4
Total	43,989	$21,819,178	$12,736,471	$289	$167	76,351	5.1

B. Arrears Data for Southern Region[2]
April 1977 to August 1978

Amount Approved	Amount Issued	Repayment Up to August 1978	Repayment Rate (%)	Arrears Rate (%)
J$10,852,651	J$5,983,502	J$325,442	5.4	94.6

[1]Years refer to fiscal year April 1 through March 31.

[2]Consists of St. Thomas, Kingston and St. Andrew, St. Catherine, Clarendon and Manchester.

Source: Unpublished data from Production Unit, Ministry of Agriculture, Jamaica.

that the Crop Lien Programme *per se* was of marginal importance in explaining the rapid rise in output can be seen in Column 7 of Table 1 where the contribution to total output of foodstuffs by Crop Lien Programme farmers only ranged between three and seven per cent during its three years of operation.

Spending almost J$22 million (in nominal terms) or J$12.7 million (in 1974 Jamaican dollars) to transfer presumed working capital to a set of farmers whose contribution to foodstuff production only reached from three to seven per cent of total foodstuff output suggests a large investment with a limited payoff. Its contribution to total output was marginal. When this fact is combined with the almost total absence of effective repayment, one must conclude that the social costs of this programme were high (and hidden or masked in terms of their incidence) and the social benefits problematical at best.

FARM LEVEL ANALYSIS

This raises the question of whether the farm level experience with this loan programme was in any way promising so as to justify the expenditure. Tables 2 through 6 help to clarify this question with survey results from a selection of 96 farmers in St. Catherine in the Summer of 1980. This sample comprised roughly 15 per cent of the active crop lien farmers in the portfolio of the parish registers at that time. Care was taken to include farmers with different loan sizes so as to determine the degree to which loan size made a difference with respect to certain performance indicators and experience.

The first finding that emerged from this survey was that 18 farmers refused to admit they had a crop lien loan. (We of course knew they had obligations to the programme, but were not concerned with pressing the point and merely recorded relevant non-loan information.) This high refusal to admit having a loan (19 per cent in this case) no doubt

reflects a desire of some farmers not to get involved in having to admit to delinquent behaviour and answer questions about a programme that had been receiving unfavourable publicity. It is clearly not a promising sign of approval and satisfaction with the programme.

The remaining 78 farmers constitute the sample for Tables 2 through 6 in which the farmers' experience with the programme is documented. These Tables are designed to show the costs and inconvenience experienced by farmers in receiving funds from the Crop Lien Programme. Documenting this experience at the farm level is useful since it is commonly thought that the programme, by charging low, concessionary or subsidized interest rates (6 per cent), was an inexpensive or low cost source of funds for small farmers. As the data shows this was not the case. Borrowing or transactions costs (above and beyond interest charges on the loan) are frequently significant in allegedly cheap credit programmes for small farmers.

Table 2 sets forth information on the time lag between loan application and loan disbursement, number of trips by the borrower to the lender to secure the loan and the number of farm days lost negotiating and securing the first disbursement. The results are revealing. More than 55 per cent of the

TABLE 2: SELECTED INDICATORS OF TIME AND EFFORT SPENT BY CROP LIEN FARMERS TO NEGOTIATE AND SECURE LOANS

A. Time Lag Between Loan Application and First Disbursement – Crop Lien Farmers

	No. of Weeks					
	1-4	5-8	9-12	13-16	17-26	26+
1. No. of Farmers	17	17	16	7	12	7
2. Per cent of Total (%)	22.4	22.4	21.1	9.2	15.8	9.2

B. No. of Trips to Lender Undertaken by Crop Lien Farmers to Negotiate Loan and Secure First Disbursement

	No. of Trips 0	1-2	3-5	6-10	10+
1. No. of Farmers	2	16	31	19	10
2. Per cent of Total (%)	2.6	20.5	39.7	24.4	12.8

C. No. of Farm Days Lost By Crop Lien Farmers to Negotiate Loan and Secure First Disbursement

	No. of Days Lost 0	1-3	4-6	7-9	10-12	13+
1. No. of Farmers	14	21	21	3	10	9
2. Per cent of Total (%)	18.2	27.3	27.3	3.9	13.0	11.7

Source: Sample survey data.

sample experienced a time lag of 3 months or more from the time of application to disbursement. Considering that we are not dealing with involved investment plans associated with long term loans, one would have thought that short term production loans could have been serviced more quickly. This point takes on even more weight when it is recognized that loan evaluation procedures were perfunctory at best. One likely reason for these delays is the unusually large number of farmers that the programme attempted to reach in its first year (Column 1, Table 1). Even in the context of perfunctory procedures the usual bureaucratic screening and rudimentary accounting and disbursement processes could easily become swamped with large numbers of applicants. In retrospect the initial large number serviced probably built in the seeds for later problems in the programme as well as raising on farm borrowing costs.

The delay and frustration syndrome can also be seen in Table 2, Panels B and C illustrating the significant number of trips (and lost work days) incurred by farmers attempting to secure their first disbursement.

Table 3 underscores the widespread incidence of out-of-pocket costs (transportation, food, lodging, fees, etc.) and farm work days lost incurred by the sample of Crop Lien farmers. Panel B shows that for 44 per cent of these farmers the non-interest borrowing costs were equal to or greater than the 6 per cent interest charge levied on the loan. Only 13 per cent of the farmers in sample escaped the burden of borrowing costs.

TABLE 3: RELATIVE IMPORTANCE OF NON-INTEREST RATE BORROWING COSTS FOR CROP LIEN FARMERS

A. Percent of Crop Lien Farmers Incurring Selected Non-Interest Rate Costs in Securing Loans

	Out-of-Pocket Expenses	Days of Farm Work Lost
1. Per cent of Total No. Farmers in Sample	75.6%	82.1%

B. Non-Interest Rate Borrowing Costs as Per cent of the Loan for Crop Lien Farmers

	Non-Interest Costs as a Per cent of Loan Value 0	1-5	6-10	11-15	16-20	Above 20%
1. No. of Farmers	10	34	22	5	3	4
2. Per cent of Total No. Farmers in Sample	12.8	43.6	28.2	6.4	3.8	5.2

Source: Survey results.

Table 4 presents a profile of total borrowing cost components by loan size. Of greater importance here is the fact that interest rate charges are relatively more important than non-interest rate expenses (for negotiating and securing a loan) for larger loan sizes and, conversely, non-interest rate charges or expenses weigh more heavily on smaller sized loans. Put differently, larger sized loans (invariably associated with larger farms or farms with greater wealth and physical assets) do not have to incur the nuisance costs of acquiring loans. The explicit interest rate charges are practically the only cost incurred. Smaller loans (frequently associated with smaller farmers), on the other hand, encounter a variety of obstacles in securing their loans. For the smallest loan customers in Table 4, roughly 62 per cent of their total borrowing costs consisted of non-interest expenses. Considering that the majority of the number of loans in the Crop Lien Programme at large were 1,000 Jamaican dollars or less, we can assume that non-interest borrowing costs represented an important component of the total costs for these borrowers.

Table 5 highlights another important feature of the borrowing experience by crop lien farmers. Following all the hassles and costs associated with their efforts to secure loans, in the end the loans in question represented a substantial proportion of their operating expenses. Two-thirds of the farmers in the sample secured loans greater than their recorded operational expenses. Despite all efforts to ensure accurate and comprehensive answers in the survey interviews, farmers' operational expenses may have been underestimated. Still, it is unlikely that these expenses would have been underestimated to the extent necessary to lower the loan to expense ratio much below 50 per cent. In the end it is difficult not to conclude that these short term production loans represented a substantial proportion of total expenses. Farm management studies in general suggest that most debt/expense ratios for farms with access to credit would fall between 25 to 50 per cent, rarely rising beyond 50 per cent when we are

TABLE 4: DISTRIBUTION OF TOTAL BORROWING COSTS FOR CROP LIEN FARMERS BY LOAN SIZE AND SELECTED COST ITEMS1

1980 Jamaican Dollars

Loan Size	Interest Expense		Out-of-Pocket Expense		Value of Days of Work Lost[2]		Value of Days of Work Lost[2]		Total[2]		Total[2]	
(J$)	J$	%	J$	%	J$	%	J$	%	J$	%	J$	%
599	276	37.5	232	31.5	228	31.0	456	-	736	100.0	964	-
600 - 999	924	57.1	339	20.9	356	22.0	712	-	1,619	100.0	1,975	-
1,000 - 1,499	1,166	67.6	301	17.5	256	14.9	512	-	1,723	100.0	1,979	-
1,500 - 2,000	1,473	70.1	327	15.6	300	14.3	600	-	2,100	100.0	2,400	-
2,001 - 3,999	1,706	70.7	359	14.9	348	14.4	696	-	2,413	100.0	2,761	-
4,000	1,834	83.8	73	3.3	280	12.8	560	-	2,187	100.0	2,467	-
Total	7,379	68.5	1,631	15.1	1,768	16.4	3,536	-	10,778	100.0	12,546	-

[1] Expenses within cost categories refer to the total costs incurred by all borrowers in a particular loan size.

[2] The first estimate of the value of days of work lost is based on one-half the common daily wage for unskilled farm labour at the time (J$4.00); the second estimate uses the full day's wage (J$8.00). Percentages in the Table are based on the first section.

TABLE 5: DISTRIBUTION OF CROP LIEN FARMERS BY LOAN SIZE AND LOANS AS A PER CENT OF OPERATING COST

Loan Size (J$)	Loan As Per cent of Operating Cost											
	1–25		26–50		51–75		76–100		101+		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
599	0	0	3	30.0	2	20.0	1	10.0	4	40.0	10	100.0
600 - 999	0	0	2	10.5	2	10.5	2	10.5	13	68.4	19	100.0
1,000 - 1,499	0	0	2	11.8	2	11.8	0	0	13	76.5	17	100.0
1,500 - 2,000	0	0	1	7.1	3	21.4	0	0	10	71.4	14	100.0
2,001 - 3,999	1	10.0	1	10.0	1	10.1	1	10.0	6	60.0	10	100.0
4,000	0	0	0	0	0	0	0	0	6	100.0	6	100.0
Total Farmers	1	1.3	9	11.8	10	13.2	4	5.3	52	68.4	76	100.0

Source: Survey results.

talking about working capital. This suggests that much of the credit in the Crop Lien Programme was extended to clients far beyond the level conceivably needed for production purposes. It would equally suggest that much of this credit was diverted into consumption and/or non-agricultural uses. Looked at differently, taking the fungibility of finance into account, we could imagine that much of the personal savings of the farmer (that would otherwise have been used for working capital purposes) were diverted into consumption or non-agricultural uses.

A further feature of these findings is that this working capital credit/expense ratio is generally much higher for larger than for smaller sized loans, reflecting no doubt the greater ability of larger borrowers to secure these funds and, one might add, the greater likelihood of credit diversion opportunities into non-agricultural uses for these larger borrowers. Finally it is curious to note that 20 per cent of the loans granted in this sample were greater than 2,000 Jamaican dollars which raises the question of how small some of the farmers were that were serviced under the programme.

Table 6 summarizes key responses by Crop Lien farmers evaluating the quality of loan service in the programme. The pattern that emerges is that the farmer played a minor role in determining the way the loan was to be used (Panel A); over half the farmers were not sure if the loan helped them earn more income (Panel B), while only 30 per cent registered a strong positive statement that the lender was helpful or co-operative (Panel C) and a majority claimed the loan arrived too late to be used as planned (Panel D).

These farm level field results reinforce the impression that the Crop Lien line of credit contained: (1) important features of non-interest borrowing costs despite the low interest charges; (2) significant elements of poor service in the eyes of most farmers; and (3) an inequitable incidence of non-interest borrowing costs and credit rationing in that

TABLE 6: RESPONSES BY CROP LIEN FARM BORROWERS TO SELECTED QUESTIONS ON QUALITY OF LOAN SERVICE

Panel A Question

Who played the most important role in determining the way you were expected to use the loan?

	The Farmer	The Lender	Equal Influence	No Use Requirement
No Responses	26	49	2	1
(%)	33.3	62.8	2.6	1.3

Panel B Question

Do you feel that your use of credit allowed you to earn more farm income than you could have earned without it?

	Yes	Possibly	Don't Know	No
No. of Responses	38	8	7	25
(%)	48.7	10.3	9.0	32.1

Panel C Question

Are you satisfied with the help and cooperation you received from your lender in working out your loan?

	Yes, Very Much	Accpetable	Could Have Been Better	Not Satisfied
No. of Responses	23	12	24	19
(%)	29.9	15.6	31.2	25.6

Panel D Question

Did the loan come in time for you to use it as you planned?

	Yes	No
No. of Responses	32	46
(%)	41.0	59.0

Source: Survey data.

smaller borrowers (by loan size) experienced a much higher relative burden of non-interest borrowing costs and enjoyed a lower loan to operational cost ratio than larger sized borrowers.

CONCLUSIONS

In forming a final judgment on the Crop Lien Programme we must evaluate its impact in a broad, society-wide general equilibrium context. It is useful to highlight five ways in which it proved to be less than equitable, and finally underscore the misunderstanding of the role of credit that lay behind this policy.

The Crop Lien Programme generated costs in the following ways:

(1) it detoured extension agents from their more traditional tasks to undertake the loan evaluation and dissemination of short term credit;

(2) it detoured the staffs of the People's Cooperative Banks from their regular portfolio to service the dissemination and loan collection of the Crop Lien portfolio;

(3) the high delinquency record of the programme compromised the effectiveness of other public sector loan programmes (through the Agricultural Credit Board–People's Coop. Bank network and the Self-Supporting Farmers Development Programme) as bad habits of repayment were inculcated by the lax administration of the Crop Lien programme, spilling over to a growing degree of casual and irresponsible behaviour in honouring obligations with other programmes, reinforcing the image that all public sector credit programmes are nothing more than income transfer programmes;

(4) it misallocated many of these loan funds to borrowers who very likely diverted their use for consumption purposes and other non-agricultural uses; and

(5) it incurred a high opportunity cost in the use of these funds in that other valuable investment opportunities to service farmers' needs were foregone or sacrificed by this use of funds.

Three serious inequities were experienced in the mobilization and dissemination of these funds:

(1) non-interest borrowing costs were substantially higher for smaller than for larger borrowers underscoring the fact that allegedly cheap credit is not necessarily cheap to small borrowers;

(2) while a large *number* of borrowers were reached in the first year of the programme, this widespread incidence is misleading in that there was a much more concentrated distribution of the total *value* of the portfolio; and

(3) as in any subsidy programme, these resources came from the public treasury which in effect meant that a regressive tax structure or an equally regressive incidence of inflationary financing lay behind the generation of these funds that became income transfers.

Finally a root cause of the difficulties surrounding the Crop Lien Programme lies in its conception of the role of credit in the process of rural development. Credit at concessionary rates of interest well below the rate of inflation (i.e., negative real rates of interest) is not an efficient or an equitable policy instrument to deal with the principal problems of rural development. Credit diversion, resource misallocation, portfolio concentration, periodic lender crises of viability and political patronage, invariably transform these efforts into counterproductive actions creating unintended negative consequences with high social costs. Agricultural credit programmes are initiated because they are easy to start or expand, because they can be implemented rapidly and because their ultimate effects (and true social costs) are diffused and hidden.

Distorting and weakening the financial intermediation process in an attempt to reach small farmers with a 'quick fix' is self defeating in the long run. Credit instruments are not the most appropriate tools to use for this task. Rather, effort should be directed towards those elements that do reach the smaller farmer more effectively such as product prices, marketing channels and research and extension activities. Appropriate policy action and subsidized investment is required to:

(1) remove price controls on domestic foodstuffs and artificially priced cheap food imports that indirectly compete with domestic food producers;

(2) reduce the risks and costs of marketing for small farmers by subsidizing the expansion of wholesale and related storage facilities that can smooth out price and income fluctuations; and

(3) improve the capability of local agricultural research and extension activity with a view to developing better soil conservation programmes and crop practices, and high yielding variety packages for small farmers.

If these policy initiatives are taken, realistically priced formal credit (which even in the best of circumstances is only going to reach a relatively small subset of the total number of farmers) can be used more efficiently and productively with high levels of repayment, greater chances for lender viability and increased savings mobilization. For those farmers that are outside the formal credit network, increased income will be more achievable through a pricing environment which emphasizes incentives rather than penalization, and a more serviceable marketing, research and extension infrastructure that reduces risk and costs and increases rates of return to farming.

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