WP: 167

167

Working Paper



IIM NP-16)



INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD

Costs of Operations in Agricultural Financing by Formal Agencies

by B.M. Desai

W P No. 167 JULY 1977

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage

INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD

Costs of Operations in Agricultural Financing by Formal Agencies

B.M. Desai*
Indian Institute of Management
Ahmedabad

Ι

Introduction

The purpose of this paper is to, first, briefly discuss the main elements of costs in agricultural finance operations of formal agencies. Secondly, the sources of high administrative costs are identified. And finally a strategy is proposed for reducing these high costs. These objectives are discussed mainly in conceptual terms. Wherever possible the available costs data are also used for empirical validation of analytical arguments. However, in India these data are not yet adequately documented. Nor are the experiences of group or area approach to agricultural financing adequately studied.

^{*}I am grateful to Shri C.E. Kamath, Chairman, Canara Bank, Shri L. D'Mello, Chief Economic Adviser, and Shri T.K. Sinha, Chief Officer of State Bank of India, and to Professors C. Rangarajan and G.M. Dessi of the Indian Institute of Management, Ahmedabad for their valuable comments on an earlier draft of this paper. I am alone, however, is responsible for the errors of omission and commission.

Elements of Costs in Agricultural Financing Operations

The four main elements of costs of operations of any formal agency would include (i) administrative costs, (ii) cost of capital or money borrowed for the lending operations, (iii) allowance for default, and (iv) allowance for inflation _1_7. The first three elements are small in magnitude for informal lenders than that for formal agencies / 2_7. Consequently, the formal lenders have a strong comparative disadvantage, relative to informal lenders, in giving and servicing loans to farmers. Further, commercial banks in most low income countries find agricultural finance operations unattractive in relation to the finance operations for the industrial and urban sectors. This is because, agricultural finance operations entail servicing of (i) larger number of accounts for a given amount of loan, and (ii) higher premium for risks arising from absence of well defined collateral, excessive defaults, etc. Government sponsored programmes are, therefore, common in many countries. For example, in India cooperatives have been organized for meeting rural financial needs. Sovernment extensively participates in the share capital and loanabl

funds of these cooperatives. Lately, the commercial banks have also

Servicing of a loan account would include such activities as identifying clients, evaluating their loan requirements in terms of amount, purpose, etc., monitoring the end-use of loan, and recovery of loan.

pose they have been given incentives. Some of these are: commercial banks like land development banks are now extensively refinanced their agricultural advances by the Agricultural Refinance and Development Corporation (ARDC); also their agricultural advances are exempted from total advances for the purpose of computation of the norm that banks should not exceed the ratio of 5% between their term lending and the deposits etc.

The costs of agricultural finance operations of both cooperative and commercial banks in India are not yet documented. What is known is that the differences between the interest rate at which these agencies borrow from the Reserve Bank of India (RBI) and the rate of interest at which they lend their money to their clients is considered to be sufficient to meet the administrative costs in lending operations. Thus, for example, if state cooperative banks borrow from RBI at 7% interest rate, then they can lend this money at interest rate varying between 7.50 and 8.25%. The corresponding lending rates of interest that could be charged by the District Central Cooperative Banks (DCCB) and Primary Agricultural Cooperative Societies (PACS) are, respectively 8.75 to 9% and 9 to 10.5%.

In this reckoning, assuming that these agencies undertake only lending operations, any surplus left after meeting the administrative costs from the differences between the borrowing and lending interest rates would be the profit for the concerned financing agency. However, this profit may not represent the true profit of this agency because the allowances for defaults² and for inflation may have been inadequately considered in determining the lending interest rate. Moreover, it is doubtful whether this interest rate is sufficiently high to cover entire administrative costs³. It is for this reason sometimes finance to these agencies is provided at interest rates lower than going market rate.

The interest which a formal lending agency would have to charge on a loan of Rs. 100 is estimated to be Rs. 22 to

In 1971-72, the overdues as a percentage of outstanding loans to agriculture was 44 in the case of primary cooperative societies in India. The corresponding percentage in the case of Commercial Banks in India was also around 45 \(\sum_3 \) \(\sum_3 \). Also see Annexure 1.

In 1973-74, about 30 per cent of the primary credit cooperatives in India had incurred losses. _On an average the societies incurred a loss of Rs. 3000 / 4/.

This estimate considers all the four cost elements described earlier. Moreover, the share of administrative costs alone in the total charges works out to 38 to 46%. This share would obviously be higher if the allowances for defaults and for inflation were ignored in determining the lending interest

⁴ Details of this estimate are:

Costs		<u>%</u>	Notes			
i)	Administrative	10 ^a (Median)	^a This excludes cost for technical assistance to farmers, and those for auxiliary marketing and other services.			
ii)	Cost of Capital	3 ^b - 10 ^c	^b Concessional rate on public capital			
iii)	Allowances for defaults	5 (10 max)	^C Cost of a savings programme			
iv)	Inflation rate	4 (Median)	dThe cost of capital is taken as the actual cost of capital borrowed rather than the opportunity cost of capital. Perhaps opportunity cost of capital may not exceed 10%.			
v)	Allowances for	0-6	•			

v) Allowances for 0-6
funds not on
loan (i.e. surpluses of the
agency)

Source: Donald Gordon, <u>Credit for Small Farmers in Developing Countries</u>, Westview Press, Boulder, Colarado, 1975, pp.112-116.

It is therefore important to identify the sources of wager costs in administering the agricultural finance operations. It is also essential to formulate a strategy of financing operations which would help reduce these costs. This is because the financing agencies must earn sufficient to continue and stabilize their operations for agricultural and other sectors.

Both of these are now discussed in what follows.

⁵ In their study on economies of scale in banking Rangarajan and Mampilly found that the ratio of wages to total expenditure varies between 70 to 80%. The other elements in the costs that were considered by them were (i) printing and stationery, (ii) postage, telegram and telephones, (iii) rent for premises, and (iv) depreciation of physical assets. They have excluded interest charges from costs because there could be no scale economy in this element. See "Economies of Scale in Banking," C. Rangarajan and Paul Mampilly, in <u>Technical Studies Prepared</u>
for The Banking Commission, Vol I, Reserve Bank of India, 1972,
pp 244-268 (5). In the case of various District Central Cooperative Banks in Gujarat and Rajasthan the ratio of wages to total expenditure ranges from 57 to 84% (See Annexure 2). The other items of costs are rent, taxes, insurance, electricity and telephone charges, postages and telegraphic charges, law charges, auditors! fees, depreciation on and repairs to property, stationery and printing, travelling allowances and sitting fees paid to the local committee members and directors, advertisement expenses, etc. See Statistical Tables Relating to Cooperative Movement in India, 1973-74, Part 1, Reserve Bank of India / 4).

III

Sources of High Costs

Assuming that loanable funds are available with a financing agency its function of credit supply requires, in operational terms, the following tasks:

- 1 Identification of clients, and
- 2 Appraising loan requests of the clients.

Both these tasks entail use of more manpower and other resources for a given amount of agricultural advances than that for industrial advances.

1 Client Identification

First, the number of clients that have to be identified for a given amount of loan is larger for agricultural advances than for industrial advances. Further, these clients from rural sector de not on their own approach banks for loans. This is because of a variety of reasons. In the case of some clients it is their total unfamiliarity with such agencies which prevent them taking an initiative. In some other cases it may be because of the risks of breaking the age-old secured relationships with the informal lenders which inhibit them to voluntarily approach the formal agencies. This, in turn, requires the formal agencies to make special efforts to induce the clients to come forward for their loans. The first step in this process is to know about the economic and other activities of the rural clients. Inasmuch as the

financing agencies are unfamiliar to the villagers' activities they require new efforts to gather information and knowledge. The knowledge of financing agricultural economy that these agencies possess largely relate to the trade financing alone. Even this knowledge is more useful in the context of agriculture that is characterized by static and low resource productivity. Further, the sheer physical access to the rural clients entails use of more resources because they are geographically widely dispersed and the transport—cum—road facilities to reach them are inadequate and poor. Consequently, the task of client identification must be done keeping in view the availability of new technology and physical infrastructure facilities.

2 Appraising Loan Requests of the Clients:

Under this task the financing agencies need to collect information that would help in formulating alternatives for servicing loan requests. For this purpose they would need information about the end-use, amount and period of loan, method of disbursement, monitoring and recovery of loan, and about the nature and type of collateral for the loan.

Unlike industrial clients the agricultural clients cannot provide this information without the assistance of the bank's personnel. Moreover, even the banks cannot obtain necessary information for technical and economic feasibility without

ments. Both these add to the usual costs of administering a given amount of loan. Secondly, it is likely that most working capital and fixed capital loan requirements of villagers are shorter in duration than those of the industrial clients. The shorter the duration of loan the higher would be the administrative costs on an annual basis. Thirdly, the method of disbursement, monitoring and recovery of both working capital and fixed capital loan requires use of more administrative and other resources for agricultural clients than for industrial clients. This is because of the difficulties of using "cash credit system" for agricultural advances.

Under this system, at the request of the client, the bank opens a cash credit account for the amount sanctioned to such borrower. From this account the borrower ithdraws money whenever he needs it. He continues to do so as long as he repays the money withdrawn earlier. Normally, such an account is created for a year. The bank charges interest for the period for which the amount actually borrowed remains outstanding in this account. In case the borrower does not use this account, he is charged a fixed amount for every quarter. Such 'cash credit system' is sanctioned against a variety of collateral like hypothecation, pledge, demand promissory note, land and buildings etc. This type of 'cash

credit system' cannot be followed for most agricultural clients, particularly in the initial stages of development.

In the absence of such system the financing agencies directly disburse and monitor the loan for the period agreed upon and recovers the same after this period. This in turn entails repeated inspection and other visits including that for recovery by the banks' personnel. Finally, the examination of nature and type of collateral offered by the villagers for their loans also necessitatesuse of more resources. For example, the verification of title of land ownership requires checking of records other than those provided by the clients. The examination of anticipated crop-produce as collateral would also require frequent visits to the farms.

ΙV

Strategy For Reducing Costs

At the outset, it is not intended here to argue for reducing the lending costs by lowering either pure interest rate i.e. the cost of capital, or the premium for risks arising from higher default rate. This is because pure interest rate is already low enough. It varies from about 4% to 10%, depending on whether the capital is borrowed from the government or the Reserve Bank of India. Even the cost of capital borrowed through mobilizing savings from the people in general is

also likely to be low. Secondly, the pure interest rate is low enough to encourage misallocation of resources, since it is unlikely to represent the 'true' scarcity of capital in the country. Thirdly, and incidentally, subsidizing pure interest does not ensure the supply of capital to the borrowers for whom subsidization is meant. Fourthly, if subsidy is at all needed it is best to give it at the source at which it is needed. For example, if subsidy is needed to encourage the use of a particular material input, it is best to subsidize its price rather than subsidize credit for this input. Finally, and more importantly determination of pure interest rate is beyond the control of any single financing agency. And hence it is prudent to first identify those elements of lending costs over which the financing agency has relatively more control.

As regards lowering premium of risks arising from higher default rate is concerned, first, it may be considered that this should not be included as an element in determining the lending costs. Even if it is included, it is likely that this can be lowered through innovations in evaluation, monitoring and control operations for loans supply. To this we now turn.

The strategy under consideration for cost reduction attempts to identify alternative methods of undertaking financial services operations.

The basic future of this strategy-centres around the idea of group or cluster approach. This feature is already recognized beneath the area approach of financing emphasized since 1969 when banks entered the rural finance business. Indeed, this approach was advocated for, among other reasons, it would lower the cost of operations $\sqrt{6}$.

The group approach of financing can enable the banks to reach a larger number of clients through a given amount of administrative resources. As noted earlier, banks being labour-intensive industry, labour itself is the major source through which it can reap the scale economies. Ironically it is through this source only the banks can suffer the diseconomies of scale, "if labour loses motivation due to sense of insignificance, and if management control is dissipated" $\sqrt{5}$. Between these two outcomes, it is obvious that the management would choose the former. The group approach of financing can help operationalize the scale economies and then assist cost reduction⁶, assuming that defaults do not rise. This assumption is not difficult to realize since

An illustrative study of area approach through village adoption by a branch of a commercial bank in India shows that the costs of providing a given amount of short-term credit to farmers for this approach are lower compared to those for scattered approach \(\frac{7}{3}\). Under this new approach the bank officials had organized four different groups consisting of 15 farmers each. Every farmer in each group was individually given credit. This farmer was required to stand as a guarantor for two other farmers in his group.

The group approach under consideration here recognizes the need for inter and intra group checks and balances. Moreover, the recent experiences in group lending by commercial banks in India and elsewhere show that the default rate is relatively low. Thus, the proposed approach is different from the group approach implied in the cooperatives. The groups are to be formed, as far as possible, through the process of concensus among the entities which come together. Again, this is unlike in the cooperatives which are at present formed through the official or government sponsorship.

Cluster or group finating can be organized in different ways or manners. These are (i) villagers within a village, (ii) villagers together with some commercial entities who are functionally dependent on each other; for example, villagers, input dealers, crop-produce buyers, and processors, and (iii. villagers together with some commercial and non-commercial intities including government departments who provide auxiliary services \$\int_97\$.

The same illustrative study also shows that the defaulters under the area approach may not be more than half of those under the scattered approach of providing finance / 8 / . Some banks have mixed experiences in this regard, despite the fact that group financing was organized through both informal and cooperative society organizations. In some cases, farmers were even reluctant to participate because of incompatibility of groups due to caste, status and such other factors.

In all the three different manners—of organizing group financing, more than one group pust be formed so that each sub-group can act as a check on the other and thereby induce some competition. Even the involvement of government departments should be organized such that more than one person is available so that each can be associated and made responsible for every sub-group. Same principl should be used for forming groups of second and third nature. It is this principle which is most crucial to safeguarding against the formation of vested interests in different groups and sub-groups.

The critical feature on the basis of which the earlier referred three groups are formed is the functional interlinkage among the members of each group or even a sub-group. Moreover, the instrument through which the functional interlinkages are achieved should under the control of a financing agency. Also, it should be impersonal in nature. Instruments of this kind may be identified, after appropriate modifications, from amongst the existing indigenous bills of exchange, in addition to introducing new bills, and other methods including varying terms and conditions for rediscount.

The earlier referred problem of incompatibility of groups due to caste, status etc. may also get resolved, if such financial instruments are used.

For each of the above noted three groups, the banks can formulate schemes or projects. These projects need not be restricted to loan operations alone. They may also cover the savings mobilization operations. Moreover, the projects may also be kept flexible enough to cover such practices as rediscounting of bills, credit for marketing of inputs rather than for storage alone, credit to the ultimate users routed through the input dealers-cum-product-buyers etc.

In their formulation the banks should cover critical variables relating to operations for financial services. These would include, among others, information for loan appraisal including monitoring and control and for the extent and timing of cash surpluses. Also, the banks should clearly identify responsibilities and powers of different entities with regard to appraisal including collateral scrutiny, and recovery of loans, besides inducing financial savings. The new strategy would also make it possible to reduce the size of application forms, and the need for loan approval procedures [10]. For example, for appraising working capital leans for crops the use of incremental income criterion can be avoided and thus the form size can be reduced. It is well known that the tangible collateral like land cannot be enforced in actual practice. And yet banks insist on it, perhaps because the threat of dispossession is believed to be a strong spur to loan repayment. Whether or not such a belief is justified, the

possibility of dispossession con lead to creating acute hostility and mistrust between the clients and the banks. This type of collateral need not, however, be required under the group approach of financing since it by definition makes possible the use of cosigners as collateral. Moreover, the need for inducing discipline for loan repayment would be met by the mutual pressure of members of sub-groups and groups. Also the use of multiple collateral including land as is presently done by some banks can be avoided under the new strategy. The loan approval procedure can also be simplified a great deal if delegation of approval authority is liberalised. This cannot be done without clearly defining the corresponding responsibilities of the officers. The officers should be responsible not only for sanctioning the loan, but also for its monitoring and recovery, in addition to that for inducing financial savings.

V

Summary

Four major elements of lending costs are (i) administrative costs, (ii) cost of capital, (iii) allowance for premium for risks arising from higher default rate, and (iv) allowance for inflation. In India, the first two elements are known to be taken into account. However, it is doubtful whether the last two elements are considered in determining the lending rate of interest, despite high default rate for both cooperative and

commercial bank loans. In such rockoning, the administrative costs account for an overwhelming share, varying from 70 to 90%, in the total costs of operations. Even otherwise, this element alone is likely to claim a share of about one-half or a little less. It is, therefore, important to identify sources of high costs and the ways to reduce them. For this purpose, it is essential to concentrate on administrative costs, because no single financing agency can greatly reduce the pure interest rate i.e. cost of capital.

Moreover, in India there does not exist much scope to reduce this cost element. In 1973-74, nearly 30 per cent of primary credit cooperatives were operating at losses.

The sources through which administrative costs run high include, among others, (i) large number of accounts for a given amount of loan, (ii) absence of voluntary approach to the banks by the rural clients, (iii) poor physical accessibility, (iv) need for coordination with other agencies including government departments, (v) need for collecting information from sources other than the prospective clients, and (vi) need for using direct and more resource—consuming methods of loan appraisal which consists of disbursement, monitoring and control including recovery of loans. The main feature—of a strategy for reducing administrative costs centres around the idea of group approach to financing. This

feature has been appreciated beneath the area approach of financing

that was initiated some years ago. The group approach of financing can enable the banks to reach a larger number of clients with a given amount of administrative resources. It can assist banks in achieving scale economies and thereby reduce costs and increase their profits which are so crucial to stabilize and expand their rural finance business.

The group approach under consideration here recognises the need for inter and intra group checks and balances. It further emphasizes voluntary formation of groups with minimum direct sponsorship from government. Moreover, it underscores the crucial importance of forming sub-groups within groups so as to induce some competition and thereby inhibit the formation of vested interests. Even the involvement of government departments is to be organized such that this ultimate aim is realized. And for this purpose, it is suggested that different officers from the same department are associated, wherever necessary and possible, with each sub-group within one group. Group financing can be organised for (i) villagers within a village, (ii) villagers together with commercial entities such as input dealers, producebuyers, processors and so on who are functionally dependent on each other, and (iii) villagers together with both commercial and noncommercial entities including government departments.

The critical feature on the basis of which these groups are

formed is the functional interlinkages among the members of each group or even each sub-group. Moreover, the instruments through which the functional linkages are achieved should be under the control of a financing agency. Also, it should be impersonal in nature. Instruments of this kind may be identified, after appropriate modification, from amongst the existing indigenous bills of exchange, in addition to introducing new bills and other methods including varying terms and conditions for rediscount.

For each of the three ways of organizing groups, financing agencies can formulate schemes or projects. These projects need not be restricted to loan operations. Instead, they should also cover the operations relating to financial services such as savings mobilization, routing credit to villagers through dealers, terms and conditions for rediscounting of bills, and so on. Such projects can help banks economize in collection and use of information for client selection, loan appraisal including monitoring and collateral scrutiny and loan recovery. Equally important under the new strategy is the possibility of accepting collateral and loan appraisal procedures which entail use of less administrative resources. Indeed, what is visualized is the technological change in management of financial services. To realize this the banks would require not only the new financial instruments but also the delegation of powers. Obviously, this cannot be done without clearly defining the corresponding responsibilities of officers in relation to loan approval, monitoring, recovery and savings mobilization functions.

SELECTED REFERENCES

- (1) Donald Gordon, <u>Credit for Small Farmers in Developing Countries</u>, Westview Press, Boulder, Colarado, 1975, Chapters 9, 10, 11 & 16.
- (2) Bottomley Anthony, "Interest Rate Determination in Underdeveloped Rural Areas," <u>American Journal of Agricultural</u> <u>Economics</u>, May 1975, pp 279-291.
- (3) Reserve Bank of India, Report of the Study Team on Overdues of Cooperative Credit Institutions, Bombay, 1974, pp.16-18.
- (4) Reserve Bank of India, Statistical Tables Relating to Cooperative Movement in India, 1973-74, Part I.
- (5) Rangarajan C and Paul Mampilly, "Economies of Scale in Banking," in <u>Technical Studies</u>, Banking Commission, Reserve Bank of India, 1971.
- (6) Reserve Bank of India, <u>Financing of Agriculture by</u>
 <u>Commercial Banks</u>, Report of the Seminar held at Bombay
 from December 6-8, 1968.
- (7) Desai B.M., and S.C. Bandopadhyay, Village Adoption—A Strategy for Intensive Agricultural Financing By "A" Commercial Bank Branch, CMA 343 (R), Indian Institute of Management, Ahmedabad, 1976.
- (8) Donald Gordon, op. cit., pp. 51-52, 155-158, and Desai, et. al., op. cit., p. 19.
- (9) Desai BM, "Formal and Informal Credit Sources in Tribal Areas: A Case of Dharampur Taluka", <u>Artha-Vikas</u>, Vol XII, Nos 2: July-December, 1976.
- (10) Donald Gordon, op. cit., pp. 118-128.

Annexure 1 Distribution of District Central Cooperative Banks And States According to Overdues As A Percent of Outstanding Loans, as on June 30, 1972.

% -	. No. of District Central Coope- rative Banks		No. of State having PACS
20 and below	38	30 and below	. 10
20 - 40	110	30 - 45	2
40 - 60	89	45 - 60	9
60 ~ 80	78	60 and above	7
Above 80	26		
	341		28

Source: Reserve Bank of India, Report of The Study Team On Overdues of Cooperative Credit Institutions. July 1974, pp. 12 and 17.

١

Annexure 2

Costs Of Operations Of District Central Cooperative Banks in Gujarat and Rajasthan

					Year ^		1973-74	
G u	 j a r a	t		Ra	jast	han	~ _	
)istricts	Sala- ries Rs.	Other costs*	% of salar-ics to total costs	Districts	Sal- aries Rs	Other costs* Rs	% of so- laries t total costs	
Ahmedabad Amreli Banaskantha Baroda Bhavnagar Broach Bulsar Jamnagar Junagadh Kaira Kodinar Kutch Mehsana Panchmahals Rajasthan Sabarkantha Surat Surendranagar	4313 550 833 1975 1583 1021 1071 1510 3553 419 317 2044 1279 2399 2170 1657	1270 138 358 708 450 508 422 221 906 657 104 568 298 973 604 701 366	77.3 79.9 73.6 77.8 82.5 82.5 84.4 80.3 78.3 80.8 75.6 81.9	Ajmor Alwar Banaswara Barmar Bharatpur Bhilwara Bikanor Bundi Chittorgarh Churu Dungarpur Gragar Jaipur Jalore Jhalewar Jhunjhunu Jodhpur Kota Nagaur Pali Sawai Madhopur Sikar Sirohi Tonk Udaipur	548 860 201 1018 425 1218 5354 1208 5744 205 4461 425 461 425 461 219 436	234 222 335 100 386 173 157 49 240 135 1264 153 1264 158 158 158 158 158 158 158 158 158 158	70.1 79.5 37.4 67.9 72.5 70.5 68.0 71.2 72.1 75.3 77.2 81.5 77.2 81.5 77.2 77.2 77.2 77.2 77.2 77.2	

 $^{^{\}mathrm{t}}$ Items included in this category are listed in footnote 2 in the text of the paper.

Source: Reserve Bank of India, op. cit., Part I