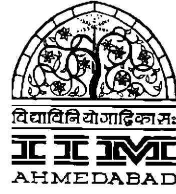

Working Paper

RESTRUCTURING RURAL FINANCIAL INSTITUTIONS

By

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Restructuring Rural Financial Institutions

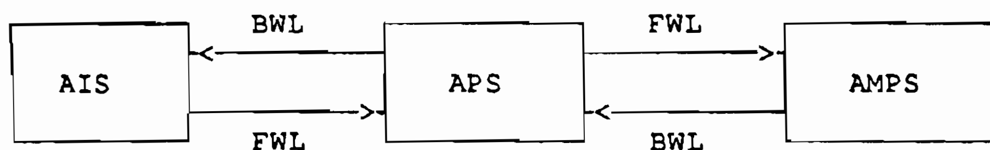
Bhupat M. Desai

Introduction

India like most countries in the world has pursued **rural growth with equity, integration of rural financial markets**, and **viability of the formal rural financial institutions (RFIs) as objectives** of rural credit policy. Again like most countries it has utilized two aspects of this policy; these being **institutional development** (i.e. non-price instrument) and **interest rates** (i.e. price instrument). Like most countries except in Sub-Saharan Africa we have done well in **structure** related aspect of institutional development. But this is much less satisfactory in so far as **process** aspect of this development is concerned; only exceptions are Japan, South Korea, Taiwan and the U.S.A. (hereafter called four successful countries) (Desai and Mellor 1993). This aspect is concerned with **strategic, systemic** and **procedural principles** of organizing institutional development. Two features of this aspect appear to be missing in various proposals being considered now for restructuring RFIs. These are: (1) nature and extent of **decentralization, autonomy** and **accountability** of RFIs, and (2) nature of **discipline** and **dignity** between these institutions and their clientele. This paper would examine various proposals from the standpoint of these features. It would first state these proposals. It would then discuss reasons which seem to have prompted these proposals. This is followed by a formulation of an alternative proposal for restructuring RFIs. Customary concluding section follows this. Before discussing these let us briefly discuss why RFIs are required, what is our rural banking set-up, and what are its broad functions and accomplishments emerging from the past several decades of its working.

Both early and more recent monetary and finance theories reach a **common conclusion** that **finance influences** not only prices but also **employment and output growth**--the real factors in **economic development**. It does so through encouragement of private investments (including working capital) and financial deepening of any economy/sector. And it requires **land and labour augmenting technological change** so critical for agriculture (Desai and Mellor 1993). RFIs in India consists of **vertically integrated** two/three tiered state cooperatives, state cooperative land development banks (CLDBs), rural branches of the public sector commercial banks (NCBs), and the Regional Rural Banks (RRBs). These RFIs have somewhat **decentralized structure** including field-level offices. They (1) make **direct** loans of wide variety to farmers (functioning in agricultural production sub-system [APS]), (2) extend **indirect** loans to farm input dealers, rural electricity agencies (operating in agricultural inputs distribution sub-system [AIS]), and to cooperative agro-marketing and processing (AMPS) enterprises, (3) provide **technical** services, (4) undertake other **services like input** sales by Primary Agricultural Cooperative Credit Societies (PACS), coordination with the government, etc. and

(5) collect **equity capital and/or deposits**. These functions encourage **backward** (BWL) and **forward linkages** among the three agricultural sub-systems shown diagrammatically below.



These linkages **accelerate increases in agricultural productivity, production, value added and incomes, besides improving ability to repay loans.** RFIs also benefit by **reaping scale and scope economies** through spreading common transaction costs and risks in credit business. Significant performance of the above mentioned last four functions is not much recognized.[1] Rural banking has become somewhat **decentralized, diversified, multiple** and **joint-products oriented.** This character needs to be urgently strengthened for it is in this respect the four successful countries distinguish themselves. This would greatly facilitate accelerating its accomplishments, some of which are given in **Table 1.**

Various Proposals for Restructuring

Beginning with the Agricultural Credit Review Committee (ACRC) in 1989 several proposals of restructuring RFIs have emerged. Major ones are:

(1) Merging RRBs with their sponsor NCBs (ACRC 1989);

(2) Merging RRBs with the rural branches of NCBs and creating a separate Rural Banking Subsidiary of the public sector commercial banks (Narasimhan Committee 1991);

(3) Amalgamating all RRBs to create National Rural Bank (Parliamentary Standing Committee on Finance);

(4) Making RRBs an intermediary of NABARD;

(5) Establishing National Cooperative Bank[2] (ACRC 1989);

(6) Creating branches of State Cooperative Banks (SCBs) and State Cooperative Land Development Banks (CLDBs) to gradually replace PACS, besides proposal (2) above (Dandekar 1993);

(7) Voluntary agencies (NGOs) being intermediaries between RFIs and farm households (EPW 1993);

(8) Self-help Groups (SHGs) of the rural poor as intermediary channels between RFIs and the ultimate client (EPW 1993);

(9) Moneylenders as agents of RFIs to serve the rural households (Bell 1990 and EPW 1993) and so on and on.

Table 1
Some Findings on Institutional Finance for the Agricultural and Rural Sector

		Years			
		1951-52	1961-62	1971-72	1981-82
1	%of Formal Credit to total borrowings of rural households	12.3	18.4	31.7	54.6
		Years			
		1960-61	1968-69	1978-79	1988-89
1	No. of field-level offices	212,219	173,423	128,101	146,861
		Rs. Million			
2	'Direct' Agricultural Credit Outstanding (APS)	2,546 (4.56)	10,674 (19.14)	55,770 (100.00)	304,712 (546.37)
3	'Indirect' Agricultural Credit Outstanding with Inputs Dealers, Rural Electrification Agencies (AIS), and Cooperative Agro-marketing and Processing units (AMPS)	Na	3,178 (30.41)	10,449 (100.00)	21,032 (201.28)
4	Total Agricultural Credit Outstanding (i.e. 2 + 3)	2,546 (3.84)	13,852 (20.32)	66,219 (100.00)	325,744 (491.92)
5	Total Rural Credit Outstanding	2,546 (2.85)	16,361 (18.33)	89,234 (100.00)	513,339 (575.27)
6	Total Rural Deposits Balances	1,995 (1.50)	17,879 (13.41)	133,346 (100.00)	717,551 (538.11)
7	% of Rural Deposits to Agricultural output	2.86	12.64	32.12	53.73
8	% of Rural Credit Outstanding to Agricultural Output	3.65	11.57	21.50	38.44
9	% of Agricultural Credit Outstanding to Agricultural Output	3.65	9.79	15.95	24.32
			Years		
			1978-79	1982-83	1986-87
1	% share of Marginal and Small Farmers in total APS Loans:				
	(a) Short-term loans		39	45	51
	(b) Term-Loans		31	53	

Figures in brackets are percentages with a base year of 1978-79
APS Agricultural Prodction Sub-System
AIS Agricultural Inputs Distribution Sub-System
AMPS Agro-marketing and Processing Sub-System
Na Not available
Source: "Scale and Scope Economics in Rural Banking" Their Implications to Rural Credit Policies", Bhupat M Desai, Keynote Paper for the National Conference on *Agricultural Credit System: The Next State*, Papers and Proceedings, Agricultural Economics Research Association (India), Indian Agricultural Research Institute, New Delhi, 1994.

Reasons for Restructuring

The literature cited above seems to be groping about the reasons for restructuring. However, it appears that the following reasons may have guided one or the other proposal.

(1) Multi-agency approach seems to lead to inefficiencies and shirking the responsibility from one institution to another;

(2) Field level units like PACS and RRBs are not self-reliant and becoming overdependent on the super-structure including NABARD/RBI;

(3) Autonomy of RFIs is inadequate;.

(4) Financial viability including loan recovery of RFIs is inadequate; and

(5) Credit delivery channels are clogged due to high loan overdue.

We will discuss each of the first three and fourth and fifth reason together vis-a-vis various proposals to understand their rationale.

Multi-Agency Approach

It is legitimate to visualize that multi-agency approach can lead to more than one loan to one and the same borrower, higher transaction costs to the borrowers, making borrower to run from one institution to the other and in the process each institution evades, and so on. But none of the proposals has underneath a sound empirical basis to validate these. Rigorous validation would require to find out whether **more than one loan** to one and the same borrower is **for the same purpose**. This is because, for example, a farmer needing both crop loan and long term loan would borrow the former from PACS which does not make long term-loan and latter from CLDB which does not extend crop-loan. But this is not inefficiency. On the contrary it is an efficient behaviour because such two loans are complementary to more fully increase production and employment. Granting that there may be cases of **duplication of loans for the same purpose**, the next question is why inter-institutional coordination through Lead Bank Scheme and more recently, Service Area Approach failed. Unless these types of questions are examined above mentioned problems are more fears than realities. None of the proposals has a potential to reduce such fears or shall we say realities! Merely reducing the number from four to three or two as is implied in first four and sixth proposals would not prevent these. While Lead Bank Scheme and Service Area Approach may be necessary for inter-institutional coordination, they also imply lack of trust in our rural folks. Is this mindset healthy? Similarly, is the mindset of **not punishing** cheaters like rural folks and/or RFIs officials who connive for **duplication of loans** legitimate? Lastly, multi-agency approach is not unique to India. It is common all over the world (Desai and Mellor 1993).

Dependency of RFIs

It is often alleged (to some extent rightly) that PACS and RRBs are overdependent on their super-structure for share capital, and other borrowings to make loans and other businesses. Neither the extent of dependency nor its nature nor its reasons are discussed in the literature cited earlier. Moreover, most of the proposals do not offer directions to reduce this dependency.

Table 2
Deposits Mobilization by Rural Financial Institutions (RFIs)
(Rs. million)

	RFIs	Years			
		1960-61	1968-69	1978-79	1988-89
1.	Primary Agricultural Cooperative Credit Societies (PACS)	146 (6.7)	568 (26.2)	2164 (100.0)	10498 (485.1)
2.	District Central Cooperative Banks (DCCBs)	1120 (5.7)	3508 (17.7)	19783 (100.0)	84762 (428.5)
3.	State Cooperative Banks (SCBs)	723 (5.1)	2156 (15.1)	14240 (100.0)	52110 (365.9)
4.	State Cooperative Land Development Banks (CLDBs)	6 (3.0)	60 (29.8)	201 (100.0)	1296 (644.8)
5.	Public Sector Commercial Banks (NCBs)	NA	11587 (12.2)	94960 (100.0)	526210 (554.1)
6.	Regional Rural Banks (RRBs)	NA	NA	1998 (100.0)	42675 (2135.9)

NA = Not Applicable
Figures in parentheses are percentages with a base year of 1978-79.
Sources: (1) RBI, Report on Currency and Finance, Various Issues.
(2) NABARD, Statistical Statements relating to Cooperative Movement in India, Part I, Various Issues.

Let us attempt some understanding of why federating and/or sponsoring institutions have a role for the field level units. They promote vertically integrated organizational structure to induce intra-organizational flows of both managerial and financial resources. Even RBI/NABARD has this role through its National Rural Credit Funds. Such a role is just not pioneering but also a catalytic for the development of RFIs. Both managerial and financial resources have been visualized from the super-structure to overcome/reduce problems of their non/ inadequate availability in rural areas. However, super-structure also visualized that every PACS would collect membership fee and the first share capital contribution from those who become their members and then a part of loans given to them would be collected as their share capital to build equity-base of the institution. Furthermore, it also introduced a policy of PACS offering one-half percent higher interest rate than other banks to attract rural deposits. The former seems to have delivered quite effective results; the share of government in equity capital of PACS in 1989-90 was barely 15 percent. But, PACS performance in deposits mobilization was initially less satisfactory though it improved significantly later (see **Table 2**). Nonetheless it was not as dramatic as NCBs and RRBs. Initial inferior performance was due to low incomes as well as lower choice of rural households for saving in financial form. Despite this, what may have gone wrong is that the PACS were/are not perceived by their members as safe channels to deposit their meagre surplus financial savings. This is understandable to anyone who has seen the offices and other facilities that PACS have. So learning from this is that higher interest rate was not the appropriate instrument to make PACS look like a bank. But we have missed the bus. Now

we need to make efficient use of PACS, NCBs, and RRBs in some other manner. Specifics on this and on mobilizing local equity capital would be offered in the next section.

As regards replenishing share capital of RRBs due to persistent losses, it was to some extent built-in as rural poor cannot provide large and diverse enough credit and other business. It is also because of inefficient management which we will discuss subsequently. Before discussing the third reason let us attempt to understand why RFIs resort to RBI/NABARD refinance for their agricultural credit business. First, it is mutually beneficial. RBI/NABARD can invest their funds including those from excess reserves, and government directed external loans and aids for agricultural development. Two, RFIs do not have sufficiently high potential to mobilize rural deposits compared to the investment requirements for rapid and broad-based technological change in agriculture. Such limited potential emerges from lower preference of rural households for financial savings due to the fact that they being producers prefer investing such savings in acquiring and using physical resources including family labour for their avocations. Such high preference for physical forms of saving is not unique to India. Such a preference is found in Japan and the U.S.A. even in the later stage of their agricultural growth (Desai and Mellor 1993). Moreover, such savings are seasonal, short and small because of the peculiar characteristic of agriculture. Consequently, there are surplus and deficit seasons, enterprises, households and regions with widely varying amounts which may not match well with the time profile and quantum of investment requirements. Three, it is not uncommon for the RFIs to have lack of synchronization between the time when they can mobilize local deposits and when they encounter local demand for their credit. And four, RFIs like NCBs, SCBs, and District Central Cooperative Banks (DCCBs) have also a pull of their deposits from other sectors. It is this comprehensive perspective which truly indicates a catalyst role that RBI/NABARD have played in developing institutional credit for agriculture. Thus, the dependency of the RFIs for refinance is not so much a dependency but an institutional innovation for inter-institutional, inter-sectoral and inter-regional free flow of funds for development needs. But this seems to have caused lack of involvement especially by NCBs and RRBs which tend to divert their deposits to other sectors and avenues. We need to correct this tendency suggestions for which will be discussed later.

Autonomy of RFIs

The third reason for restructuring could be to infuse more autonomy to the RFIs for their healthy development. But this autonomy has to be accountable for their ultimate goal is to protect the interests of not only their financiers but also those of the users of their funds. We will discuss their autonomy in relation to reserve requirements under CRR and SLR, priority sector lending, loan appraisal, monitoring and recovery, and determination of interest rates.

As regards CRR and SLR, it is not unique to Indian banking system. But in more recent years it has become very high for NCBs. To make it more reasonable does not require any of the restructuring proposals mentioned earlier. What is required is to reduce it to some reasonable level. Narasimhan Committee has rightly recommended this. Similarly, if priority sector lending targets have reduced the autonomy of NCBs, it is this instrument rather than the institution that needs to be modified. Narasimhan Committee itself has recommended that in future such directed lending may be only for the rural poor. We however differ for two reasons. One, credit may not be the binding constraint of the poor (Dantwala 1966, and Dandekar 1993). It could be more in the form of availability of new technology/economic opportunity and access to marketing of their produce. And two, priority sector includes not only agriculture and rural artisans but also small scale industries and exports. It seems issues related to this directed lending are confused with the issues related to the autonomy in loan appraisal, monitoring and recovery. These two sets of issues must be separated. While the priority sector lending may be continued, **the autonomy in regard to loan appraisal, monitoring and recovery** for both priority and non-priority sectors **should completely rest with the RFIs.** It is this autonomy about which there is perhaps an unanimity that the government's schemes like loan melas and loan waivers have caused the damage. Question is, does it require the restructuring proposals that are stated earlier. In our understanding it does not. What it requires is more flexible, debureaucratized and decentralized high-quality autonomous loan management. Some strategic restructuring required for this will be discussed later.

In regard to interest rates what we have is a guided market force through positive, tiered, and stable real interest rates. This is healthy for both lenders and borrowers. Countries which tried completely market determined interest rates have experienced unviable and bankrupt financial institutions because lenders made indiscriminatory lending without properly assessing return-risk features of credit projects (Desai and Mellor 1993). This may be the reason among others why countries like South Korea, and Taiwan have continued with the guided market determined interest rates for critical sectors like agriculture, exports, and infrastructure even in the wake of financial liberalization at their advanced stage of development. Even China has continued this.

In regard to the so called concessionary interest rates for agriculture and the rural poor we first note that they at present range from 11.5 to 18 percent. These rates have remained positive since more than two decades or so except during four years of exogenous shocks like oil crisis and severe droughts. Hence, by and large, there has not been any interest-rate subsidy for agriculture including the rural poor[3]. Inasmuch as expected return on investment would vary from sector to sector and from the poor to non-poor the tiered rates are the steps in right direction. While this provides a basis for demand price of credit, there is also a need to account for the expected supply price of credit (i.e.

transaction plus financial costs) in determining lending rates of RFIs (Desai 1994, and Desai and Mellor 1993). It is here far more complexity is involved which would become clear when we discuss the remaining two reasons. Suffice it to say that RFIs autonomy in interest rates is not rigid. And most restructuring proposals do not have much relevance.

Financial Viability of RFIs

Many of these proposals seem to have their origin, and rightly so, in the concerns for financial viability of RFIs. But the approach and method of assessing this viability are not appropriate. Usually financial viability is defined as unit (or average) net margin in lending. If it is positive, it is considered viable. This is arrived at after subtracting unit transaction (i.e. administrative) costs from unit gross margin which is nothing but interest spread (i.e. unit interest revenue minus unit financial cost). Sometimes this is adjusted for bad and doubtful debts ratio. Since it is lending which earns revenue it is obvious this is how viability is understood and assessed. Based on this approach ACRC declared that since unit net margin is negative for all RFIs interest rates on rural loans must be raised especially for the non-poor to improve their margins.

But there are serious shortcomings of this approach. One, it is inconsistent with the policy concerns for the viability of an institution rather than its any single product like lending or technical services. It is the institution (including rural branches) which must remain viable. This institution, as noted earlier, has diversified and multiple functions. Some of these are even *joint* in nature; for example, deposits being characterized by multiple credit creation, refinance being conditional to prior lending, overdue, etc, and technical services being embodied in loans and so on. Two, transaction costs are common to most of these operations. Their allocation to lending is artificial, arbitrary and fraught with assumptions that can prove misleading. Three, interest rates on borrowings range from zero on current deposits to 10 percent on some fixed deposits. Depending on which ones are considered and for what type of loans unit financial cost would also vary significantly. Similarly unit gross margin would vary from 1.5 to 18 percent considering the above mentioned lending and deposit rates. Four, it is not uncommon to find loans being made to depositors and/or to identify potential borrowers at their instance. Hence attributing unit gross margin to lending alone is erroneous. Five, non-interest revenues are ignored. They can and would be significant for RFIs. Six, ACRC when considered unit net margin for an institution it found it to be positive for all RFIs (except RRBs for which no such result is reported). This is not to suggest that there are no loss making PACS or RRBs or branches of NCBs. Nor is it appropriate to say that all field-level units are loss incurring. Both profit and loss making units exist as in any economic activity. Seven, ACRC's samples of both PACS and rural branches of NCBs did not even constitute one percent of their population. Nor did they indicate their age. Normally, transaction costs would be high initially but not the unit gross

margin. And lastly, seven different alternatives can be identified from the same formula to improve viability. These are (1) increase in lending rate, (2) decrease in borrowing rate, (3) lowering unit transaction costs, (4) a combination of increase in lending rate and decrease in borrowing rate, (5) increase in interest rate on loans and lowering unit transaction costs in some combination, (6) **lowering both unit financial and transaction costs**, and (7) increase in lending rate and lowering unit transaction as well as financial costs. But ACRC merely chose the first one. Be that as it may.

A careful reflection over these seven alternatives will suggest that **lowering both unit transaction and financial costs** would be most desirable from the standpoint of the rural borrowers, lenders, and the nation alike. This indeed implies higher **productivities, and efficiencies- the hallmark of growth in any institution.** That transaction and financial costs (including loan default risks cover) for rural banking can be higher is not the issue. What is more critical is **whether these costs rise less than or more than or just proportionately with the expansion.** These three are, respectively, termed **scale economies** (or increasing returns to scale) or **scale diseconomies** (or decreasing returns to scale) or **constant returns to scale.** These can be measured for major assets and liabilities together (i.e. **total scale economies**) and for each of them separately (i.e. **partial scale economies**) for any **RFI**. These require estimating a cost function that allows for constant as well as non-constant returns to scale (i.e. varying partial and total elasticities). Translog cost function permits this. It also allows for complementarity or jointness in various sources and uses of funds which is peculiar to RFIs. Both these also make it possible to study economies of scope. **Table 3** reports the recent evidences on these for PACS, CLDBs, NCBs, and RRBs.

All four RFIs have **constant returns to scale and/or scale economies in transaction, financial and total costs for their entire operations.** Even RRBs have these. In other words, their various costs rise by one percent and/or by less than one percent for every one percent increase in their business volume. This is consistent with the experiences (in transaction costs) of as many as 13 RFIs spread over such developing countries as Bangladesh, Thailand, Sudan and Honduras (Desai and Mellor 1993). These results suggest that **these institutions can improve their viability by expanding their volume of business under the existing interest rates and margins structures.** Secondly, all four RFIs except RRBs **have higher scale economies in lending and/or non-loan assets compared to other operations.** This implies that resources including staff time, travel, communication etc. should **relatively be shifted more to this activity.** Thirdly, both profit and loss-making RRBs have higher scale economies in their investment in call money market followed by lending and then major liabilities. Inasmuch as such investment siphons off resources from their areas of operations there is a need to have a ceiling on such investment. Fourthly, all four **RFIs have the least economies of scale in various costs for managing their major liabilities.** This suggests overuse of resources

Table 3

Partial Scale Economies (PSE), Total Scale Economies (TSE) and Economies of Scope (EOS) in Various Costs of RFIs, 1988-89 *

RFIs and Costs	PSE Parameters related to (i.e. % increase with 1% increase each in)			TSE (i.e. % increase with 1% increase in all operations together)	EOS Parameter
	Liabilities/ Deposits/ Borrowings	Loan Assets	Non-loan Assets/ Bank Deposits & Investments in Call and Short Money Market		
PACS					
1. Transaction costs	0.526	0.171	0.479	1.176[a]	+0.195[c]
2. Financial costs	1.096	0.091	0.056	1.243[a]	-0.154[c]
3. Total costs	0.711	0.250	0.261	1.222[a]	+0.059[c]
CLDBs **					
1. Transaction costs		1.163[a]			
2. Financial costs		0.231[a]			
3. Total costs		0.696[a]			
NCBs (MID-1980s)					
1. Staff salaries etc.	0.459	0.276		0.735[b]	+0.086[c]
2. Other transaction and financial costs	0.689	0.304		0.993[a]	+0.193[c]
3. Total costs	0.622	0.286		0.908[a]	+0.147[c]
RRBs with Profit					
1. Transaction costs	0.281	0.022	0.171	0.474[b]	+5.410[c]
2. Financial costs	0.341	0.381	0.313	1.035[a]	+0.576[c]
3. Total costs	0.359	0.241	0.153	0.753[a]	+1.277[c]
RRBs with Losses					
1. Transaction costs	0.557	0.072	0.012	0.641[a]	+0.036[c]
2. Financial costs	0.839	0.190	0.023	1.052[a]	+0.674[c]
3. Total costs	0.660	0.051	0.0003	0.7113[a]	+0.0001[c]

* PSE, TSE, and EOS are derived from the estimated transcendental logarithmic costs functions $Yi = a + b\ln X1 + c\ln X2 + d\ln X3 + 1/2\, e(\ln X1 \ln X2 \ln X3)$ where Yi is three types of costs and X1, X2 and X3 are different types of operations. Parameter e is specified to capture "joint" nature of these operations.

** For these banks costs functions considering liabilities and assets as separate operations could not be estimated. This may be because of lack of diversification in these operations.

a Statistically not significantly different from 1 suggesting constant returns to scale.

b Statistically significantly less than 1 indicating increasing returns to scale.

c For economies of scope (EOS) to exist this should be negative, and it is given by the sum of the estimated parameter associated with the interactive variable (i.e. e) and the products of the estimated parameters associated with each operation (i.e. bcd).

Source: Same as Table 1

resulting from lot of staff time, paper work and bureaucratic process especially for other borrowings. Computerization and simplified procedures for this service can lead to significant savings in these

resources. Such savings would then enable RFIs personnel to better loan appraisal, monitoring and recoveries. Even in this such savings are possible with change in work culture and technology. All these would result into high quality loan assets and just not loans. Finally, among the four RFIs it is only the PACS which have economies of scope in their financial costs which account for opportunity costs of loan delinquency. What this means is that when PACS increase their, say, loan assets marginal (i.e. incremental) financial cost decreases for, say, inputs inventory (i.e. non-loan asset). This is because the former would lead to increase in demand for inputs which would reduce inventory and its associated risks and thereby these costs would decline. The reverse process would also occur. Such scope economies can be harnessed by other RFIs by developing complementarities between, say, loans to farmers and input dealers, loans and deposits etc. Thus, **at present all four RFIs can improve their viability under existing lending rates and margins structures through expanding loans rather than by increasing lending rates** as was suggested by ACRC and was introduced by the GOI and RBI for loans up to Rs. 2 lakhs late last year.

Furthermore, when interest rates on loans are increased RFIs enjoying scale economies could suffer scale diseconomies. This is because loan business would decline significantly as rural loan demand has become more interest rate elastic overtime; this being -0.25 in early 1950s to -1.11 in mid 1980s. Such a loan demand schedule emerges when interest costs share significant part of the total costs of production in the wake of new technology adoption by farmers. This is also consistent with the experiences of other developing countries like Nepal, Bangladesh, and Brazil (Desai 1994, and Desai and Mellor 1993). Incidentally, rural households paying high interest rates for non-institutional loans cannot be indicative of their demand for loans being interest rate inelastic. They pay such high interest rates because they have no comparable options. Moreover, interest elastic nature of rural loan demand holds for both formal and informal loans (Desai and Mellor 1993)[4].

The above findings have two significant and far reaching policy implications for lending rates and structure of RFIs. One, an upward revision in lending rates is unwarranted at present because of prevalence of scale economies and/or constant returns to scale. It is also not required because it could be injurious to scale economies. And two, various proposals to restructure different RFIs on the ground of viability are also not required. This is because their profitability can be improved within the existing structure by fully reaping scale and scope economies. They are unwarranted also because some of them like Narasimhan Committee's and NGOs and SHGs as intermediaries imply specialised **RFIs different from the type emerging and emphasized.**

Now, are these proposals required to protect viability of RFIs from high and persistent loan overdues. Let us first understand causes of these overdues. These are varied and complex. But some

of the critical ones are: (1) unavailability of complementary credit such as crop loans which enable term loans to be utilized efficiently, (2) inadequate credit resulting from non-flexible age-old formula to determine the scale of finance/unit cost of investment, (3) mismatch between the time schedule fixed for loan recovery and the time when farmers can repay, (4) inadequate attention to borrower selection and monitoring, (5) unavailability or inadequate and/or untimely availability of inputs and extension services, (6) inadequate increases in production and marketable surplus, (7) natural factors like drought, floods, and inadequate rains, and (8) connivance among borrowers, lenders and local politicians (Desai and Namboodiri 1991, and Desai and Rao 1978). While first four can be overcome and are under the control of RFIs, even the fifth and to some extent sixth one can be overcome by promoting technical services, inputs distribution credit (AIS) and agro-marketing and processing loans (AMPS). Natural factors would require rescheduling past loans for which also there are now well defined policies. That leaves out the wilful default solutions for which would be discussed later. Do all of these solutions require restructuring that are proposed? Will the restructured RFIs have new and better managers or will we have these new institutions like old wine in a new bottle? Before we offer our design of restructuring RFIs some comments on Dandekar's proposal on one hand and the three proposals visualizing NGOs, SHGs and money lenders as intermediaries of RFIs are called for.

Dandekar's proposal is operationally inefficient and unachievable, and politically infeasible. It would also completely destabilize socio-economic fabric of nearly 6 lakh villages served by about 89000 PACS now. SCBs would not have required resources to replace these 89000 PACS which amount to creating more than twice the number of rural branches that NCBs have opened in last 25 years. Further, transaction costs of both borrowers and lenders would increase since both of them would be away from each other than is the case now.

As regards one more number in the channel between RFIs and the rural households we have serious reservations. We do, however, recognize that it may create more result-oriented financial intermediation especially with the assistance of NGOs and SHGs of high repute. Such NGOs and SHGs may be facilitated to create banks of their beneficiaries. These banks should be subjected to the same terms and conditions which apply to other RFIs. But this proposal of an intermediary channel has some negative and unsustainable features.

One, NGOs and/or SHGs have been involved to reduce transaction costs and to improve loan recovery and financial intermediation of RFIs. But no such intermediary will be gratis forever. Their costs would have to be borne by some one. If these costs are also considered then it may not be any better alternative than RFIs themselves reaching the rural poor. Two, SHGs are too recent experiences and past experience with group guarantee in India and elsewhere was none too happy (Desai 1982

and 1983). Three, SHGs cannot become like money lenders who operate 24 hours, and ingeniously use local credit, commodity, land and labour markets. Such interlinking of markets is perceived by the rural poor as providing not only credit but also other services. These services even include receiving loans in the form of seeds, grains etc. and repaying them in the form of labour and/or land services and/or produce. Four, many of the timely services, intimate local knowledge, etc. that NGOs/money lenders/SHGs have, can be developed by the existing RFIs if they mean business. This can also include these RFIs like SHGs making consumption loans as is successfully done by some Farmers' Cooperative Banks in Kerala (Desai and Namboodiri 1993). And lastly, such intermediaries cannot be the substitutes for PACS and rural branches; indeed they mean adverse implication to prices when only consumption loans are given, increase in intermediation costs, and an erosion of autonomy.

To sum up, we do not prefer any of the nine proposals. Moreover, none of them seems to address to the four most critical present problems of RFIs. These are their (a) low geographical density (1.3 field offices per 1000 hectare in 1989-90 which compares very poorly with 4 for China in 1979-80), (2) low and unsustained reach or coverage of farmers, (3) high and persistent loan delinquency with rural households though this is significantly lower in Northern and Southern India where technological change in agriculture has been more rapid (see **Tables 4 and 5**), and (4) inadequate autonomy, decentralization, and accountability, besides highly bureaucratized institutions. These have led to their low resource productivities, inefficiencies and inadequate viability as shown earlier.

Alternative Proposal for Restructuring

Let us first recall that all four RFIs can improve their viability through expansion in their business volume. This expansion has to be visionary. The vision is earlier described decentralized, diversified, multiple and joint-products-oriented rural banking, that is autonomous but accountable. It would be a gross oversimplification to say just expand, for such an expansion can strain RFIs as has to some extent happened in recent past. We therefore propose major restructuring in non-price instrument of institutional development.

Following Desai and Mellor 1993 it may be stated that development of RFIs in India as elsewhere has been guided by six strategic organizational principles. These are: (1) promoting multiple institutions, (2) encouraging state-oriented forms of their organization, (3) achieving vertical integration of their organizational structure, (4) creating their appropriate geographical density, (5) reaching larger number of rural clients, and (6) promoting diversified and multiple functions that are horizontally integrated. There is a need to change critical aspects of planning and implementation of these

principles. Both systemic and procedural innovations would be essential to improve RFIs X-efficiency[6] i.e. use as against allocative or purchase efficiency of their resources (Desai 1994).

Multiple RFIs

We would suggest allowing all four RFIs to function separately. We also suggest all should themselves reach the rural households. Three reasons guide these suggestions. One, in reality there is only one institution at the grass-root level to which farmers can turn to for their financial services needs. This is so ever since the introduction of District and Service Area Credit Plans. There may be a need to exercise some flexibility in this to provide a choice to the rural households. Such flexibility is also essential in the event of an agency servicing a particular group being unable to fulfil the credit needs due to lack of funds, overdue, prolonged absence and/or inefficiency of staff. Two, the four RFIs have already created processes among them and their clients which should not be destabilized. And three, these RFIs have somewhat decentralized structure which is essential for geographical, agro-climatic, and socio-economic vastness and diversity in the country. Learning derived by the staff from these so far needs to be internalized, improved and sustained at the grassroot level. This learning is nothing but a highly relevant human capital built over years for agricultural sector. Two types of systemic and procedural innovations, however, may be introduced. One, credit-cum-deposit passbook recording each transaction with each institution may be given to the client as well as other institutions. Computerization of such record especially by NCBs and RRBs, would not require storing thousands of passbooks. On the contrary it would even reduce transaction costs of RFIs. It would also eliminate duplication of loans for one and the same purpose to one individual. And two, field-level staff may be required to systematically maintain diaries of what their problems are, how have they eased them, and what are the future opportunities in their areas of operation. Such diaries may also be computerised so that the new personnel can maintain process continuity and growth.

Forms of Organization of RFIs

On state-oriented forms of organization India is not unique (Desai and Mellor 1993).[5] It was indeed prudent for two reasons. One, local village-level credit cooperatives (officially established as early as 1905) did not have access to larger financial market which was promoted subsequently through their federating institutions like DCCBs and SCBs with larger areas of jurisdiction. On a hindsight this could be considered best to capitalize past institutional structure at the grass-root level. And two, no private bank entered the rural financial market until 1969 when major ones were therefore nationalized. Their voluntary entry may have been constrained by initial problems of scale diseconomies and a perception that rural credit is always and necessarily more risky business. But if any private entrepreneur now wants to launch a rural bank or a general bank with significant rural

finance operations he should be permitted. Terms and conditions on which this bank would undertake rural banking should be on par with other four RFIs. Competition should be on level-playing field.

Recently capital base of NCBs and RRBs has been raised from the government to meet with capital adequacy norms. Similar should be done for the cooperatives especially PACS and CLDBs which unlike upper tiers have large erosion of their capital due to persistently high loan delinquencies. RBI/NABARD may directly provide share capital to these institutions which have eroded their capital drastically. It may develop memorandum of understanding (MOU) among concerned PACS/CLDBs, SCBs, and DCCBs. This MOU should encompass all the six organizational principles mentioned earlier. Moreover, as a part of this MOU, RBI/NABARD should convince state governments that henceforth it would audit the accounts of PACS also. Moreover, two important innovations may be introduced. One, beneficiaries of all four field-level RFIs may be required to regularly participate in their equity-capital. This participation could be as small as Rs.10 per beneficiary. But there should be a steep ceiling on such individual holding lest they get dominated by large and powerful capital owners from agriculture and/or industry. This financial innovation would enable these institutions to be people-oriented, decentralized and accountable not merely to the State but also to their clients. And two, CLDBs sources of finance be diversified. They may once again float ordinary debentures, rural debentures, attract funds from LIC and such other financial institutions instead of merely depending on NABARD. Such dependency is unhealthy for both these parties.

Vertical Integration of RFIs' Organizational Structure

The strategy of vertically integrated organizational structure of the four RFIs is sound. This is because of several reasons. Significant ones are (a) geographical and sectoral integration of rural financial market, (b) inadequate availability of financial resources initially more in rural areas, (c) inadequate availability of relevantly trained human resources at the grass-root level, and (d) need for guided decentralized and delegated managerial resources, structure and processes. Six important modifications are needed because of over-bureaucratization, top-down tendencies in management, and neglect of harnessing local initiatives for local utility.

One, much more autonomy and delegation of powers with accountability for field-level units are needed. There is no point in requiring these units to uniformly follow only RBI/NABARD guidelines for, say, scale of finance/unit cost of investment, margin money, and loan repayment schedule. These guidelines may be formulated separately for more and less developed areas in each district. They may moreover truly serve so rather than as statutes. Some more flexibilities are clearly warranted to account for local variations and to induce local initiatives in management of rural credit. There is now more informed judgements learned by the personnel of the RFIs. Two, apex-level RFIs

including NCBs should provide a matching sustained contribution to refinance and/or temporary credit accommodation from RBI/NABARD to their field-level units. This is needed to generate a stake and accountability of the controlling units which seem to take rural credit casually. It is also needed because in 1980s, rural deposits seem to have flown out to other areas and sectors at the cost of rural credit demand potential (compare rows 9 and 7 in Table 1). Three, NCBs may now be required to have rural credit-deposit ratio of 70 instead of 60 percent for this very reason, besides the fact that the economy of newly developing rural areas has diversified with private enterprises in farm inputs distribution business, agro-marketing and processing, other consumer goods and other industries whose credit needs must be fulfilled. Four, NCBs may also be provided refinance and/or temporary credit accommodation by RBI/NABARD for encouraging them to promote crop-loans, loans to farm input dealers and working capital credit to agro-marketing and processing enterprises which they tend to neglect (see Table 6). This is because NCBs rural branches seem to have temporary liquidity shortage since the demand for loans does not always coincide with the opportunities for deposits mobilization. Moreover, NCBs such loans to private agro-marketing and processing units may also be considered 'indirect' agricultural credit just as such loans of cooperative banks to cooperatives are treated. This would provide an incentive to NCBs to fully exploit innovative instrument of 'indirect' agricultural credit (see Table 6 which shows imbalances in APS, AIS and AMPS loans of cooperatives, NCBs and RRBs). Five, in the case of PACS staff there is a clear need to bring them into suitable regular employment terms and conditions to provide incentives and encourage accountability for high quality loan assets, input sales, consumer goods sales etc. Their apex level cooperatives together with NABARD/RBI may institute a fund with incrementally growing contributions from the PACS for promoting these. Days of honorary secretarial staff are long over as we all know. More so now when RRBs and NCBs staff have handsome salaries and other benefits. And lastly, incentives of employees of the four RFIs may be made performance-linked. Performance may be judged not merely in terms of targets for loans and deposits but also loan recoveries, examples of result-oriented better coordination with agencies providing auxiliary services including government role in extension, loan recoveries, etc.

Density of Field-Offices of RFIs

There is an obvious need to improve **geographical density of field-level offices** of NCBs, RRBs and PACS (see Table 4). There are four reasons for this. These are (i) it improves accessibility for both rural households and the formal lenders which in turn generates more intimate understanding and resulting situation specific identification of potential for lending, its recovery and deposits, (2) it enables intensifying and widening the scope of lending and non-lending operations to reap scale and scope economies which are crucial to spread common transaction costs so peculiar to RFIs, (3) it facilitates more effective competition with informal lenders and thereby enlarges coverage of rural

Table 4
Density, Coverage, and APS Loan Delinquency Rate of Field-Level Rural Financial Institutions in 1988-89

	Field-level RFIs	Density[1]	Coverage or Reach[2]	APS Loan Delinquancy Rate (%)[3]
1	Primary Agricultural Cooperative Credit Societies (PACS)	0.6038	21.60	38 (33)[4]
2	Branches/ Primaries of State Cooperative Land Development Bank (CLDBs)	0.0177	0.39	48 (13)[4]
3	Rural and Semi-Urban Branches of Public Sector Commercial Banks (NCBs)	0.3136	4.77	43 (47)[4]
4	Branches of Regional Rural Banks (RRBs)	0.1005	3.85	51 (18)[4]
	Overall	1.0356	30.61	45

1. No. of Field Offices per 1000 hectare of net sown area
2. No. of borrowers/loan accounts as a percent of operational holdings
3. This is computed as (100-loans recovered) as a per cent of demand i.e. loans due for recovery
4. These are lowest achieved in the past

Source: Same as in Table 1

households which would further induce achieving scale and scope economies, and (4) it reduces transaction costs of rural borrowers and depositors.

Table 5
Regional Variation in Farmer-Level Loan Delinquancy Rates[1] of Rural Financial Institutions, 1985-86

Agency	Northern	North-Eastern	Eastern	Central	Western	Southern	Overall
PACS	30.0	84.0	57.0	53.0	42.0	36.0	41.0
CLDBs	44.7	72.9	32.7	33.7	55.1	41.4	39.0
NCBs	38.7	64.0	57.0	47.0	49.6	39.3	43.0
RRBs	53.0	60.0	60.0	53.0	52.0	42.0	51.0

1. These are computed as (100-loans recovered) as percents of demand (i.e. loans due for recovery)

Source: "Policy Issues Relating to Irrigation and Rural Credit in India", C.H. Hanumantha Rao, in ***Economic Liberalization and Indian Agriculture***, Edited by G.S. Bhalla, Institute for Studies in Industrial Development, New Delhi, 1994.

Four concrete actions are needed. One, recent policy of closing loss-making rural branches of NCBs and RRBs may be reconsidered and reviewed. In doing so an alternative of invigorating them by the proposed changes, may be thoroughly explored. Two, the policy of establishing one non-rural branch for every two rural branches may also be thoroughly reviewed. Questions like, is it necessary to link the two, is it not just enough to have some realistic targets for the latter may be considered. Three, future expansion of branches of NCBs and RRBs may be implemented altogether differently. The prospective branch managers and the selected staff or two may intensively interact

Table 6
Various Types of *Direct* and *Indirect* Agricultural Credit of Rural Financial Institutions (RFIs)
(Rs. million)

Types of Credit by RFIs	Years			
	1960-61	1968-69	1978-79	1988-89
1. COOPERATIVES				
1.1 Direct short-term APS credit outstanding	2180 (85.6)	5219 (43.6)	15400 (39.3)	43722 (41.1)
1.2 Direct APS term-loans outstanding	366 (14.4)	4919 (41.1)	19019 (48.5)	54205 (51.0)
1.3 Indirect AIS credit outstanding	NA	712 (5.9)	1147 (2.9)	3547 (3.3)
1.4 Indirect AMPS credit outstanding	NA	1118 (9.4)	3638 (9.3)	4849 (4.6)
1.5 Total agricultural credit outstanding (1.1+1.2+1.3+1.4)	2546 (100.0)	11968 (100.0)	39204 (100.0)	106323 (100.0)
2. PUBLIC SECTOR COMMERCIAL BANKS (NCBs)				
2.1 Direct short-term APS credit outstanding	NA	-	8434 (34.3)	36123 (19.6)
2.2 Direct APS term-loans outstanding	NA	536 (28.4)	10654 (43.3)	135624 (73.7)
2.3 Indirect AIS credit outstanding	NA	1348 (71.6)	5496 (22.4)	12199 (6.7)
2.4 Total agricultural credit outstanding (2.1+2.2+2.3)	NA	1884 (100.0)	24584 (100.0)	183946 (100.0)
3. REGIONAL RURAL BANKS (RRBs)				
3.1 Direct short-term APS credit outstanding	NA	NA	-	4990 (14.1)
3.2 Direct APS term-loans outstanding	NA	NA	2266 (93.1)	30048 (84.7)
3.3 Indirect AIS credit outstanding	NA	NA	168 (6.9)	437 (1.2)
3.4 Total agricultural credit outstanding (3.1+3.2+3.3)	NA	NA	2434 (100.0)	35475 (100.0)

NA = Not Applicable; Figures in ( ) are percentages.
Source: Same as in Table 2.

with the people and area likely to be served to create more informed judgement about business potential and also to induce a healthy and loyal relationships among them. Such a process may even be introduced in branches that have sluggish business. Costs incurred may be viewed as investments for the future tangible and intangible rewards. This is what Grameen Bank of Bangladesh does with handsome rewards to itself, its clients and the nation alike. And four, declining density of PACS needs to be reversed. This decline is because of the policy of reorganizing them into larger PACS serving more number of villages per PACS. This size is usually worked out based only on loan

business required to meet the transaction costs and reasonable amount of net margin. Current norm of loan of Rs.1 million per PACS is rarely applicable in reality. This entire exercise is weak for more than one reason. For example, it does not take into account the costs (including staff time), revenues, and the infrastructure like godowns required to undertake input sales, consumer good sales etc. Secondly, it is inconsistent with the policy of promoting multi-purpose or service PACS, and forces them to be merely credit disbursing institution. Moreover, larger PACS (with Rs.3 million of volume of business consisting of Rs.1.5 million of borrowings, 0.96 million of loans, and 0.54 million of non-loan assets) have scale diseconomies. This is because of difficulties in managing operations of credit, input sales etc. in larger number of villages with limited and inadequately trained personnel available in the villages. These then result into poor quality loan assets, loan recoveries and non-loan assets. All these would suggest that smaller PACS serving fewer villages but with intensive credit and non-credit operations may be a better strategy. How do we reverse the process?

One option is to compute some number about the total business volume in relation to the costs just like what is being done for the loan business. We reject this because this number would vary from time to time and place to place depending on such factors as weather, availability of new technology etc. Moreover, it would also imply assuming away the willingness of people to change their membership from one PACS to the other. Instead a process-oriented alternative is proposed. The managing committees and general membership may be consulted to discuss the issue of creating a smaller PACS openly. They may be persuaded to likely benefits of such PACS in the form of better quality services, cohesiveness in the institution, timely and adequate availability of credit and inputs, and so on. **Such a process may be initiated where new technologies including watershed-based farming are at the door-step.** This alternative has an intangible gain in the form of involving people which is an important goal of cooperation. Once some positive response emerges it may be made a part of MOU mentioned earlier. And swift actions must be taken lest some leaders induce a counter-productive process. DCCBs, SCBs and NABARD/RBI like NDDB may organize spearhead teams of trained and motivated personnel for this to generate suitable processes with the State Department of Cooperation and PACS. All these, to reinforce, are needed because of complexities in changing PACS density through administrative fiats. Such fiats could suddenly destabilize and/or choke of institutional supply of credit and inputs and thereby adversely affect agricultural production, besides antagonizing people.

Reach of Rural Households by RFIs

Larger coverage of rural households is an important source of reaping full scale and scope economics. Since RFIs have yet to reach close to 70 percent of farmers there is immense potential to harness these economics. Computerization of monitoring innumerable small accounts could be

particularly done by NCBs and RRBs to control high transaction costs. Secondly, credit may be dispensed on group guarantees by forming groups to control costs of RFIs. These groups should be homogenous especially in the identity of interests of their members (e.g. watershed based groups including for new and old wells). Absence of such an approach was mainly responsible for mixed results with the group guarantee scheme in the past. This new approach however need not be the only mechanism to promote loans. Individual-oriented extension of crop loans and term loans of bankable type may be continued. Thirdly, loans may not be restricted to past good borrowers. New ones may be brought under the fold. Wherever PACS cannot enrol non-land-owners as members cooperative by-laws may be suitably amended. This amendments may also include making consumption loans for foods, and loans for non-farm rural economic activities so that such rural folks would join PACS. Fourthly, coverage of delinquent borrowers may be organized separately for the non-wilful and wilful. The former may be identified as those who have repaid part of their overdue consistently for three years. And the latter are those who have not repaid their overdue for three consecutive years. For the non-wilful ones their overdue loans may be suitably rescheduled just as it is done routinely for industrial loans so that they become eligible for new loans. Such rescheduling must be done because some delinquencies as noted earlier, seem to have arisen from inadequate loan appraisal and monitoring including lack of access to inputs and extension services.

The names of wilful defaulters must be published and widely circulated with a notice to them to repay loan within a prescribed time limit. If they do not respond, revenue/civil cases against them must be filed as a first step to recover loans. Such a process may also be followed by the RFIs for their such non-agricultural loan overdue to avoid political pressures against recovering loans from recalcitrant borrowers in the agricultural sector. In the case of PACS their managing committees and general membership should be required to recover overdue loans of such borrowers from their share capital in the society. And fifthly, NCBs and RRBs should enlarge their coverage not only of rural households but also input dealers[7] and agro-marketing and processing units. Similar should be done by DCCBs which serve PACS that are eminently suitable retailers of inputs, consumer goods etc.[8]

Diversified and Multiple Functions of RFIs

The principle of diversified and multiple operations of RFIs is the most critical for what it emphasizes is the vision noted earlier. This vision is mutually beneficial to lenders and borrowers. It is characterized by eight specific operations: (1) working and term capital loans to farm households (for both crop and allied agriculture and non-farm activities), (2) extension services, (3) input sales, (4) produce marketing, (5) consumer goods sales, (6) deposits, (7) other borrowings, and (8) loan recovery. While PACS are highly suitable for all of these, they seem to have five major constraints which must be removed. One, they do not have cash credit facility from DCCBs without which from

their meagre, if any, own surplus funds they cannot sustain (cash) sales of inputs, consumer goods etc. Two, DCCBs may give a part (say, one-third) of kind component of crop loans to PACS as inputs distribution credit so that they do not have to borrow twice for one and the same purpose, i.e. once for buying inputs to supply against kind component and another for the kind component proper. This financial innovation would save interest costs, enlarge the borrowing capacity and improve viability of PACS. It would also make available adequate and timely inputs to the members. It would also be consistent, with RBIs policy of transferring funds sanctioned for kind component to input suppliers. Three, some of the PACS do not have godown facility as yet. Such a facility could be created with working capital loan to hire it wherever possible. Elsewhere 50 percent grant and the rest a term loan at 10 percent interest rates to PACS may be given to construct it. This loan should be for ten years with a grace period of first two years. It should also be given by DCCBs rather than the government to avoid popular pressures and to improve the utilization of the business potential created which these banks would need to monitor for sanctioning cash credit facility. Four, PACS staff incentives are poor or at best modest, and their managing committees are indifferent or at best inadequately active in the affairs of their institution. While suggestions for overcoming the former have been made earlier, the latter could be improved by organizing the managing committees into 3 or 4 smaller groups to guide, and assist the staff as is done by some Farmers Cooperative Banks in Kerala. These groups could be for high quality loan assets and their recoveries, input sales and consumer goods sales. And five, many a time PACS have factions in their managing committee and general membership mainly due to rivalries in holding the supreme position in village panchayat and other village institutions. There is a need to legislate that a person can hold such position in only one institution at a time. Simultaneously an attempt may be made to make such leaders share prestige through appropriate counselling.

As regards non-credit and non-deposit functions of NCBs and RRBs are concerned three actions are suggested. One of these is that they can undertake them indirectly by fully utilizing the innovative instrument of 'indirect' credit mentioned earlier and also by promoting loans to consumer goods retailers. Their branch level targets for various business should also include these types of loans. Similarly, District and Service Area Credit Plans should encompass these loans. This would be consistent with ACRC's recommendation to estimate credit demand for all three agricultural sub-systems mentioned earlier. Even CLDBs should also be allowed to extend term loans for commercial infrastructure for input dealers and agro-marketing and processing enterprises. Two, NCBs, RRBs, and CLDBs can improve their administrative or rather managerial coordination with the agencies providing auxiliary services (including loan recovery) through more-result oriented involvement in consultative committees at block, district and state-levels. And three, these banks may innovate in organizing technical services on a peripatetic basis or group of branches or such other modus operandi. Costs

incurred for it may be viewed as investments which would have implicit returns in the form of better loan recoveries and more endurable relationship with borrowers.

In regard to loans to rural households five major departures are required by all RFIs. These departures must recognize that agricultural unlike industrial production process is highly complementary. And this together with the resource endowments of rural households would require land and labour augmenting technological change of Green Revolution type. Thus, one, loans need not be restricted to avowed purposes like crop-loans, new well irrigation, dairy-animals, and tractors. Such other purposes as loans for (a) modern hand and bullock drawn farm implements like seed-cum-fertilizer drill, wheeled-tool-carrier etc., (b) repair of old wells and tanks, (c) simple soil turning operations which farmers periodically undertake even in a drought year and for, (d) watershed based farmers groups may also be developed. Two, the scales of finance for crop and other loans may be made more flexible. Three, they should also incorporate costs of family labour. This would indirectly fulfil the much needed consumption requirement. Four, whenever a term loan is extended it should be combined with working capital loan as the two are complementary. This would improve efficiency and recovery of loans, in addition to providing scale and scope economies to RFIs. Such composite loans are especially required from NCBs and RRBs which tend to concentrate on term loans (including IRDP). And, five, consumption loans for basic foods may be extended on group guarantee basis. Such loans would facilitate better energy without which rural clients cannot be productive. Interest rates on such loans may also be tiered and marginally higher than on crop-loans. These improvements in loan portfolios for the three agricultural sub-systems would assist arresting declining trend of private investment in agriculture in the 1980s.

As regards deposits, two innovative schemes could be considered to reduce their financial cost. One of these could be credit- linked-deposits in which depositors are assured of term loans once they accumulate required margin money in their deposit accounts. This is indeed different from the existing deposits linked credit. And the second is fixed deposits for as short a duration as 7 or 15 days with commensurate lower interest rates. China has successfully implemented such schemes with as low interest rate as 1 to 2 percent. Both these deposit schemes are highly suitable to short, seasonal and small surpluses so characteristic of agriculture. And lastly, RRBs should be allowed to lend only 40 instead of 60 percent of their new loans to the non-poor. This is because it was 40 percent just about a month before 60 per cent was introduced. Such crisis management approach should be avoided. Moreover, these loans may be especially extended to the non-poor in agricultural production (APS) and input distribution sub-systems (AIS).

Before concluding three significant points may be noted. One, various macro and micro decisions proposed for restructuring PACS may be initiated by the earlier mentioned spearhead teams from DCCBs, SCBs, and RBI/NABARD. Such organizational intervention has been successfully practised by NDDB for promoting Milk Primary Cooperative Societies. Two, once such restructured PACS show consistent high loan recoveries, reasonable profit, and multi-purpose operations, DCCBs may amalgamate their rural branches with these PACS to create their Rural Cooperative Banks after consultations with the PACS membership. These banks will undertake financial operations and the PACS merged with them would become their branches, inputs depots, and consumer goods stores serving same villages they served before. Those depositors of the erstwhile branches of DCCBs who are not members and equity-holders should be requested to become so on same terms and conditions which are applied to the members of the merged PACS. These types of banks may draw relevant lessons from the earlier referred Farmers Cooperative Banks of Kerala. Such banks may be even created from those PACS and branches of DCCBs which have already shown sound performance. And three, the non-price policies discussed for restructuring all four RFIs have a potential to synergize credit, technology, and organisation. This synergy is critical to achieving RFIs viability as well as making borrowers investment more profitable and productive.

Conclusions

Rural financial institutions have been developed as an institutional change to wean away farmers from money lenders and to spur unconventional innovations in their management. This has been done over decades through appropriate changes in price and non-price policies. These have resulted into some significant accomplishments. They must be capitalized further to accelerate RFIs achievements. Among the various reasons that may have prompted different restructuring proposals the reason of improving viability of RFIs is most convincing. But these proposals seem to merely tinker with their macro-structure and/or deal with problems by fragmenting them rather than synthesization inherent in financial intermediation for agricultural development. Indeed, present concerns of non-viability are based on inappropriate approach to understanding and assessing viability. More appropriate approach of studying scale and scope economies in various costs reveals that all four RFIs can improve viability by accelerating their resource productivities and efficiencies. Appropriate macro and micro non-interest rate policies are the corner stone of RFIs restructuring proposed by us. They emphasize harmonious development of their financial resources, and human capital for generating high quality loan and non-loan assets for land and labour augmenting new technologies for agricultural development. Neither the upward revision in lending rates nor the restructuring of the type being considered is warranted. What is proposed has undreneath a mission of decentralized institutional development related financial and organisational innovations. Its vision is diversified, multiple and joint-products oriented rural banking, that is autonomous but

accountable. And [illegible] it has a potential to make RFIs more viable and also agricultural and rural growth-oriented.

Notes

1. For some success stories see, for example, Analyst 1993, Mohanan 1986, Desai, Gupta and Tripathi 1989, Gothoskar 1989, Desai and Namboodiri 1993, and 1994. Also see Tables 1, 2, and 6 in the text for macro performance indicators.

2. We have serious reservations to creating National Cooperative Bank (NCB) at this stage. This bank being a federation of State Cooperative Banks is not required now because there are innumerable PACS in each state which need financial and other resources for their development. Since it is the grass-root level institution which needs sustainability and growth NCB is not so much relevant. But our reservation is meaningless for it is learnt that NCB is already created.

3. Literature offers more than one definition of interest rate subsidy. For example, some consider interest rates of informal lenders as a reference point. But the products offered by informal and formal lenders are not homogenous. Some others consider cost of credit to the lenders as a benchmark. But this ignores the demand price of credit. Gulati and Sharma 1993 measure this as a difference between the interest rate on agricultural loans (12 percent) and that on trade credit (16 percent). But they do not consider such credit for exports which carries an interest rate of 7 or 8 percent! Inasmuch as expected marginal efficiency of investment (i.e. demand price of credit) and expected cost of credit (i.e. supply price of credit) differ for different sectors there would always exist differences in interest rates for different sectors. Interest rate subsidy exists only when nominal interest rates are lower than the expected normal inflation rate.

4. Rural loan demand is influenced by both interest rates and non-price factors. Desai and Mellor 1993 found that the latter are more important than the former. Non-price factors include timely and easy access to credit, density of branches, availability of new technology/economic opportunities and many of the non-credit functions that RFIs attempt. A higher relative importance of non-price factors need not be interpreted as interest-rate-inelastic nature of rural loan demand. The two can and do co-exist.

5. Japan launched a government financial agency for fisheries despite its well developed cooperatives as late as mid-1980s. But this agency is well integrated with the cooperatives and other RFIs.

6. This concept of X-efficiency is propounded by Harvey Leibenstein (1976 and 1980). It recognizes something more than the concept of allocative efficiency that Neo-classical economics emphasizes. It is concerned with efficiencies attributable to the use of resources that can be achieved through better organizational structures and processes.

7. Nearly 30 percent of indirect rural credit of the commercial banks was to private farm input dealers as on June 30, 1989. There were nearly 2 lakh such dealers just for fertilizers and pesticides in 1989. They represent a new class of entrepreneurs largely operating in rural areas. In 1988-89 57 percent of credit needs of Rs.5 billion for private inputs distribution business was met by these banks. For details on this including a critique of the estimate of this credit by ACRC see Desai and Namboodiri 1994.

8. In 1988-89 only 50000 of the 89000 PACS undertook these operations. Moreover, this number fluctuate from year to year. Stabilizing this together with the coverage of additional 39000 PACS would require cash credit facility, incentives for their staff and godowns.

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