WP:No.

PROFORMA FOR WORKING PAPER

Title of the Paper	: Member-funds and cooperative performance
Name of the Author(s)	Rajesh Agrawal K V Raju K Prathap Reddy R Srinivasan M S Sriram
Under which Area do you like to be classified?	: Finance and Accounting Area
Would you consider giving a faculty seminar based on your study?	: No
If the Working Paper has any relation to the Research Project(s) you are handling, please give the title of the Research Project.	: No
ABSTRACT	

(within 250 words)

This research examines the role of member-funds in multi-purpose cooperatives in the state of Andhra Pradesh, India. The central thesis is that member-funds, both in terms of quantity and quality, can enhance the control members exert on the cooperative. The involvement of members through their capital stake could be at various levels – by the provision of permanent capital, long-term capital and short-term capital. We expect that each of these will have differing effects on control and on the culture and systems of the cooperative. Such an effect on control is expected to directly drive cooperative performance, and indirectly enhance cooperative performance through greater usage of the cooperative by the members. Enhanced cooperative performance in turn would satisfy members, and the loop will hopefully be completed; satisfied members would place more funds with the cooperative.

The research used data collected from 923 individuals and 30 multi-purpose cooperatives, as well as case-studies of four successful multi-purpose cooperatives.

The 'bottom-line' of this research is that member-funds have a central role in enhancing cooperative performance. Funds provided voluntarily, either as an outcome of collective cooperative level decision making or of individual level decisions are of high quality. Externally compelled member-funds are of low quality, as are short-term member funds.

Date: September 2002

Signature of the Author (s)

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

Rajesh Agrawal K V Raju K Prathap Reddy R Srinivasan M S Sriram

September 2002

Rajesh Agrawal K V Raju K Prathap Reddy R Srinivasan M S Sriram¹

¹ Rajesh Agrawal is a faculty member in the Finance and Accounting Area of the Indian Institute of Management, Ahmedabad (IIMA). KV Raju is a faculty member and K Prathap Reddy is the Director of Institute of Rural Management Anand (IRMA). R Srinivasan is Professor and Co-ordinator of the Finance and Control Area of Indian Institute of Management Bangalore (IIMB). M S Sriram is a faculty member at the Centre for Management in Agriculture at IIMA.

Abstract

This research examines the role of member-funds in multi-purpose cooperatives in the state of Andhra Pradesh, India. The central thesis is that member-funds, both in terms of quantity and quality, can enhance the control members exert on the cooperative. The involvement of members through their capital stake could be at various levels – by the provision of permanent capital, long-term capital and short-term capital. We expect that each of these will have differing effects on control and on the culture and systems of the cooperative. Such an effect on control is expected to directly drive cooperative performance, and indirectly enhance cooperative performance through greater usage of the cooperative by the members. Enhanced cooperative performance in turn would satisfy members, and the loop will hopefully be completed; satisfied members would place more funds with the cooperative.

The research used data collected from 923 individuals and 30 multi-purpose cooperatives, as well as case-studies of four successful multi-purpose cooperatives.

The 'bottom-line' of this research is that member-funds have a central role in enhancing cooperative performance. Funds provided voluntarily, either as an outcome of collective cooperative level decision making or of individual level decisions are of high quality. Externally compelled member-funds are of low quality, as are short-term member funds.

Introduction

A cooperative can be viewed ideologically in two opposing fashions. First as an integral part of a capitalist society. Second, as an organization that is in some manner the antithesis of a capitalist firm. Cooperative legislation, in India, effectively (and possibly unintendedly) assumes the latter view by making it difficult for a cooperative to raise funds on market-determined terms. The government often steps in to make available funds to cooperatives on concessional terms. However, there has always been a view that it is good for a cooperative to raise funds from its members. Understanding the roles that member-funds can play in a cooperative is of importance to managers and policy-makers alike.

This research² examines the role of member-funds in multi-purpose cooperatives in the state of Andhra Pradesh, India. The central thesis is that member-funds, both in terms of quantity and quality, can enhance the control members exert on the cooperative. The involvement of members through their capital stake could be at various levels – by the provision of permanent capital, long-term capital and short-term capital. We expect that each of these will have differing effects on control and on the culture and systems of the cooperative. Such an effect on control is expected to directly drive cooperative performance, and indirectly enhance cooperative performance through greater usage of the cooperative by the members. Enhanced cooperative performance in turn would satisfy members, and the loop will hopefully be completed; satisfied members would place more funds with the cooperative (see Figure 1).

Figure 1 about here

The above thesis essentially focuses on why member-funds are required. The research also examines strategies for mobilizing member-funds, addressing the issue of how member-funds are raised.

The paper is organized as follows. Research methodology covers the literature, the three research components used, the statistical data analysis tools, and a description of the types of member-funds used by the coooperatives studied. Research findings are then summarized. Finally implications for managers and policy-makers are presented.

² We are grateful to the Food Agricultural Organization and the Committee for the Promotion and Advancement of Cooperatives for financial support, and indeed for motivating this research in the first instance.

Research methodology

Literature

Three strands of literature contributed immediately to the research design, and are mentioned below. A large body of literature, beyond what is cited exists, but has been omitted from considerations of space alone.

The central thesis of the FAO/COPAC Draft Proposal (1992) was that member-funds, in cooperatives, lead to greater member-participation and enhanced cooperative performance.

Reddy and Sekhar (1992) measured, among other variables, member-control in both cooperatives and other village-level organizations. Their instrument was designed to capture the members' perceived influence on liberal democratic decisions (elections), as well as on routine and non-routine managerial decisions. While the FAO/COPAC Draft Proposal emphasized the use of secondary measures of member participation (for instance, voting percentages), the Reddy-Sekhar research contributed to the design of a robust instrument for capturing member-control and membersatisfaction from individuals.

Furubotn and Pejovich (1973) and Jensen and Meckling (1979) analyse the role that capital can play in a cooperative using the property rights framework. Important in this framework is a recognition that, unlike in the capitalist firm where suppliers of capital are the residual claimants³; suppliers of a commodity, or buyers of a cooperative's output and sometimes even suppliers of capital are the residual claimants in a cooperative. Phansalkar and Srinivasan (1992a, 1992b) provide an analysis of a range of possible property rights that can be vested with cooperative members, and the appropriate property rights set for various market and technological contexts. Agrawal (1992) looks at the role of income tax in discouraging member-capital.

Research Components

The research had three components. The first was a survey of individual members. A questionnaire covering member-funds, member-control, member-usage, and member-satisfaction was administered on 923 members belonging to 32 multi-purpose cooperatives in Andhra Pradesh. The questionnaire measured 14 individual items relating to member-control. Items covered included, participation in cooperative elections, control that members perceived as

³ Residual claimants are those entitled to the difference between inflows from customers and fixed payments to other parties. The residual claimants in a sugar-processing company are the shareholders, while the residual claimants in a sugar-processing cooperative are the sugarcane farmers.

having on budget decisions, decisions on price fixation, appointment of the chief executive, as well as an overall measure of being in control. The questionnaire also covered three items of member-usage, four items of member-satisfaction, and documented the total funds each member had with the cooperative.

The second component covered 10-year financial data of 30 of these cooperatives, as well as 10year non-financial data of these cooperatives (covering elections and voting percentages, attendance in annual and extra-ordinary meetings, the rating provided by the auditor, and the audit lag that measured the interval between the end of a financial year and certification of accounts). Of these, 18 were high-performing (good) cooperatives and the remaining 12 lowperforming (bad) cooperatives. This classification was based on the consensus opinions of several experts. At the cooperative level, member-funds, member-control and cooperative performance were measured. All the cooperatives studied extended credit to members, and provided fertilizer and other agricultural inputs. Most also sold consumer goods. Also ten cooperatives had paddy-processing facilities.

Case studies of four high-performing cooperatives, out of the above 30, constituted the third component. These cooperatives were Achanta, Gattududdanapally, Mulukanoor and Yendagandi.

Data Analysis

Data collected in the first two components were subjected to a battery of statistical tests. These included factor analysis, correlations, multiple regression, discriminant analysis, and causal path modelling (LISREL)⁴. These are briefly summarized below. This summary below is not intended to present results, but to indicate the nature of tests conducted.

Factor analysis extracts the underlying sense of measured data. For instance, following factor analysis, the numerous measures of member-control, in the questionnaire, collapsed into three items. The first was control through elections, the second through interactions with the cooperative staff, and the third an overall sense of being in control. The various measures of member-satisfaction collapsed into a single measure, as did the various measures of member-usage.

Again a factor analysis was conducted on possible measures of cooperative growth. One factor emerged that appeared to encapsulate cooperative performance. This factor combined growth in capital employed, net working capital, long-term capital, net worth, and interest income. This factor

⁴ Fortunately for us there is as yet no Society for the Prevention of Cruelty to Data.

was used as a measure of cooperative performance. This measure was consistent with the *a priori* classification of cooperatives into good and bad.

Correlations between pairs of variables show the strength and direction of relationship. Thus the three measures of member-control—participation in elections, control that members perceived as having over day to day operations, as well as an overall measure of being in control—were significantly and positively correlated with member-usage and member-satisfaction.

Multiple regression enables an item to be expressed as a function of other items. For instance member-satisfaction was significantly and positively related to member-usage, control through elections, and the overall sense of being in control; and negatively related to control through interactions with the cooperative staff. In other words, while being allowed to participate in elections adds to member-satisfaction, dissatisfied members interacted more frequently with the cooperative than did satisfied ones.

The purpose of LISREL is more ambitious, to confirm a causal path such as suggested at the outset of this article.

Member-funds

Multi-purpose cooperatives can raise funds from members through several instruments. The first is by raising share capital (Member-Share Capital). Cooperative legislation in India imposes a ceiling on the dividend that can be paid on such share capital, the ceiling is lower than the market rate of return for financial instruments with comparable risk. The principle of open membership does not permit transfer of shares. A member can withdraw the amount subscribed, on termination of her membership. Given the difficulty of attracting share capital from members on these terms, legislation usually compels members to bring in some capital. In credit cooperatives a member, intending to borrow, had to have capital equal to ten percent of the loan amount.

A cooperative, that generates a profit, can retain surpluses in the form of indivisible (Non-Withdrawable) reserves. A member has no right to such indivisible reserves, in case the cooperative is liquidated such reserves can be transferred to a successor cooperative. Such indivisible reserves led to the creation of a reserve fund invested outside the cooperative or to the creation of buildings, and other visible assets within the cooperative. A cooperative might also chose to create reserves that can be distributed to members in a contingency, such as a price-fluctuation reserve (Withdrawable Reserves).

Cooperatives also accept deposits from members for periods ranging from 90 days to ten years paying market rates of interest (Withdrawable Deposits). Some cooperatives also encourage

members to subscribe to deposits that are equity-like in nature (Non-Withdrawable Deposits). Such deposits carry a market rate of return, but cannot be withdrawn unless a member terminates her membership. These deposits are usually raised by check-off from payments made by the cooperative to the member. Thus these amounts are in proportion to the volume of activity a member conducts with the cooperative. To discourage the frequent withdrawal of such deposits, a cooperative requires that a member leaving the cooperative and rejoining, restore her previously held deposits. As a further discouragement a cooperative may impose an interval between termination and rejoining.

Member-funds constituted about a quarter of the overall funds raised by the average cooperative studied. Of these, Withdrawable and Non-Withdrawable Reserves that could not be identified with members constituted a quarter. Member-Share Capital and Non-Withdrawable Deposits (amounts available on termination of membership) constituted 30% while Withdrawable Deposits was around 35% The remainder consisted of short-term dues to members arising from their supply to the cooperative.

Research findings

The hard data was subjected to statistical analysis; case-analysis was used both to provide insights on processes, and to add meaning to the output of statistical analysis.

Individual level analysis

All cooperatives

When the entire sample was considered, member-funds were found to be significantly associated with member-control and member-usage. Member-funds, in this individual level analysis, included funds paid-in by members (share-capital and deposits) but excluded reserves.

Member-satisfaction was strongly dependent on member-usage, and to a lesser extent on membercontrol. Control through operations was used when members were less satisfied.

A causal path analysis indicated that member-funds had significant total effects on member-control, member-usage and member-satisfaction. Member-control, in turn, had significant total effects on member-usage and member-satisfaction. Finally, member-usage had a significant effect on member-satisfaction.

Paddy and non-paddy cooperatives

Member-funds were strongly associated with member-control, member-usage, and membersatisfaction in paddy cooperatives. However, in non-paddy cooperatives, member-funds were significantly associated only with member-control. This was understandable, since rice milling required additional working capital. While refinance from the federal cooperative was available for on lending to agriculture; it was more difficult to obtain working capital finance for rice milling. Hence, member-funds had a more important role in paddy cooperatives.

Cooperative level analysis

The good and the bad cooperatives were compared on a number of financial indicators. Good cooperatives were associated with more member-funds (as a proportion of capital employed), higher levels of activity (sales and interest income), larger capital employed, and higher profitability (earnings before interest and tax to capital employed, and profit before tax to net worth).

Good cooperatives used, as a proportion of capital employed, more Non-Withdrawable Reserves, Non-Withdrawable Deposits, and Withdrawable Deposits. Good cooperatives used marginally less Member Share-Capital and Withdrawable Reserves.

Good cooperatives reported much higher growth rates of interest income, capital employed, net working capital, long-term capital, and net worth. But, in the growth rates of gross fixed assets and total sales, there was little difference between good and bad cooperatives.

Three categories of member-funds emerged from factor analysis.

Net individually-volunteered long-term funds (**Individually-volunteered Funds**⁵) was the excess of Withdrawable Deposits over Member Share-Capital. While Withdrawable Deposits were voluntarily provided by individuals, Member Share-Capital was, in almost all cases, provided by individuals because of State-legislated linking of individual borrowing to such capital.

Box on Mulukanoor about here

Collectively-volunteered long-term funds (**Collectively-volunteered Funds**) consisted of Non-Withdrawable Reserves, Withdrawable Reserves, and Non-Withdrawable Deposits. All three originate from decisions collectively taken by members at the cooperative level.

⁵ This is the label we assigned to the factor. Naming is a difficult matter as T.S. Eliot cautions in *The Naming of Cats*.

Individually volunteered short-term funds (**Short-term Funds**) consisted of short-term deposits and saving accounts.

The first two categories of member-funds were positively associated with cooperative performance, while the third was negatively associated. Thus Member Share-Capital is negatively associated with performance, and other forms of funds positively associated with performance.

Member-funds had three distinguishing features; origin, permanence, and rate of return.

There are three categories of member-funds in terms of their origin. The first is externally compelled by linkage with the use of cooperative services. Member Share-Capital, for example, is linked to the member's borrowing limit by legislation. Members, who wish to borrow, have to bring in such externally compelled share capital.

The second category originates from cooperative level collective decisions. The creation of both Non-Withdrawable Reserves and Withdrawable Reserves is the outcome of such decisions. While, in these cases, collective capital is created, Non-Withdrawable Deposits represent individual capital created by a collective decision. Here, each member creates capital in proportion to the usage of the cooperative services. Member Share-Capital contributions, in excess of what is stipulated by legislation, as in Mulukanoor also fall in this category. Such cooperative level decisions are, to a substantial extent, based on voluntary decisions at the individual member level. In addition, the creation of reserves also pre-supposes profitable operations.

The third category of member-funds originates from individual member decisions. Withdrawable Deposits are created by individuals of their own volition.

Externally compelled funds are of lower quality than the funds volunteered by either collective or individual decisions. Member-Share Capital has negative representation in **Individually-volunteered Funds** that is positively associated with performance.

Non-Withdrawable Reserves have the highest degree of permanence, followed by Share-Capital and Non-Withdrawable Deposits. Withdrawable Reserves and Withdrawable Deposits have a lower degree of permanence. Short-term funds have the lowest degree of permanence, and are of lower quality than the more permanent funds. It is not surprising that **Short-term Funds** is negatively associated with performance.

To the individual member the returns on both Non-Withdrawable and Withdrawable Deposits are high, but the returns on Member Share-Capital are low. Reserves are not member-identified, while there may a perception that such funds generate adequate returns and indirectly benefit the member, a member would not have direct expectations. However, Non-Withdrawable Reserves lead to the creation of reserve funds invested outside the cooperative that enhance the perceived quality of the balance sheet. More importantly, such reserves also translate into buildings and other fixed assets owned by the cooperative, that add to the sense of permanence of the entity. Since the analysis did not directly incorporate rates of return, it is a speculation that members prefer higher returns/visible outcomes of funds.

Based on the origin, permanence, and return; the preceding analysis supports the following hierarchy of member-funds.

Non-Withdrawable Reserves and Non-Withdrawable Deposits represent the highest quality of capital; as an outcome of conscious collective decision-making, by their permanence, and by either high return or visible outcomes (reserve funds invested and buildings).

Withdrawable Deposits represent a somewhat lower quality of capital; as an outcome of individual decision-making, some degree of impermanence, compensated by high returns.

Withdrawable Reserves are of a lower quality, reflected in the ambiguous manner of entry, negatively (but not statistically significantly) in **Individually-volunteered Funds** and positively (and statistically significantly) in **Collectively-volunteered Funds**. While such reserves are the outcomes of collective decision-making, they lack permanence, are neither member-identified funds nor lead to visible asset creation.

Member Share-Capital is of low quality. They are provided by members to meet external requirements, are permanent, but offer a relatively low return.

Short-term member-funds are of the lowest quality.

Thus, member-funds in decreasing order of quality, are:

- 1. Non-Withdrawable Reserves and Non-Withdrawable Deposits
- 2. Withdrawable Deposits
- 3. Withdrawable Reserves
- 4. Member Share-Capital
- 5. Short-term Funds

Member-satisfaction was dependent on member-usage, and member-control (excluding control through elections). Member-usage and member-control were, in turn, dependent on member-funds (with **Collectively-volunteered Funds** being important). Control over operations was less used if the cooperative grew satisfactorily. Cooperative performance was dependent on the growth of member-funds which in turn, was dependent on profitable performance which, ultimately, was driven by the aggregate member-funds. The possible empirical relationship is in Figure 2, this is broadly consistent with what we had hypothesized in Figure 1 but more complex.

Figure 2 about here

Two strategies for mobilizing funds emerged from the case analysis. In the 'mutual' strategy, a cooperative treated funds as a means to an end; where the end itself was such cooperative services as credit or paddy-processing. Funds were raised from the entire membership with an emphasis on collective decision-making on fund-raising. In the 'bank' strategy, a cooperative treated funds as an end in themselves. Funds were raised from a class of members, not necessarily using other cooperative services (credit or paddy-processing). The emphasis was on individually volunteered funds, although collective decision-making was also used.

The 'mutual' strategy appears to fit with an environment characterized by poor resource endowments/absence of competition. The 'bank' strategy would be more appropriate in environments characterized by rich resource endowments/competition. Both the strategies require good accounting systems, as a necessary but not sufficient 'hygiene' factor.

Both of them also require satisfactory cooperative performance. A cooperative following the 'mutual' strategy may be able to tide over a temporary bad patch better than a cooperative following the 'bank' strategy. This follows, since members in such a cooperative, are more strongly inter-linked with other cooperative services. Whereas, in a cooperative following a 'bank' strategy, depositors may shift loyalties at the first hint of trouble.

Four growth trajectories were conceived of. In all the four a cooperative is assumed to begin with some Member Share-Capital contributed as an act of hope. In Trajectory 1, additional member-funds are infused desirably early in a cooperative's life, by a collective decision. In Trajectory 2, there is high initial dependence on external finance but superior performance is used to build collective capital and attract funds from individuals. Trajectory 3, unlike Trajectory 2, does not place too much reliance on external funds. Superior performance leads to more member-funds. The rate of growth is slower than in Trajectory 2. In Trajectory 4 there is high dependence on external funds. Performance is poor, member-funds beyond the minimum Member Share-Capital required to borrow

12

are not forthcoming. Performance continues to be poor. Trajectory 4 is, alas, the one followed by many Indian multi-purpose cooperatives.

The 'mutual' strategy would imply Trajectory 1, while both Trajectories 2 and 3 are available with a 'bank' strategy. These trajectories indicate broad patterns of cooperative growth over a period of time, and finer variants can be conceived of.

Implications

Cooperative level implications

A cooperative can choose between the 'mutual' and 'bank' strategies. This choice is influenced by external environment considerations (resource endowments and degree of competition).

A cooperative choosing the 'mutual strategy' needs to develop collective decision-making processes. Non-Withdrawable Reserves, Withdrawable Reserves, and Non-Withdrawable Deposits would be emphasized. While cooperative performance is important it need not precede some amount of fundmobilization.

A cooperative choosing the 'bank' strategy needs to make its financing schemes (primarily Withdrawable Deposits) attractive. This requires satisfactory cooperative performance, an emphasis on customer service, and attractive deposit terms. Some amount of collective decision-making leading to the mobilization of member-funds, may also be desirable.

For both strategies good and transparent accounting is essential. Audit certification has to be timely and credible.

Much of our focus has been on systems and processes, we have not looked at issues such as leadership. Mulukanoor certainly had a charismatic and popular leader, while the learning from Yendagandi is that a leader need not be a nice guy. Achanta illustrates that a cooperative can perform well even in the absence of a leader who stood out.

Box on Yendagandi about here

Box on Achanta about here

Implications for microfinance institutions

While this study was in the context of cooperatives, we believe that these findings are of relevance to microfinance institutions. We will restrict our attention to those MFIs that use self-help groups (SHG). Our target in this paragraph are the 'promoters' of such SHGs. An SHG essentially uses what we have described earlier as the mutual strategy. The nurturing of processes that encourage collective decision-making within a group is very important. Equally important is for the members to be firmly in control over group decisions. A significant use of funds originating from group members and a lesser dependence on outside borrowings is also desirable. Is also important for accounting records to be current and for members to be kept informed, especially about the loan portfolio status. While what we are about to say is in the realm of speculation, we are convinced that the broad relationship between member-funds, member-control, member-usage, member-satisfaction, and (in this instance) SHG performance would not be very different from that found in the cooperative context.

We believe that such a relationship would also be found in the New Generation Cooperatives (NGCs). NGCs given their investment in further processing would resemble the paddy processing cooperatives in our study.

Policy implications

In general, policy measures should not restrict cooperatives from raising funds on terms decided by themselves. Nor should these discourage or crowd out member-funds by adding a supply of cheap and readily available external funds, or funds unrelated to performance. Finally, policy measures can promote reliable third-party certification of financial performance.

While the interest rate structure on rural cooperative deposits is not regulated by the central bank, in some states a structure is imposed. This seems unnecessary.

Borrowing limits, if they have to be imposed by an external agency, may be linked both to Member-Share Capital and also to Non-Withdrawable Deposits (which are quasi-share capital in nature and can offer higher returns).

Externally provided refinance may be made less attractive. Linking of refinance to member-funds and the use of a mix of differential interest rates and limits to provoke cooperatives to raise member-funds, is strongly desirable.

The audit function, in most states in India, is carried out by the Registrar of Cooperatives. Auditing involves significant work, and inadequately-staffed or inadequately-trained auditors lead to delayed auditing and auditing of unsatisfactory quality. Strengthening the audit department, allowing the

entry of reputed private audit firms, and imposing penalties on cooperatives which violate audit provisions, are some of the measures required.

Conclusion

This research represents the outcome of the meeting of two worlds, the world of corporate finance and the world of organizational behaviour, that seldom meet. The 'bottom-line' of this research is that member-funds have a central role in enhancing cooperative performance. Funds voluntarily provided, either as an outcome of collective cooperative level decision making or of individual level decisions are of high quality. Externally compelled member-funds are of low quality, as are shortterm member funds. Agrawal, R. (1992), Why is internal finance important for cooperatives?, *Chartered Accountant*, 66, September, 188-193.

FAO and COPAC (1992), Research design for a study of successful capital formation strategies for agricultural service cooperatives in developing countries, (Draft Proposal), Rome: Food and Agriculture Organization.

Furubotn, E.G. and Pejovich, S. (1973), Property rights, economic decentralization, and the evolution of the Yugoslav firm, 1965-1972, *Journal of Law and Economics*, 16, 275-302.

Jensen, M.C. and Meckling, W.H. (1979), Rights and production functions: an application to labor-managed firms and co-determination, *Journal of Business*, 52, 469-506.

Phansalkar, S.J. and Srinivasan, R. (1992a), Residual claims in cooperatives: design issues, *IRMA Symposium on Management of Rural Cooperatives*, Anand: Institute of Rural Management.

Phansalkar, S.J. and Srinivasan, R. (1992b), Residual claims in cooperatives: design propositions. *IRMA Symposium on Management of Rural Co-operatives*, Anand: Institute of Rural Management.

Reddy, K.P. and Sekhar, R.C. (1992), Civic control ambience and collective controls in cooperatives, *IRMA Symposium on Management of Rural Cooperatives*, Anand: Institute of Rural Management.

Figure 1 Hypothesized Relationship

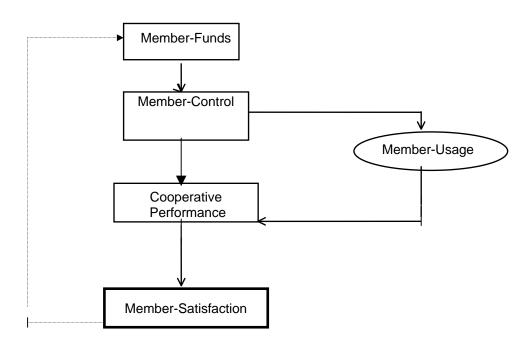
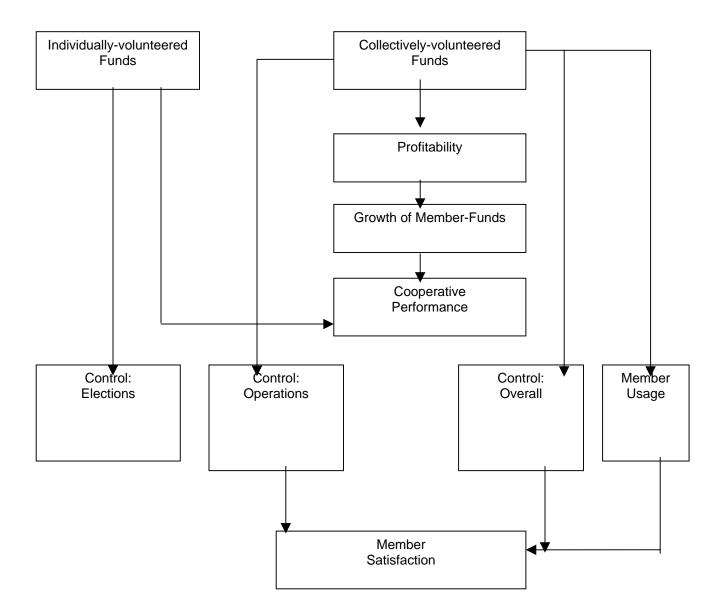


Figure 2 Empirical Relationship



Boxes

Mulukanoor A conscious decision to raise member funds

Like other agricultural cooperatives, Mulukanoor initially raised funds from its District Central Cooperative Bank (DCCB) for on lending to its members. It later switched over to a commercial bank, as the DCCB was unable to meet its financial needs.

A ratio of share capital to borrowing of 1:10 was stipulated for both the cooperative's borrowing from the DCCB/commercial bank and for member borrowing from the cooperative. Mulukanoor realized that it did not have the capital to perform any other activity. It also realized that its role was limited strictly to that of an intermediary - just passing on loan disbursements from the bank to members and loan repayments from members to the bank. The capital needed for trading in fertilizers was initially raised on a short-term *ad hoc* basis but this was found unsatisfactory. This led to a discussion, and a broad consensus among members was reached to strengthen the capital base of the cooperative. As most of the members could not make contributions in cash, it was decided to adopt the following two methods which authorized the cooperative to make deductions at source while making disbursement of loans to members.

The first of these two was to raise the ratio of share capital to loan amount from 1:10 to 1:5 at the level of members, thereby reducing the borrowing limit of members. At the same time the cooperative continued to borrow at the previous ratio. This ensured that the cooperative had enough working capital.

The second was to check off 5% of the seasonal crop loan amount from every member of the cooperative once a year, as a Non-Withdrawable Deposit. (Members borrow twice a year for the *Kharif* and *Rabi* season crops). It was also decided that the cooperative should pay market rate of interest on these deposits The interest was reinvested in this deposit account. It was also agreed that this deposit could be withdrawn only when an individual ceased to be a member.

With relatively large sums as deposits, members were tempted to withdraw deposits and re-join as new members. To prevent this, the bylaws were amended. A member, who so withdrew, could re-join after a five-year gap and even then had to re-deposit the amounts withdrawn. Member opportunism has been sufficiently deterred by this stipulation.

The rate of interest on Non-Withdrawable Deposits has been around 3-4 percent higher than that on three-year Withdrawable Deposits. On such deposits, as well as on savings accounts, Mulukanoor has used the interest rate structure binding on the urban (but not on the rural) cooperatives.

Yendagandi-You do not have to be nice

One member perhaps best summarized the cooperative President's role, "His greatest service to us was being strict."

Achanta-Systems can substitute for leadership

In literature, it is usual to ascribe the success of a cooperative to a visionary leader or an aggressive chief executive. In the case of Achanta neither of these appear as obvious explanations for its success. Each election produces a new set of elected members to manage the cooperative. The members of the cooperative as well as the employees ascribe the success of the cooperative to very strong operating systems. These operating systems have come been maintained through an acculturisation process. For instance, the first president of the cooperative had a reading room set up just outside the banking hall. The argument was that if more members hang around, the chances of fraud and corruption are lesser. This "control system" continues to this date.