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**Second ICA/Japan Training Course on**  
**“ENHANCEMENT OF FARMERS’ INCOME**  
**&**  
**POVERTY REDUCTION THROUGH COOPERATIVES”**

**Reading Material on**  
**Integrated Agricultural Cooperative**  
**Business Management [IACBM]**

**Facilitators**  
**Prof. K.V. Raju Prof. S.R. Asokan**

**IRMA Module on Project Management in Agricultural Cooperatives**

**Institute of Rural Management, Anand**



**Integrated Agricultural Cooperative  
Business Management [IACBM]**

- ICABM 1      Technology, Production and Marketing**  
**Characteristics of Agri-business Cooperatives**
- ICABM 2      Community Based Organisation: Design Concept**
- ICABM 3      Determinants of Enduring Cooperative Performance**
- ICABM 4      Design of Anand Pattern**
- ICABM 5      Democratic Decision Making In cooperatives**
- ICABM 6      Measuring Performance of Cooperatives**
- ICABM 7**
- ICABM**

## **Technology: Production and Marketing**

**KEY WORDS:** Primitive technology – Production for immediate and local consumption – Decentralised subsistence economy – Functional specialisation – More or less simple and egalitarian distribution of value generated - Independence highly valued – Modern technology – Production for distant markets – Monetisation of economy – Centralised production – Task, activity specialisation and automation – Risk and uncertainty – Problems in distribution of value – Role of intermediation – Importance of coordination.

### **What do we mean by Technology?**

Goods and services have three types of utility, namely, of form, of place and of time. Production or manufacture methods assist creation of form utility; transport facilities add place utility; and storage methods add time utility. Travel and communication facilitates the exchange. We use Technology to mean broadly all these throughout this course. We try to look at farmers' organisation from the Technology point of view.

Primitive technology i.e., technology that helps creation of form, place and time utilities only in a very limited way, essentially limits and binds people to immediate vicinity and immediate future. Primitive production based on primitive technology is thus largely for immediate and local consumption or fulfilment. There is not much possibility for exchange. Production tends to equal self and/or local consumption and ability to produce on demand is valued rather than productivity. Decentralised subsistence production with functional specialisation and egalitarian distribution of value would result. Individuality, spontaneous creativity is valued.

Modern technology i.e., technology that helps creation of form, place and time utilities in a big way, essentially liberates people from the tyranny of immediate vicinity and immediate future. Possibility for exchange enhances and specialised production tends to surpass immediate local consumption. Productivity assumes importance as goods and services produced must be exchanged with others and that too withstanding competition. Economies of scale and scope lead to large-scale production. With improved methods of storage and mass transport, exchange is extended to reach global level crossing regional and national boundaries.

### **What is the central problem of sharing value?**

Methods of sharing of value by dividing the value realised on exchange in the proportion of contributions made towards production of goods and services become difficult as exchange is ever extending to persons who are beyond the immediate reach of the producers in terms of space and time.

Centralised production with ever increasing function, task specialisation and complex distribution of value will be the result. Economies of scale and scope lead to large-scale production and distribution networks. Technology moderates production and marketing in their effort to match supply with demand and a long chain between producers and final consumers creates roles for intermediation. The uncertainty in production and risk in marketing gets enhanced. There is always an unequal distribution of ability and willingness, both endowed and acquired, to assume risks in any group. This pushes some to negotiate for definite and fixed returns, even if less, for their contributions. Element of suspicion, prompts the negotiations further especially among the weak. The degree of uncertainty in production and risks in realising value enhances the tendency to accept fixed pay off. This automatically will lead others to assume risk and uncertainty and extend their claim to residual.

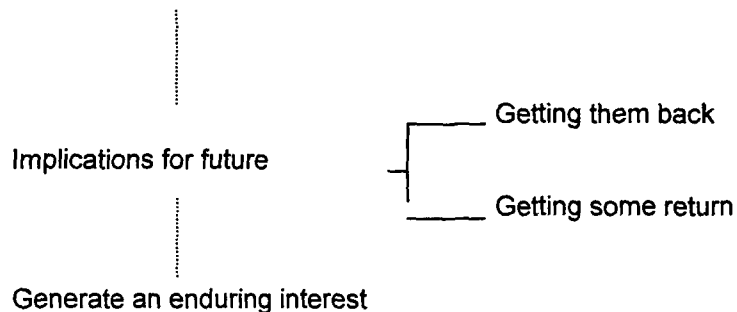
**What are the key factors of production?**

Under the present technology conditions material, labour and capital have emerged as key factors of production.

**Nature of resource contributions**

- - Resource contributions made for absorption (material, labour)

---- Resource contributions transferred for use (capital)



Factor owners make contributions with fixed pay off rewards or proportionate share of value. Any of the factor owners can take lead and come forward to organise production of goods and services. Those coming forward and taking lead usually negotiate fixed rewards for securing contributions from other factor owners and retain claim to residual for themselves.

It is but natural for those who are assuming risks to try negotiating on conservative estimates of value generated and highlights uncertainty and risk. Whereas, others who are negotiating for fixed and definite return tend to base their negotiations on optimistic, if not on exaggerated, estimates of value generated and to undermine the risk and uncertainty.

The divergence in the estimated and realised value of goods and services produced may leave those who assumed risks better off or worse off. If they emerge better off, others will feel jealous,

cheated and exploited. If, the risk takers do not emerge better off but become worse off, others feel relaxed and congratulate themselves for having wisely negotiated a fixed and definite return for their contributions.

**Fixed pay off** factor owners do not receive benefits due to increased productivity and/or increased value realisation than anticipated and the demand for extending their claims beyond fixed pay off rewards derives force and legitimacy from this.

Labour based production (fruit gathering and hunting), land based production (agriculture) systems were first to emerge. The advent of new methods of mass production and large-scale marketing make it almost impossible to organise production of goods and services in the absence of capital on a large scale.

Providers of each factor are trying to claim a major chunk of the value generated for them, often disregarding the claims of others. Aggregation by absorption and elimination by displacement or replacement are the methods employed to achieve complete control over production and supply of goods and services. The level of technology moderates this struggle and forces material, labour and capital factors to coexist in the process of production of goods and services. The distribution of the value realised from the goods and services jointly produced by these factors is based on their relative negotiating strengths backed by their relative scarcity rather than their objective contributions to the production of the same.

## Characteristics of Agri-business Organisations

KEY IDEAS: Agri-business organisation – Production orientation – Market orientation – Impact of modern storage, processing technologies towards centralisation – Problems and prospects on the way – Technology suggests capital intensive, centralised agricultural production – Integration with processing and marketing – choice before farmers: Organise or be organised – Need for coordinated production integrated with processing and marketing – Question of independence and autonomous functioning.

With the pace of Technology change agricultural production, processing and marketing must also transform from **subsistence-oriented production to market oriented production**. This calls for specialised production in coordination with processing and marketing requiring radical changes in several related aspects. **Economies of scale, integration and scope** do not necessarily operate in the same direction in case of production or processing or marketing. In case of some, small scale production and large scale processing may be advantageous; large scale production and small scale processing may be advantageous in other cases; storing and transporting in the same form or semi processed form may confer advantages in some other cases. We have to essentially look at the technology critically to determine exactly what needs to be done to create form, place and time utilities. Some times, new technology that creates form, place and time utilities to bi-products considered as waste may change the economics and confer the needed comparative advantages. **Production of perishable goods tends to get limited by the demand that can be serviced immediately**. In such situations, production must be controlled to match supply with demand. The degree of perishability sets the limits to production and usually binds their production to self/local consumption. To such goods, that too if they cannot be produced easily, storage and/or preservation offers scope to add substantial place and time utility to them.

**A subsistence production system** usually also means a decentralised one and tends to be egalitarian. Market oriented production and its integration with processing usually means production on a different scale both in intensity and in extent. In all likelihood, a **resource base considered as adequate** from Subsistence production point of view at a particular level of technology may turn out to be inadequate to compete in producing for a market. Relative factor prices may turn one time subsistence vocation inadequate. **Mobility and ability to cope with rapid changes become important in the place of stability**. In general, it can be stated that modern technology has a **large-scale bias** requiring production, processing, storage and transportation on a hitherto unprecedented scale.

By force of individual circumstances and by deliberate pursuit of certain socio-economic and political goals the natural tendency towards aggregation in agricultural production got thwarted. This created a dichotomy between the large-scale needs of processing, storage and marketing operations and the small scale of production operations, which in turn created roles of several **intermediaries**.

Thus, agribusiness apart from facing the problems of seasonal production and perishability also got saddled with **the problem of coordinating several independent decision-makers engaged in small-scale production**. Given the present shift in the policy and the consequent likely withdrawal of restriction on land holdings, large-scale market oriented agricultural production integrated with processing and marketing would soon be the order. This would make small-scale agriculture unviable, setting trends towards aggregation. These problems are also accentuated by the fact that production (supply) is often seasonal rather than continuous creating **dilemmas of capital intensity and capacity utilisation**.

To meet the challenge, farmers need to organise themselves or they will be organised by the market forces. They would find themselves increasingly vulnerable. Agricultural production technology may have some small-scale bias, but processing, storage and marketing lean towards large scale. With liberal policy framework and the need for integration, the situation would soon change. This situation gives virtually very few choices to farmers: **decentralised, independent and small scale production with uncoordinated arrangements for processing and marketing** would eventually lead to —either decentralised, independent and small scale production with coordinated arrangements for processing and marketing or large scale, centralised production integrated with processing and marketing. The latter is more likely to happen and there is not much that any one need to do about it. For the former to happen there is a need to organise farmers and coordinate their small individual efforts in production and integrate them with large scale processing, storage and marketing. Question of **independence and autonomous functioning must be examined in the light of coordinated effort required to meet the challenges**. Giving up of smaller, lesser and limited freedom and autonomy to achieve higher, greater and broad-based freedom of acting by themselves for the limited and conditional must be given up for the real freedom they share with their fellow farmers. Competition among them must be eliminated reducing scope for being exploited. They must alter the scope and force of competition in their favour by their unity considerably achieved by growing preference of association, agreement and organisation in more or less permanent forms. The more farmers' organisations are able to dominate their economic environment, the more widely they extend their members' freedom to command all kinds of economic operations instead of remaining subservient to them.

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## 10. Crisis in Cabbage Country

**The vegetable revolution is, paradoxically, a misfortune for the farmers near Gadamara, in West Bengal.**

Every Wednesday National Highway 34, connecting Calcutta and Siliguri, gets choked at Gadamara, a small, wayside village in North 24 Parganas district. Nobody would think the bustle is because of vegetables - until they come to the bazaar, which sells about crore and a half rupees worth of them. Just two kilometres away is Nadia district, the 'vegetable garden' of West Bengal. And Gadamara is where the garden off loads its green. There it is sold for a song. Nowhere else within 100 km of Calcutta, they say, can so many vegetables be bought so cheaply?

That is why wholesalers from Calcutta start queuing up on Tuesday evening itself. Hundreds of trucks and vans line up on both sides of the highway, jostling right up to the next district, to carry away the lush vegetables to Calcutta, Krishnagar, Berhampore, Malda and Siliguri. The urban traders make quick buck for their effort, but the farmer gets a pittance for his. The vegetable growers bring their ware to the bazaar on rickshaws and carts. By noon thousands of baskets of tomatoes, pumpkin, gourds, beetroot, carrots, potatoes, brinjal, cauliflower, cabbage and parval are glutted in Gadamara.

The abundance keeps the prices so low that nobody talks in terms of buying less than five kilos. For the past two years, the hapless vegetable growers of Nadia and neighbouring North 24 Parganas have been calling the famous weekly bazaar their "burial ground". "It is a crisis of plenty," said Asis Sarkar, a farmer of Sat Simulia village in Nadia. "The initial success of small-scale vegetable farming inspired lakhs of farmers to take up vegetable growing in the last 15 years. So the market got flooded with vegetables."

The boom of the 80s came with electricity and irrigation facilities in the dry season. That made modern farming possible and very profitable. Overnight people went in for multicrop farming, which drastically altered the economy of the region. Sat Simulia, for instance, today boasts 13 telephones (25 more are in the offing), 20 television sets and four refrigerators. The 6,000 people of this village have electricity in almost every hut and pukka house. They also have a nursery, a primary school and a junior high school for girls.

The one and only agricultural university in West Bengal is barely 20 km from Sat Simulia. But that, the villagers complain, has little to do with its vegetables. "The teachers from the university never tell us what to grow, or when or how," said Mihir Banerjee, a farmer who has taken to modern methods. Instead, he attributes the vegetable revolution to the "demonstration effect". Take his own case: Banerjee read about Japanese cabbage in a magazine. He planted them in July and managed to sell them at a time when others were only sowing. Envious of his profits, others emulated his 'demonstration' after a couple of years.

The production of vegetables skyrocketed, but the demand did not grow proportionately. Prices went to the pits. Things came to such a pass that many a time, unable to find customers at the right prices and to avoid escalating transport prices, farmers abandoned their cabbage, cauliflower and tomatoes by the wayside in Gadamara to return home empty-handed. Similar pitiable sights prevailed in the neighbouring markets of Nilgang, Deganga and Chakdah.

Although potato production registered an all-time high in the state last year, lack of storage facilities and the politics of cornering whatever little is available turned many a farmer pauper. Some were forced to burn lakhs of tonnes of the tuber. Small farmers who didn't have the resources to hoard their produce or stock it in cold storage were hit the hardest. Adding to their woes is the lack of infrastructure. Despite making news, the area's roads have seen no development. On record they are all metalled, but such is their condition that three-wheelers dare not go to fetch vegetables. A couple of years ago trucks and vans went up to the farmers' doorstep, but not any more.

While the farmer, lacking storage facilities, roads and transport and informed marketing is forced to sell cheap at the weekly bazaars, the urban consumer pays through his nose for the same vegetables. "It is a peculiar situation," said Samar Mondal, a vegetable grower from Khasi village. He sowed rice twice a year on his four acres and, inspired by the initial success of his neighbours, planted Japanese cabbages and brinjals in between at a cost of Rs.18,000 per acre. His returns, in the last two years, worked out to less than Rs.12,000 an acre.

Adversity has forced some farmers like Sarkar to Innovate. "Now that every farmer is growing cabbages and cauliflower I have opted for brinjal and parval this year," he said. That, he hopes, will fetch him a better bargain. He is hopeful of getting 15 to 30 kg of parval an acre every week for a month. Then, he thinks, the produce will go up to 200 kg a week and he will be cozy till August if the Monsoon doesn't come in the way. But such measures are unlikely to help the farmers in the long run. The only hope for them now is to export their produce, for which the government needs to lend a helping hand.

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Reproduced from "The Week", dated March 15, 1998 by Tapash Ganguly

Questions:

- A. Explain the situation of Gadamara farmers in terms of demand and supply forces.**
- B. Explain the relationship between terms of exchange and nature of market situation in terms of buyers' market and suppliers' market**
- C. Suggest measures so that Gadamara farmers' situation improves**

## COMMUNITY BASED ORGANISATION: DESIGN CONCEPT<sup>1</sup>

How do we, then, define 'design-concept' of a successful community based organization? Or if we come across a lone example of a successful experiment, how do we figure out whether it offers potential for a robust design concept or not? This, in our view, is one of the most important questions in the development world, which has a powerful propensity to generalize from singular success. Design-concept of an organization can be viewed as its central architecture or configuration, particularly as it affects the relationships amongst its members, employees and leaders. It subsumes a testable theory of why this particular method of organizing has greater changes of success than several alternative ones.

Design-concepts vary in the demands they make on domain conditions. Robust design concepts – such as of chit fund groups – are likely to survive and work in hostile domain conditions; fragile design-concepts, in contrast require highly favourable domain conditions to work. Robust design-concepts differ from fragile ones in the effectiveness with which they serve purposes important to their members better than existing or alternative organizations do; and the proof of this is that organizations based on robust design-concepts come up swayambhoo or with little external nudge, continuously propagate and improve themselves, and resist, adapt or mutate when threatened with external assault on their design sanctity. Fragile design-concepts do none of these. In evolving the idea of the design-concept, it is useful to view a community (or member) organization as consisting of three inter-connected entities as shown in figure: membership, the 'operating system', and the governance structure, which is the elected board of the members. The operating system provides a range of services members need; in turn, it receives member business and capital from members to build it. Since members are too numerous to hold the operating system accountable to itself, they use an elected board as their governance structure.

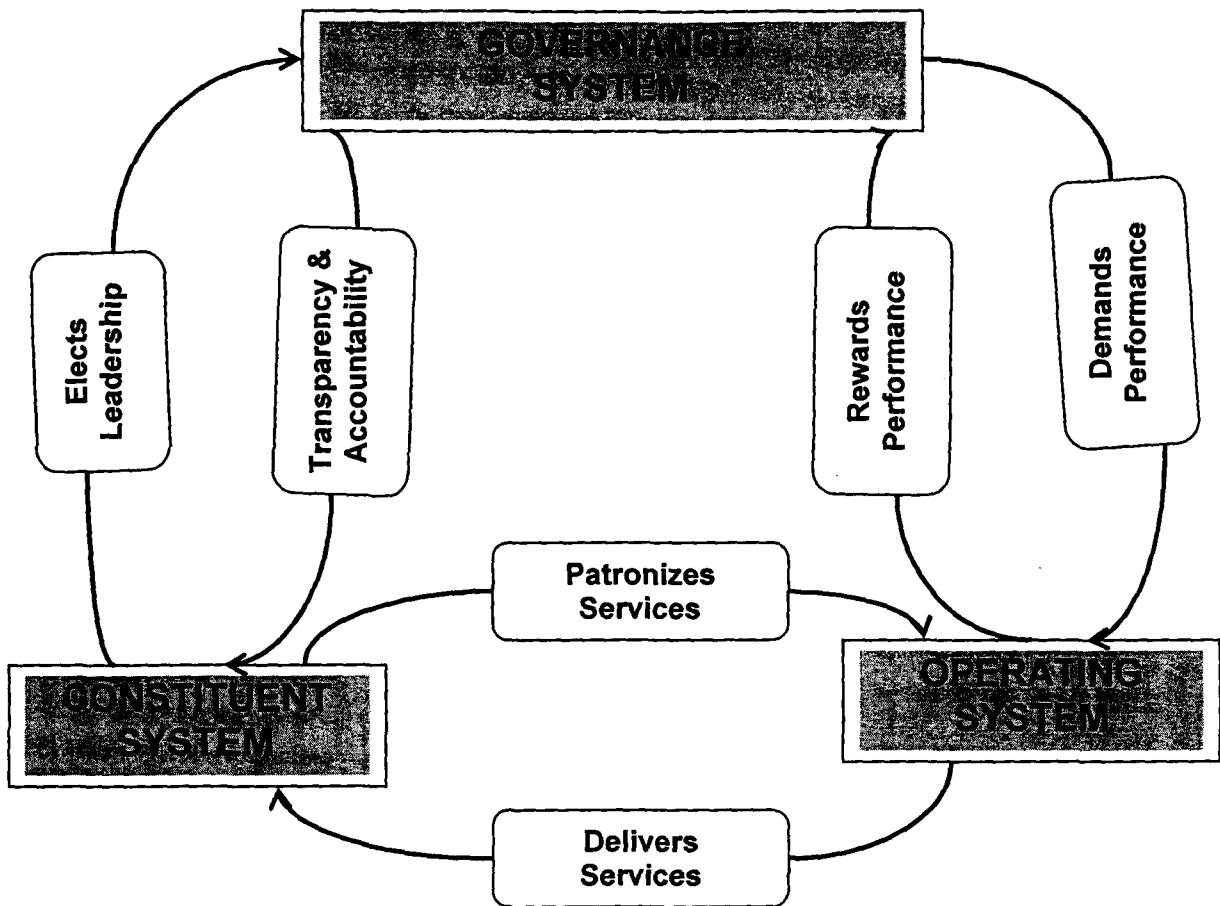
It is useful to view local institution as consisting of three inter-connected entities as shown in figure above: the constituent system, the operating system, and the governance system with the elected or appointed representatives. The constituents, being numerous, set up a governance system through representatives – the terms of such representation are formulated in the Bylaws. The operating system provides a range of services to constituents; in turn, it receives support to build and operate the services – the terms of exchange of services are governed by Service Rules. The governance system demands performance from the operating system and rewards it in accordance with the Performance Rules. A cooperative, a self-help group, a community organization and a host of other people's organizations are styled on this general format.

The effectiveness and efficiency of a local institution can be characterized as a function of the fit achieved between constituents, governance, and operating systems. In more specific terms a given local institution is likely to perform poorly in terms of advancing the well being of its constituents unless there is a close correspondence between: constituents' needs and the

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<sup>1</sup> Adapted from Tushaar Shah' note on DESIGN OF ENERGETIC FARMER COOPERATIVES

objectives of governance system – cohesiveness of purpose; performance requirements and the distinctive competence of the operating system – efficient operations; and the mechanisms for demand expression by the constituent system and the decision processes of the operating system resulting in fair transactions.



*Basic Design of a Local Institution*

A cooperative, a self-help group, a community organization and a host of other people's organizations are styled on this general format. How robust is the design-concept underlying these can be gauged by applying following four design principles we have been able to cull out from our empirical studies.

***Design principle 1: core purpose central to members***

Robust design-concept of a community organization aims at purposes, which are central to members and not to government, donor agencies or implementing organizations. In understanding a cooperative that has failed, the first question one can profitably ask is: whose purpose was it meant to serve? Canal irrigation cooperatives in many regions exemplify this: most often, the purpose they are designed to serve is of the irrigation bureaucracy rather than of members; it is therefore *not surprising* that they have not taken off. For a design-concept to be robust, it is not enough that the purpose it serves be relevant to members; it must be central, and it should be achievable through some form of organizational intervention.

### ***Design principle II: get the right operating system***

The 'operating system' is the device organizations evolve and use to achieve purposes important to their members; it includes the business enterprise of the cooperative, and systems, structures, rules, norms that govern its working. Everything of significance we find in a community organization -- other than members and their elected leaders -- would generally be part of the 'operating system'. In a chit fund group, it is simple and includes the foreman and a set of simple rules about the periodicity of installments and meetings, about the disposal of pooled funds and compensation to the foreman. In a marketing cooperative, it will include office, storage and processing facilities, managers, employees, and norms of pooling and for wholesaling, grading facilities and routines. The design-concept of a cooperative aiming at purposes central to its members will be robust only to the extent that its operating system is able to find, develop and sustain distinctive competitive advantages so as to out-perform its competitors and/or alternative organizations. They typically do so by finding newer end-users for member outputs, by forging newer linkages between members and the users of their service/outputs, by modifying the technology used at intermediate stages, and, in general, by finding innovative ways to addressing critical anomalies in the operation their sectors which most restrict their members' opportunity sets. Moreover, in cooperatives that gain enduring success, their design-concepts ground their unique competitive advantages in their very nature as a community organization.

### ***Design-principle III: patronage cohesive governance***

The potential of otherwise similar operating systems to generate value tends to vary over a wide range. *Ceteris paribus*, the level at which the operating system actually operates as an engine of value generation depends upon the quality and level of performance related demands made upon it and of performance related support provided to it by members through their governance structure. Owner-operated and investor-owned organizations, which are the usual competitors with cooperatives, enjoy a structural advantage over them in this respect; and robust design-concepts overcome their governance weakness by promoting design-features that enhance the 'patronage cohesiveness' of its governance structures and processes. Patronage cohesive governance implies, in the first place, that supreme policy making authority for the organization is vested in the elected board of members to whom managers are fully accountable. High levels of patronage cohesiveness ensure that achieving purposes for which members patronize the cooperative remains the central talisman in the governance of the cooperative. Patronage cohesiveness thus ensures the double accountability crucial to success: of 'operating system' to the governance structure, and of the governance structure to the membership. However, powerful the 'operating system' may be as an engine of value generation, it must eventually degenerate unless the governance structure is able to hold it continually accountable for serving purposes important to members.

#### ***Design principle IV: securing and retaining member allegiance***

Shaping and managing member expectations and behaviour vis-à-vis the cooperative is the constant and trickiest challenge that faces cooperative governance structures. In this, the most crucial is its launch. The skill with which a new cooperative based on an otherwise robust design concept is launched and run in has a decisive impact on its steady-state performance. Cooperatives sustain member allegiance over a long period only to the extent that purposes important to their members whom they serve cannot be served better through other means. The moment new and attractive options become available, the cooperative should expect to lose its patronage base unless it is able to surpass its new competitors through innovation and improvement. In the long run, thus, there is no such thing as member-loyalty. Finally, functional allegiance of members depends strongly and directly on the extent of 'private' benefits but weakly on the collective benefits conferred by the cooperative on its members. Finally, robust design-concepts build and sustain member allegiance by progressively evolving and enforcing a structure of rights of the members on the cooperative and of the cooperative on its members by linking private benefits with patronage.

## WIN AS MUCH AS YOU CAN

We are assembled here to play a game that involves 10 rounds. Each one of us would get an information sheet where in we can also record the scores. The objective of this game is to win as much as we can.

We will be dividing ourselves into 4 groups. Each group has to elect one leader from among the members of the group to represent their interests whenever necessary. All that the group members need to do is to select either RAT or RABBIT as their choice and record it on a small chit of paper that will be given to each group. Depending on what other groups have selected your group may get or lose points according to the following rules:

<b>OUTCOME</b>	<b>SCORING RULE</b>
<b>A. If all the 4 groups select RAT</b>	<b>Each group gets minus 10</b>
<b>B. If 1 group selects RAT and other 3 groups select RABBIT</b>	<b>Group that selected RAT gets 30 and Group that selected RABBIT get minus 10</b>
<b>C. If 2 groups select RAT and other 2 groups select RABBIT</b>	<b>Groups that selected RAT get 20 each and Group that selected RABBIT get minus 20</b>
<b>D. If 3 groups select RAT and other 1 group selects RABBIT</b>	<b>Groups that selected RAT gets 10 each and Group that selected RABBIT gets minus 30</b>
<b>E. If 4 groups select RABBIT</b>	<b>Each group gets 10</b>

Now, we know the scoring rules. Before we break into groups, remember that there should be no inter-group consultation unless it is specifically provided for. Also notice that the scores you get in third round will be multiplied by 3 times; the scores you get in the eighth round will be multiplied by 5 times and the scores you get in the tenth round will be multiplied by 10 times.

- The conductor of the game will provide a small chit of paper to indicate your group's selection of RAT or RABBIT before the beginning of each round.
- The conductor maintains the scores on the board for everyone's benefit. Each one of you may also maintain the scores at the back of this sheet in the table provided for that purpose.

Let us start playing the game.

## SCORE CHART FOR YOUR USE AND BENEFIT

<b>ROUND</b>	<b>GROUP 1</b>	<b>GROUP 1</b>	<b>GROUP 3</b>	<b>GROUP 4</b>
<b>1</b>				
<b>2</b>				
<b>3 X 3</b>				
<b>SUB TOTAL</b>				
<b>4</b>				
<b>5</b>				
<b>6</b>				
<b>7</b>				
<b>8 X 5</b>				
<b>SUB TOTAL</b>				
<b>9</b>				
<b>10 X 10</b>				
<b>GRAND TOTAL</b>				

We have played the game.

Kindly occupy your seats to reflect on what we did, what we have achieved and reasons thereof.



# **Determinants of Enduring Cooperative Performance**

## **Understanding from experience of Mulukanoor, Andhra Pradesh, India<sup>1</sup>**

### **Section 1: Mulukanoor - a well-established cooperative**

#### **1. The Beginning**

The Mulukanoor Cooperative Rural Bank started its activities in 1958-59 by offering short-term credit (crop loans) to its members for raising seasonal crops. Prior to its coming into existence, farmers, especially small and marginal, were dependent on local moneylenders for their credit needs. With the advent of using chemical fertilisers, need for cash in their agricultural production was accentuated and led to another dependency on suppliers of these chemical fertilisers.

One of the main and immediate objectives with which the Mulukanoor cooperative came into existence was to reduce or eliminate, if possible, this dependence of farmers on money lenders and suppliers of chemical fertilisers, who were often exploitative.

#### **2. Decisions to raise internal funds: the crucial turn**

Like many other agricultural credit cooperatives, the Mulukanoor cooperative also borrowed, initially, funds from its District Cooperative Central Bank (DCCB) to lend the same to its members. It later switched over to the State Bank of Hyderabad as the DCCB could not meet its demands adequately. The ratio of share capital to loan amount being one to ten, both at the level of members and itself, the cooperative soon realised that it did not have any capital left with it to do any other activity. It also realised that its role was strictly limited to that of an intermediary by just passing on loans from bank to members and collections from members to bank. It needed capital to carry its fertiliser business and tried initially raising funds on a short term ad hoc basis from few individuals and found it unsatisfactory as the arrangement, being dependent on few members, turned out to be less predictable and less reliable. This had led to a lot of discussion and a broad consensus among members was reached to strengthen the capital base of the cooperative.

As almost all of its members could not make contributions in cash, after serious deliberations, it was decided to adopt the following two methods which authorised the cooperative to make deductions at source while making disbursement of loans to members.

##### **a. Reducing member borrowing limit**

The first 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 or power of members, while retaining the same ratio of 1:10 for the cooperative, thereby increasing its leverage to raise more funds than was necessary to just meet the credit needs of its members either internally or externally. This meant putting double the amount of share capital by members to borrow the same amount of loan from the cooperative.

##### **b. Collecting compulsorily thrift deposit**

The second was to make it compulsory for every member borrowing from the cooperative to deposit 5 % of the seasonal crop loan amount with the cooperative once in every year. Members borrow twice in a year for Kharif and Rabi season crops and repay twice in a year. It was also decided that the cooperative should pay interest on this money deposited at the same rate as the member was paying on the borrowed amount from the cooperative. This was to offset the interest cost that the member was incurring as he agreed to make this deposit from the loan amount. It was also agreed that this deposit amount could be withdrawn only on withdrawing from the membership of the cooperative and interest will be credited to the same deposit account annually.

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<sup>1</sup> Caselet for classroom discussion by KV Raju, Faculty Member IRMMA, PB60, Anand 388001 email: [kvr@irma.ac.in](mailto:kvr@irma.ac.in)

At present, the interest cost is more than offset due to the positive differential between the rate of interest paid on the deposit amount and the rate of interest charged on the seasonal crop loan amount. The cooperative still benefits as, otherwise it would have to borrow from bank for business purposes at a much higher rate of interest.

### **3. Altered dynamics due to internal funds**

These two measures contributed largely to fuel the growth and development of the Mulukanoor cooperative and facilitated diversification of its services to meet the ever growing and changing needs of its members. Due to these measures, members contributed uninterruptedly to the ever-increasing need of capital for diversification into activities that strengthened the cooperative and benefited the member significantly. The internal generation of funds gave the cooperative necessary freedom in turn to meet the crucial need of financing its members liberally for utilising scarce ground water resources in a more equitable manner, when the financing declined its demand as it was not conforming to the rigid rules and regimented norms of lending.

Over the years, this also transformed the nature of its credit services programme, from that of borrowing from bank to lend its members to that of lending to its members and seeking refinance from bank. This meant achievement of relative freedom to tune credit services to suit more to the needs of its members, in terms of providing adequate assistance on time and in the process reducing its dependence on the bank. This has altered the relationship between the Mulukanoor cooperative and the bank from that of relative dependence to mutuality. There were occasions, in later years, when the financing bank was requesting the Mulukanoor cooperative to use some of its credit schemes so that it could meet its targets.

Because of access to large amount of internal funds, Mulukanoor was always in the forefront to profitably use any scheme or programme that was of interest to its members. Mulukanoor was in a position to use its funds in implementing the programme or scheme first and claim reimbursement later. This had enhanced its credibility as an organisation which can readily absorb assistance and achieve targets for the assistance providers. This also raised its image among members as an organisation that strives sincerely to somehow meet their requirements.

### **4. Members' need oriented service diversification**

The Mulukanoor Cooperative judiciously used various programmes of assistance that came its way to enhance productivity of its members' major resources, namely, their land and their labour. In the initial years, it addressed to the need of its members for utilising scarce ground water resources, mainly, by providing term loans to dig new open wells or deepen the old existing ones or go for in-well bores and energise their pump sets with electricity instead of using diesel. Its programmes of credit, supplying of fertilisers, pesticides, agricultural equipment and implements along with proper guidance and subsequent monitoring of use by members were all aimed at achieving this end. Two of its services that benefit members significantly are the following:

#### **a. Paddy produce marketing service to members**

With adequate generation of internal funds and having won its members' loyalty through well organised productivity enhancing input supply services which include credit, it ventured into output or produce marketing by grabbing an opportunity to establish 1 tph capacity rice mill with assistance from NCDC.

With assured supply of paddy from members (members repay their loans along with interest twice in the year in kind, in the form of paddy produced by them), it grew from strength to strength. At present, the Mulukanoor Cooperative pays a premium over and above the market price of paddy, which constitutes a very significant and regular benefit to members. This activity also generates a major chunk of its surpluses, contributing continuously and helping consolidation of gains both at the level of the cooperative and its paddy producing and supplying members. The Mulukanoor Cooperative, over the years, had increased its capacity for paddy processing to more than 4 tph and built an impressive storage capacity of over 10,000 MT.

Mulukanoor succeeded in this venture because it was able to tightly link repayment of loans to paddy procurement from members which conferred basically two advantages, namely, assured supply of paddy to achieve higher levels of business and that too without virtually involving any funds in working capital as members repay in kind in the form of paddy. The cooperative ends up paying to the bank out of the proceedings of the business and bears much less interest cost compared with what others end up paying on working capital. Mulukanoor cooperative has used this singular advantage to the maximum (more than 90 % recovery of loans in the form of paddy consistently over all these years).

#### **b. Seed multiplication and marketing services**

Meanwhile, with the introduction of High Yielding Variety Programme, another dependency of the farmers had arisen for the regular supply of assured and good quality seeds. The Mulukanoor Cooperative stepped in soon to fulfill this need, as it also perceived a profitable business opportunity in doing so. Mulukanoor acquires foundation seed from private companies and/or from different agricultural research stations and distributes the same among its members for multiplication. Depending on the contractual arrangements, it either markets itself on its own brand name or supplies back to foundation seed suppliers after processing and testing.

Substantial amount of internal funds, on which interest must be paid to members, created pressures on management and staff to diversify into other business activities like poultry feed supply, which were continued only as long as they were relevant to members and surplus generating.

### **5. Vigilant membership demand accountability**

There are several consequences of these two measures. They helped many members accumulate, without their conscious effort, a reasonably large sum of money (long standing members have more than what they borrow from the cooperative) in their deposit account, which enhanced their credit worthiness, self-worth feelings, confidence, and risk taking ability. It also raised their concern and level of anxiety to become more vigilant about the activities of the management and staff and the results thereof. The management and staff became more responsive by regular conduct of meetings to share information and accounts.

Mulukanoor may be one of the very few primary agricultural credit cooperatives which present printed annual report and account to members within four months of closure of accounts regularly for over thirty years. It is also one of the very few to insist on maintaining member passbooks up to date. All these resulted in an open atmosphere of functioning, within well established, accepted and understood procedures of work, trying to ensure equality of treatment and opportunity and reduce scope for favouritism.

As more of each was at stake, members became cautious in exercising their right to vote (elections were always held by secret ballot whether conducted by the Mulukanoor Cooperative in the early years or by the state department of cooperation at present and were always contested) and elect management judiciously. Their behaviour, as evidenced many times, proves that members understood that they not only have the right to elect every few years but also have the right to information on all that elected or appointed bodies do and have the right to intervene if they think these bodies are not performing in the interest of members or in accordance with their collective will.

The General Body of Mulukanoor resolved on several occasions, especially when appointed bodies were in office instead of elected bodies, restraining them from or clearly directing them to follow a particular course of action.

### **6. Resisting temptation**

The anxiety about the large sum of money in the deposit account with the cooperative tempted some of them to withdraw from membership in order to withdraw this money and join as new members. The Mulukanoor Cooperative through suitable amendments of the by-laws to prevent such member behaviour checked this in time. With this change a member, who so withdraws, cannot join again without a lapse of some years and that too, only by re-depositing the money taken out.

## 7. Living up to expectations

Ever increasing internal funds, on which interest needs to be paid, contributed to a gradual but ever growing subtle pressure for positive performance on the management and staff to become *economically prudent and efficient in their undertakings*, lest the resultant loss might erode the trust the members reposed in their integrity and the confidence they have in their ability to manage.

The management and staff of the Mulukanoor Cooperative, on the whole, lived up to the expectations of their members, by not extending credit unwisely, by not tying capital in excessive inventories, by not investing too much in fixed assets without keeping enough amount for adequate working capital, by not continuing services which contributed negatively, and lastly, by not expanding or diversifying more rapidly than their available limited capital and other resources permitted.

The management and staff of the Mulukanoor Cooperative demonstrated their ability to produce satisfactory results and provided dividend on share capital regularly for over last thirty years.

The experience of Mulukanoor thus indicate the indispensable nature of members' financial participation by contributing capital as a necessary prerequisite to their participation by patronising goods and services of their cooperative and to their effective demand of accountability and efficient performance.

Deatails about Mulukanoor cooperative are presented in the following three tables:

Table 1: Mulukanoor Cooperative Rural Bank - 40 years of Progress - Funds

Table 2: Mulukanoor Cooperative Rural Bank - 40 Years of Progress - Fund uses

Table 3: Mulukanoor Cooperative Rural Bank - 40 years of services

### Section 2: Understanding performance of Mulukanoor

The experiences of Mulukanoor corroborates the general view that cooperation can (only) be an activity of economically weak who are subjected to economic exploitation or are susceptible to such exploitation. The objective being to save themselves from such exploitation and to promote their own economic development by adopting a method of providing themselves through the organisation set up by them, instead of depending on others who exploit or likely to exploit them.

#### 1. Indispensable nature of financial participation

**Financial participation beyond a critical minimum level in relation to patronage in case of each member seems crucial for demand of efficient performance and transparent accountability.**

This was achieved gradually in case of Mulukanoor (as members could not make one time contribution) by regular deduction from loan extended towards a deposit that can be withdrawn only on cessation of membership. This worked well to mobilise capital for diversification and/or reduce dependence on external sources but whether the same or similar methods of capitalisation linked to prospective patronage would succeed, at the start needs further inquiry.

#### 2. Critical minimum level of financial stakes

**The critical minimum level (threshold level) of financial involvement in relation to patronage may vary from member to member for generating interest in more active participation. When the financial stakes of an individual member crosses the threshold level, they generate an internal pressure in the individual consciousness to protect the stakes and to benefit from them. The resultant anxiety gets reflected in the individual behaviour as demanding of transparent accountability (to satisfy one self that stakes are protected adequately) and demanding of efficient performance (to satisfy one self that stakes are yielding adequate benefits). The threshold level is presumably low in case of persons with inadequate (little) income to meet their needs because of relative dearness of money to them.**

A majority of members being small and marginal in Mulukanoor, the threshold level of investment in their case is low and that is attained quickly and the stakes are ever raising subsequently to make them increasingly vigilant about accountability and performance. Response to this in Mulukanoor is reflected in its early adoption and consistent practice of methods like pass books to members, regular conduct of general body meetings with printed annual report and audited account, secret ballot voting and system of internal auditing.

### **3. Equitable raising of capital in relation to patronage is essential**

**Gradually decreasing level of external dependence through increasing internal dependence on all active members in an equitable manner gradually promotes responsible member behaviour as contrary behaviour harms the stakes and thus provides an in built check against irresponsible member behaviour. Others also exert pressure on non-complying (deviant) members, as they perceive deviance as a threat to their stakes.**

The experience also indicates that for conducting operations, the members themselves have to contribute capital to the extent necessary in an equitable manner. Where the resources raised from among them falls short of requirement they might borrow from those willing to lend. However, they must keep in their mind that ultimately they have to raise resources on their own to the required level. Mulukanoor linked patronage of main services like lending and paddy procurement to contributions of capital (in the form of share capital and deposit from all user members) by a definite proportion to ensure equitable financial stakes of its members. High percentage of recovery of loans (85% - 95%) consistently over the years may be construed as responsible member behaviour and may be due to higher financial stakes of members (several members, especially those who joined 15-20 years ago have more deposits than loan amounts due). The threshold level may also vary for all of them put together from cooperative to cooperative or in the same cooperative from time to time depending on the package of services offered and the capital required to offer them competitively without compromising economic viability. Mobilising capital internally from members may be a necessary condition but if raised from a few members, it is not sufficient as presence of more or majority of members (due to democratic basis of sharing of right to vote) with financial stakes over and above their respective threshold level is essential to generate the requisite drive for demanding transparent accountability and efficient performance.

### **4. High stakes of members generates internal drive for performance**

**Internal governance and management systems of accountability and performance are evolved to satisfy members' demand for transparent accountability (to assure that their stakes are protected adequately) and efficient performance (to assure that their stakes are yielding adequate benefits), rather than due to design or due to the formation of certain social structures.**

With high stakes, members start making forceful demands on their cooperative leading to activities, which are more relevant to their needs. They also demand for performance and accountability from management and staff to ensure that capital and other resources secured are utilised more prudently and economically and the services provided are more efficient and satisfactory. The endurance of a cooperative is due to continuous and successful efforts of its members with high stakes to shape its malleable design (internal governance and management systems) and in rare cases the very purpose (if that proved a hindrance) of their cooperative to strengthen their individual economies. Design elements in this respect are more dynamic and situation endemic rather than static and situation neutral and hence less amenable to replicate than usually perceived to be. Malleability of design needs careful consideration to ensure success in replication efforts.

Formation of certain social conditions may facilitate or hinder but can not determine performance of cooperatives. The determining factor is emergence of collective will to secure potential benefits that were not possible for the individual through combined effort. This collective will scouts the opportunities, coordinates action to overcome difficulties, channels small individual efforts in a coherent and concerted manner to achieve results and ensures equitable sharing of benefits

accrued because of combined effort. Adverse social and political conditions may inhibit by thwarting the operation of collective will and like wise the elements of design within the cooperative but strong collective will not only tries to mould its design elements but also the socio-political environment. Lack of such effort to fashion the design elements and/or socio-political environment is a consequence of weak collective will rather than the other way round and as such these can not be argued as causal factors of performance.

The strength of the collective will is partially determined by the quantum and significance of benefits vis-à-vis the individual contributions and partially by how well the individual contributions are harnessed and deployed and how well the contributions are equitably related to the benefits conferred. Contributions to capital by members in a cooperative can be construed as their commitment to patronise continuously in future and as a measure of their risk in case the combined effort fails. Higher the quantum and proportion of member funds higher their risk and higher their effort to succeed and avert failure. Members' effort would be visible and indicated by robust internal governance and management systems within the cooperative and concerted efforts to mould the socio-political environment in its favour outside the cooperative.

Consequently, low financial stakes of members in their cooperative can be construed as their weak commitment to future patronage and as a measure of their low risk in case if the combined effort fails. Lower the quantum and proportion of member funds lower their risk and lower their effort to succeed and avert failure. Members effort, to be more precise the lack of it or weak effort, is indicated by their gross indifference even in case of denial of their rights and use (abuse) of cooperative by social and political forces to further their interests. In Mulukanoor, members tried to resist appointment of government officers as persons-in-charge in place of their elected committee and tried to enforce their will by restraining or directing the persons-in-charge through general body resolutions.

#### **5. Primary focus of control: member behaviour**

**Without members' active participation in 'each controlling other's behaviour' (promoting responsible behaviour and curbing irresponsible behaviour) and in the absence of recognising mutuality of their obligations to the cooperative in ensuring their patronage (supply produce or repay loans or purchase goods and supply or arrange adequate capital), the benefits that cooperation can secure for them can not become real.**

It is inadequate to view members as controlling their cooperative as an enterprise. The performance of this enterprise is so strongly dependent on member actions (such as supplying paddy or repaying loans on time and agreeing to supply adequate capital) that members themselves are the primary focus of control. By withholding their contributions, for whatever reasons, they either make its success or make its failure. Ensuring of consistent and enduring support from members (patronage) can not possibly be achieved in the absence of more members with high stakes of everyone. The high stakes prompt each one of them to comply and ensure compliance by others to make success possible or avert failure. The members must ensure patronizing the services of their cooperative to reduce its vulnerability because of fluctuating demand or supply, only then the cooperative can secure benefits of regular and adequate supply of quality goods or enhanced returns for their produce.

#### **6. Consequences of low financial stakes of members**

**a. Indifferent members:** If the level of financial involvement of a member or more members in a cooperative is below the critical minimum level, then their attitude towards the cooperative is characterised by apathy except when significant benefits are channeled through the cooperative. The members' attitude towards the management and staff is characterised by studied irreverence and indifference.

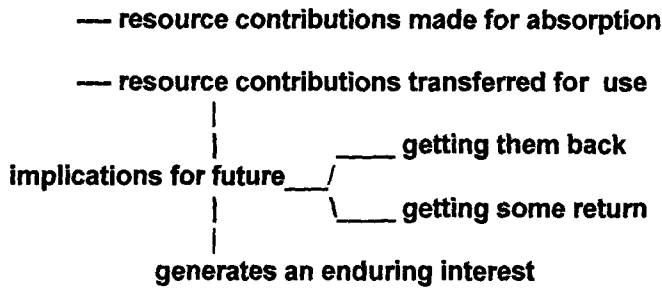
**b Loss of autonomy to function:** Excessive external dependence results in loss of autonomy and forces compliance to the wishes of resource providers (credit programmes of Mulukanoor in the early years). Internal dependence on only a few members (dissatisfaction experienced by

Mulkanoor in organising fertiliser supply with funds raised on ad- hoc basis) might not promote responsible member behaviour (manner of behaving as if consequences are of concern) or curb irresponsible member behaviour (manner of behaving as if consequences are of no concern). These might lead to authoritarian behaviour of those to protect their capital contributions. As stakes of members are low, they tend to put up with such authoritarian behaviour. These situations are undesirable as they denote critical deviation from the purpose of cooperation and are clear distortions.

**c. Self serving behaviour of office bearers and staff:** The attitude of management and staff in such a cooperative is characterised by mutual quarrel and/or accommodation to corner or enhance advantages (may or may not be pecuniary) due to their position. The tendency is also to split members among them by deflecting gains that flow through the cooperative appropriately to win and sustain members' loyalty in order to retain and continue in their positions, often for their own ends which may be personal and/or political. This undermines the legitimacy of the cooperative in the eyes of members as well as general public and worth of its activities.

Appendix 1

- **Nature of resource contributions**



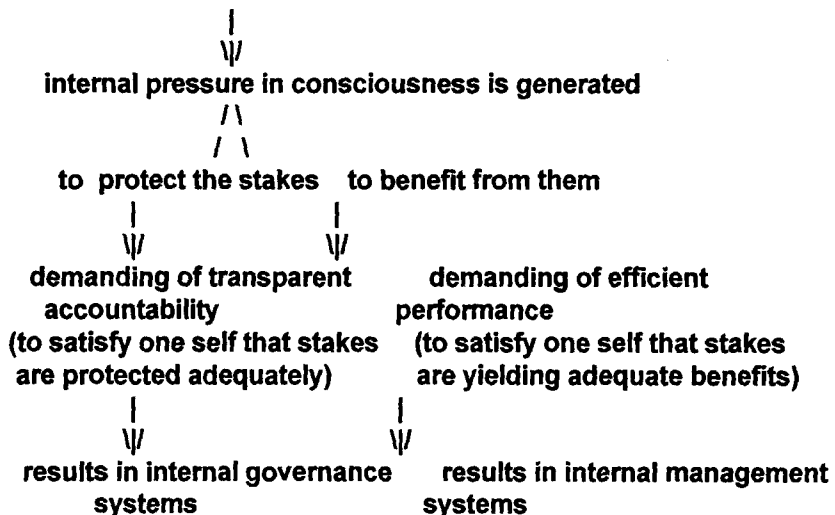
- **Indispensable nature of financial participation:**

Financial participation beyond a critical minimum level in relation to patronage in case of each member seems crucial for demand of efficient performance and transparent accountability.

- **Critical minimum level of financial stakes:**

The critical minimum level (threshold level) of financial involvement in relation to patronage may vary from member to member for generating interest in more active participation.

- **When financial stakes crosses the threshold level**



**Table 1: MULUKANOOR COOPERATIVE RURAL BANK - PROGRESS – Sources of Funds (Rs. In '000)**

Year	Members		Staff	Shares	Deposits	Reserves	Borrowings	Payables	Surplus	Total Funds
	A	B								
1956-57	373	..	1	2	..		..	..	..	2
1957-58	429	..	3	13	..		74	..	1	88
1958-59	878	..	4	23	4	3	185	2	2	219
1959-60	904	..	5	33	15	9	247	30	10	344
1960-61	1218		5	40	30	8	330	3	11	422
1961-62	1509		12	66	47	23	420	62	15	633
1962-63	1639		18	85	51	85	510	108	20	859
1963-64	1760		23	167	100	98	624	104	19	1112
1964-65	1892		23	207	127	180	996	71	38	1619
1965-66	1994		42	302	136	176	1374	9	26	2023
1966-67	2101		57	382	231	247	2244	201	43	3348
1967-68	2151	804	64	491	340	379	2256	388	64	3918
1968-69	2229	827	60	507	593	774	2589	178	58	4699
1969-70	2280	1246	58	706	410	877	3755	313	3	6064
1970-71	2330	1315	53	837	394	1014	2559	..	18	4822
1971-72	2421	1449	48	816	369	976	3141	14	73	5389
1972-73	2903	1534	84	966	420	1171	4928	2	47	7534
1973-74	3143	1845	105	1060	1129	1335	5812	1005	323	10664
1974-75	3336	2325	110	1300	1280	1562	7336	1862	241	13581
1975-76	3500	2487	142	1591	1327	1804	7854	1897	175	14648
1976-77	3344	2496	146	1689	1517	2975	9240	1396	66	16883
1977-78	3382	2496	137	1754	1761	3766	9161	1710	106	18258
1978-79	3325	2500	145	1826	1875	3626	12181	1839	335	21682
1979-80	3222	2500	109	1821	1711	3184	9795	2175	357	19043
1980-81	3465	2501	104	1725	2117	4109	11148	1946	355	21400
1981-82	3396	2525	101	1739	2994	5538	8866	1640	827	21604
1982-83	3387	2526	86	1932	3668	6946	10001	2877	1110	26534
1983-84	3282	2622	93	2638	4570	9239	15087	2634	1086	35254
1984-85	3191	2826	94	3365	4778	9881	19331	2363	1380	41098
1985-86	3385	2826	92	5972	5644	13508	19371	1441	1874	47810
1986-87	3565	2826	92	6361	6848	14268	25958	3835	914	58184
1987-88	3705	2826	84	6878	8091	16174	19334	5138	1896	57511
1988-89	3730	2893	84	6699	11138	18351	27100	5253	2002	70543
1989-90	3940		96	7215	14002	21089	36263	10790	2191	91550
1990-91	4317		96	7960	16944	23237	36450	10750	1053	96194
1991-92	4883		93	8072	21302	28249	33239	10781	3939	105582
1992-93	5160		91	9133	24441	32225	35005	9451	2810	113065
1993-94	5316		94	9733	32060	36226	41074	8284	2981	130358
1994-95	5518		98	10119	39914	42191	34500	9644	4463	140831
1995-96	5609		110	10694	49720	50089	38421	6656	4648	160228
1996-97	5684		110	11525	60033	56793	63176	6195	5470	203192
1997-98	5735		110	11985	72158	67588	53897	8055	6719	220402
1998-99	5849		120	13246	85905	87517	38874	5381	7222	238145
1999-00	5936		115	14318	137385	102482	36484	5361	8277	304307
2000-01	5931		111	15980	163611	110667	45845	7363	6566	350032
2001-02	5987		110	16957	178645	133830	20000	12388	10155	371975
2002-03	6048		110	1821	182289	142392	37464	12545	9813	402713



**Table 2 : Mulukanoor Cooperative Rural Bank - Progress – Use of Funds**

Year	Lending	Investments	Assets	Stocks	(Rupees in thousands)		
					Receivables	Cash	Total funds
1956-57	..	1	..	1	..	..	2
1957-58	4	80	2	..	..	2	88
1958-59	99	60	2	12	22	24	219
1959-60	209	24	19	33	44	15	344
1960-61	272	33	21	74	11	11	422
1961-62	381	47	49	128	6	22	633
1962-63	425	66	91	204	62	11	859
1963-64	590	159	145	189	14	15	1112
1964-65	934	176	155	273	25	56	1619
1965-66	1002	180	344	278	119	100	2023
1966-67	1168	331	431	1266	52	100	3348
1967-68	1619	265	431	1574	9	20	3918
1968-69	2572	337	647	891	87	165	4699
1969-70	2770	334	747	1795	124	294	6064
1970-71	2626	463	743	807	122	61	4822
1971-72	3183	515	768	696	185	42	5389
1972-73	4381	466	898	1449	279	61	7534
1973-74	5570	889	1096	1559	1465	85	10664
1974-75	7237	1078	1487	2659	1054	66	13581
1975-76	6993	898	2398	2242	1885	232	14648
1976-77	6576	701	2904	4281	1710	711	16883
1977-78	8600	712	3194	3792	1817	143	18258
1978-79	7717	899	3569	6713	1822	962	21682
1979-80	6762	1116	3787	5476	1645	257	19043
1980-81	6370	1490	4174	7998	1271	97	21400
1981-82	6621	1253	5481	6315	939	995	21604
1982-83	7602	1590	6351	7023	3636	332	26534
1983-84	7388	2133	7109	14653	3841	130	35254
1984-85	11046	2376	11574	12902	1919	1281	41098
1985-86	13368	2804	14045	10631	6236	726	47810
1986-87	17493	3316	15204	16410	4981	780	58184
1987-88	19098	3522	15653	14554	3874	810	57511
1988-89	23717	4286	16132	22169	2179	2060	70543
1989-90	27318	7493	16386	30917	8690	746	91550
1990-91	33726	8960	16398	28166	7370	1574	96194
1991-92	45720	13160	16725	19998	9949	30	105582
1992-93	54889	19025	17992	13192	7808	159	113065
1993-94	58540	15548	18447	23480	14034	309	130358
1994-95	59247	18585	21362	24385	16035	1217	140831
1995-96	64545	21931	24552	29126	19837	237	160228
1996-97	67218	31186	28891	66097	9451	349	203192
1997-98	66158	57178	31272	46632	18525	637	220402
1998-99	80650	52989	34357	54077	15701	371	238145
1999-00	88763	74161	38406	70764	31790	423	304307
2000-01	112941	90205	46206	67906	32425	349	350032
2001-02	125753	142677	48399	35902	18830	414	371975
2002-03	134977	134718	54276	49449	28730	563	402713

**Table 3 : Mulukanoor Cooperative Rural bank of Services (Rupees in '000)**

Year	Loans	Input Supply	Hire Charges	Output marketed	Consumer Goods	Total Services	Salaries & Wages	Surplus	Dividend
1956-57	..	..	..	..	..	..	..	..	..
1957-58	32	33	..	..	..	65	1	..	..
1958-59	186	39	..	..	..	225	2	2	5.75
1959-60	265	135	..	..	8	408	3	10	6.25
1960-61	292	143	..	..	6	441	4	10	6.25
1961-62	379	285	..	..	4	668	6	14	6.25
1962-63	446	380	..	..	15	841	10	18	6.25
1963-64	637	531	..	..	42	1210	13	18	6.25
1964-65	1295	1061	..	..	58	2414	22	38	6.25
1965-66	1324	881	..	..	183	2388	30	26	6.25
1966-67	1891	1276	..	..	299	3466	48	43	6.25
1967-68	3002	1562	..	2271	479	7314	84	64	6.35
1968-69	2340	1381	..	1058	441	5220	83	57	4
1969-70	2939	2258	28	113	697	6035	92	3	..
1970-71	3498	1897	1	..	100	5496	94	18	1
1971-72	3204	1916	87	1308	377	6892	86	74	4
1972-73	5343	1907	83	843	418	8594	119	47	2.75
1973-74	6933	3320	74	1507	431	12265	132	323	10
1974-75	9714	3780	187	2998	472	17151	145	241	10
1975-76	11669	4821	361	3461	575	20887	264	175	6
1976-77	12049	5039	370	3753	1054	22265	311	66	6
1977-78	6521	4093	383	4684	1029	16710	407	148	5.5
1978-79	6985	5979	474	4260	749	18447	445	335	10
1979-80	5379	4381	685	7342	1344	19131	423	448	10
1980-81	6673	6198	810	5109	1727	20517	552	355	10
1981-82	8975	8179	822	9898	1969	29843	627	827	10
1982-83	9915	6441	1331	10950	2535	31172	648	1110	10
1983-84	14842	9862	846	14074	5722	45346	826	1086	10
1984-85	18059	9644	1463	20839	6630	56635	942	1380	10
1985-86	14289	7730	1560	17472	7537	48588	1069	1874	12
1986-87	23952	9731	1104	13859	6342	54988	1111	914	12
1987-88	22355	13638	872	28549	6252	71666	1204	1896	12
1988-89	34169	15705	921	31108	5765	87668	1464	2002	12
1989-90	35724	26095	1047	24727	5980	93573	1593	2191	12
1990-91	27504	19530	793	28197	5954	81978	1429	739	12
1991-92	54208	35994	1395	55686	9150	156433	2071	3939	15
1992-93	39344	31797	1438	24239	8464	105282	2350	2810	15
1993-94	26012	20139	1197	41410	13387	102145	2756	2981	15
1994-95	22172	24510	1217	58986	14473	121358	3079	4463	15
1995-96	34876	34114	1319	78232	13525	162066	3402	4648	15
1996-97	71,850	48819	1613	123001	17334	262617	3830	5470	15
1997-98	63987	52960	1498	151121	19970	289536	4384	6719	15
1998-99	83694	67981	1923	29439	19547	202584	4868	72.22	15
1999-00	1170.91	747.95	23.25	1648.49	141.65	3732.25	51.12	82.77	15
2000-01	1492.27	856.38	26.04	1694.63	132.11	4201.43	57.94	65.66	15
2001-02	1284.64	864.25	27.99	1937.34	177.22	4291.44	59.52	101.55	15
2002-03	1106.03	528.73	24.04	1336.4	152.01	3147.21	72.25	98.13	15

# THE DESIGN OF THE ANAND PATTERN<sup>1</sup>

Tushaar Shah

We must remember that the propositions presented in the following pages were conceived not by a social scientist or a management theorist but by a young manager who was constantly relating his immediate experience to what others were doing in similar situations. The timing of his analysis too is important: the first two decades after India achieved Independence, when a young nation, full of hope and elan, was trying to pull its economy up by the bootstraps and attempting to erase as quickly as possible the deep scars left on its national psyche by three centuries of serfdom. There were numerous experiments in development, some in the official sector and others outside. Many of these had been impacted by the strong influence of Gandhian thought. Through Jawaharlal Nehru, the Socialist experiment in the erstwhile Soviet Union had also influenced the design of many of these development experiments. In simple terms, the Indian development sector was trying to implement the ideas of Gandhi when not realising Pandit Nehru's dream of socialism; when it was doing neither, the governments at the centre and in the states were launching programmes after public sector programmes to increase the production of this commodity or to raise the incomes of those target groups; the Indian development sector paid scant attention to what the people themselves wanted. The propositions set out here were conceived against this backdrop.

## **Proposition 1: Market as the Pre-condition for Post-subsistence Production**

In a subsistence agricultural production system, in order to raise production and productivity, we must first stimulate and expand the market to which subsistence producers have easy, low-cost access.

As a young manager, Kurien found that most government and NGO programmes in the rural sector concentrated on extension, production enhancement and technical change at the farmer/artisan level. However, all these seemed pointless unless farmers had a strong enough reason to be more productive. In dairying, this paradox was evident. Throughout the 1950s and later, government policies on dairy development took the form of the Key Village Scheme and the Intensive Cattle Development Programme which were designed to introduce better feeding and breeding practices through extension support. The Key Village Scheme failed, in general, to stimulate dairy production in those areas where milk marketing had not been reformed. According to Kurien's assessment, the basic assumption on which the scheme was designed—that farmers did not know nor had the wherewithal to increase milk production—was wrong. At the average daily yield of around half a kilogramme, the productive capacity of cattle in India was and continues to be so under-utilised that a farmer can, if he really decided, double the milk production 'by merely being kind to the animal'; he can double it again by feeding it some green fodder or food concentrate. If the Indian farmer did not do this, it was because he did not have access to a stable and remunerative market (see, for example Taimni 1979).

Why was Kaira traditionally a district of milk producers? Because it had for long served the Bombay market. Despite their unjust and exploitative business policies, Reeves, Kapasi, Koehler, Banker, and finally Polson—all the pre-Amullords of Kheda's dairy industry, who set up modern dairy processing factories in the district in the first half of the century—served to strengthen this link with the market. In fact, even before all these appeared on the scene, as far back as AD 1900, a Swede by the name Stafford manufactured over 50 mt of butter in Anand every day. All these gentlemen did not care to provide any production enhancement support to milk producers (Singh and Kelly 1981: 11-13); and yet they contributed immensely to making Kaira a premier dairy district by their 'exploitation' of its dairy farmers.

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<sup>1</sup> Reproduced from Shah, Tushaar (1996). 'Catalysing Cooperation: Design of Self Governing Organization', New Delhi: Sage Publication.

Subsistence dairying contains a large built-in-slack which permits increases (without any cost) in production and productivity as soon as access to a market makes it worthwhile to do so. It is only after this slack is used up that extension, technical change and input services help in increasing productivity further. The Kaira union recognised this market-induced production effect and systematically used it to enhance milk production by improving the quality of linkage between the producers and the market. A range of technical input services that the union gradually began to provide, and which became standard elements of the Anand Pattern kit, assumed significance only because they followed the 'market-pull'.<sup>7</sup>

At a more general plane, the lesson is that in each community and in each activity/business, there operate several constraints that restrict the opportunity sets of members; in the design of successful economic development programmes, it seldom helps to start with any one of these constraints; it is crucial to identify and attack that constraint which is the most critical and binding on the community's opportunity set. And according to the Anand Pattern, in most subsistence agriculture and rural development projects, doing this involves finding and tapping new, attractive markets and providing producers access to them. Indeed, Kurien has often gone so far as to assert that marketing is the key to India's agricultural development, a proposition that has been generally ignored, often contested and seldom taken into account in the design of development projects.

### **Proposition 2: Marketing as the First Step to Co-operative Organisation**

Following from the first, the second proposition of the Anand Pattern is that if a new rural producers' co-operative wanted to drive a wedge into the existing system and create a niche for itself, its best bet was to begin by studying the demand system rather than the production system and to first mount a successful marketing strategy rather than to organize the producers.

If it is suggested that this is a trivial proposition, then one should study the numerous attempts made by NGOs and Gos to organize poultry farmers, mushroom growers, artisans, weavers or bidi makers who have done precisely the opposite, and generally failed. We find governments, Gandhians, voluntary agencies and others exhorting farmers, artisans, fishermen and tribals to organize themselves in all types of co-operatives. A majority of these fail because behind their formation there is seldom a cogent theory of why they should succeed.

Co-operatives are often created because those who create them cannot see any good reason why they should fail. This is seldom enough. To build successful co-operatives, it is important to identify a strong reason and a correct logic (theory) to ascertain why the co-operative proposed would succeed in normal circumstances. The Anand Pattern had such a theory. In Kurien's words: 'If you want to create an Anand [type co-operative], you have to first find a Bombay [type market]. Capturing and developing new, remunerative markets is crucial for building and sustaining a marketing co-operative. The key reason why Amul itself and other Anand-type co-operatives in Gujarat and elsewhere achieved success was because they succeeded in processing and marketing milk; correspondingly, where marketing was under-emphasised or mishandled, dairy-and other-co-operatives failed.

We noted in the first section that once established, the only factor that checked the pace at which Kaira, Mehsana, Sabarkantha and other unions grew was the quantity of milk they could handle and market. Society organisation and production enhancement closely followed the development of processing and marketing capacity. In Kaira itself, in a single year soon after the second dairy was commissioned in 1957, 43 new village co-operatives were formed; the number of farmer members of the union went up by 25 per cent; milk collection increased by 30 per cent and sales by 22 per cent. In the Mehsana union, the number of village co-operatives increased from 20 to 239 and milk procurement increased from around 1 to 3.5 lakh litres/day in less than two years after the plant was ready. In Sabarkantha, likewise, within one year of the commissioning of the plant, the number of village co-operatives and producer members and the milk, procurement shot up to achieve 100 per cent utilisation of the processing capacity! As soon as Baroda's plant was

ready, within one year, the number of village co-operatives increased from 8 to 65; primary membership shot up from 150 to 7,900, and daily milk collection soared from 0 litres to an average of 18,300 litres per day! Organising farmers, large numbers of them, posed little problem once the groundwork was done. As soon as they were able to handle and market milk, these unions built farmer organisations at an electrifying speed.

In Chapter 1, we have stated that ease and cost of organising are amongst the principal criteria in evaluating different models of member organisations. The larger the number of members, the lower the ease and the higher the cost of organising. That is why member organisations that come up on their own are typically small. When large co-operatives and member organisations come up as *swayambhoo* organisations, we must look for unique features (built into them) which dramatically enhance the ease and reduce the cost for a large number of potential members to organise. In the Anand-type unions that came up in Gujarat before 1970, this unique feature was their ability to provide to their members access to an attractive, stable, reliable and year-round market for their marketable surplus of milk.

What is the best way to do this? The Anand Pattern has specific suggestions to offer in this regard.

### **Proposition 3: The Anand Pattern: A Superior Design-concept**

In the Kurienesque world-view, all three mainstream government interventions in animal husbandry and dairy development during the 1950s and 1960s were conceptually flawed. The Key Village Scheme, the intensive Cattle Development Programme and other such animal husbandry schemes either completely ignored the importance of marketing or were based on unimaginative marketing strategies which were designed to fail. City milk schemes which were designed to collect milk from producers in villages in the immediate neighbourhood of the cities were also bound to fail since numerous private milk vendors, who used low-cost transport (bicycle) and processing technology (usually dipping milk cans in canals or tanks for cooling) and less capital, were sure to give the city dairies (that used trucks for milk transport, energy-intensive chilling and pasteurisation technologies and urban milk distribution systems) a good run for their money.

Likewise, milk colonies like Aarey in Bombay were also destined to fail in the long run. Besides the environmental havoc cattle-sheds created in cities and the genetic drain they inflicted on the livestock sector by making it advantageous to send dry buffaloes in fourth- or fifth lactation to the slaughter-house, the Aarey type colonies would lose out 011 competitive advantage if pitted against milk produced in rural areas. This is because it was far more expensive to keep cattle in Bombay and transport fodder from the hinterland to Bombay, and dung from Bombay to the villages, rather than produce milk in the villages and transport it to Bombay. As long as structures to promote rural milk production and its marketing in cities were absent, the Aarey-type arrangement would work; otherwise not.

Finally, in the Kurienesque world-view, government-promoted dairy co-operatives and/or government-managed suburban milk plants too failed to grasp the primacy of market development and the need to strike a balance between procurement and marketing. Almost all of these plants were liquid milk plants collecting milk from producers either through contractors or through pseudo co-operatives, processing it and marketing it in nearby urban demand centres. The main problem that all these failed to solve was the mismatch between demand and supply. In winter, when buffaloes produced thrice as much milk as they did in summer, these plants frantically tried to increase their share in the liquid milk market; but in summer, as their collection dropped, they failed to satisfy their customers and lost them. The size of the liquid milk market they could build and maintain was determined by their summer through-put; and they had to find a mechanism to deal with the excess procurement in winter.

The design-concept of the Kaira co-operative—as it had emerged by late 1950s—solved at once all these inadequacies and problems that bewitched all other dairy development interventions in progress at that time. The basis of the Anand Pattern, in the Kurienesque world-view, was captured in the following statements: (a) In order to create an Anand, it is important to first find a Bombay, (b) It is futile to build an Anand in Andheri; or, in other words, the distance between an Anand-type co-operative and Bombay-type market must be so large as to justify investment in chilling and pasteurisation and long distance transport, and which frees the co-operative from competition with small-time private vendors. (c) An Anand can capture and retain a Bombay's market and yet provide its farmer members a stable market for milk only if it has a powder plant. (d) Production enhancement programmes must follow and not precede the commissioning of the procurement, processing and marketing system.

#### **Proposition 4: The Principle of Pump-priming**

Kurien stuck to these principles even he himself, as the General Manager of the Kaira union, helped to falsify them. The Baroda union, which we saw was the first to follow Amul in organising a Kaira-type union, tried to build an Anand in Andheri, as it were! The union had within its command area a large demand center – namely, the Baroda city; it also did not have a powder milk plant for a long time. Surat, another early union, was a similar case and by the late 1980s had emerged as one of the best unions in Gujarat. That the Anand Pattern principles were falsified in some situations raised-and not reduced-their value as a theory and a design-concept. For, in dealing with these exceptions, new creative propositions were formulated. One of these, which eventually formed the basis of Operation Flood, was the pump-priming principle.

We have noted that the best way to go about organising commodity co-operatives (and indeed agricultural development in any specific region/community) is to start working with the consumers and not with the producers. However, this always involves cracking a chicken-and-egg-problem; unless producer co-operatives are organised, they have nothing to market; and unless co-operatives know how to dispose of the produce, they cannot start the procuring process. Kurien found pump-priming the best answer to this 'launch' problem that all new co-operatives face. The formation of Baroda as well as Mehsana unions suggested the power of this principle.

The Baroda union violated the principle that the co-operatives should be organised sufficiently far from the demand centre and paid dearly for it. Its early village co-operatives ended up with all the village's milk in winter; but in summer, private traders from Baroda raised their offer price to producers so as to serve their regular clients, and as a consequence, the summer milk sale by the young Baroda union dropped to a trickle. This cycle went on until the Baroda union built its own liquid milk plant. Amul offered to the Baroda union any amount of milk it needed to capture a commanding share of Baroda city's liquid milk market during *summer*. This the new union did; and 10 and behold, no sooner did it begin capturing the Baroda market than its village co-operatives began rapidly expanding their summer procurement as private traders began moving out of business. In order for the Baroda union to develop a stable business for good, someone (in this case Amul) had to *prime the pump* as it were for the first time. The same effect worked in reverse when the Ahmedabad Municipal Dairy and Amul provided a guaranteed processing and marketing channel for the milk that the Mehsana and Sabarkantha unions collected until their own plants were ready some years later.

The pump-priming principle was central to the design of the Operation Flood programme. Kurien often stressed that the distinctive aspect of Operation Flood was that instead of using foreign aid as an external resource inflow, it used donated dairy commodities-for priming the pump-as an integral part of the strategy which led to the success of the project. <sup>8</sup>

#### **Proposition 5: The SNF Surplus**

In the design-concept of the Anand Pattern, the powder plant has great significance. Its value is widely recognised in absorbing excess procurement during flush seasons in buffalo dominated

areas so that co-operatives can procure all the milk their members have to offer throughout the year. However, an even more important reason why a powder plant has been crucial to dairy unions is that it has conferred on them a powerful competitive advantage vis-a-vis traditional competition in milk and products.

Milk has fat, solids-non-fat (SNF) and moisture. Buffalo milk has 7-10 per cent fat, 9-9.5 per cent SNF; non-descript cow milk has 2.5-5.0 per cent fat and 8-9 per cent SNF. In the Indian subsistence dairy system, conversion of surplus milk into ghee was the most popular mode of conserving and marketing milk; the buttermilk produced as a by-product also had an important place in traditional Indian diet. Up until the mid-1960s, over half of the Indian buffalo milk output was converted into ghee at the household level. Between 10 and 13 kg of buffalo milk would yield a kg of ghee and some 25-30 litres of buttermilk which had to be used within 6-12 hours, especially in summer. Thus, even if only 10 kg of ghee were made daily in a village, 250-300 litres of buttermilk would be available for consumers within the village every day. It is possible that it was because of this systematic over-production of buttermilk that traditionally there have not existed any markets for buttermilk in Indian villages. The net impact has been that in converting buffalo milk into ghee; the farmer would put much less than the true economic value on the milk proteins separated as butter milk; as a result, if a milk producer could sell 7 per cent milk fat at, say, Rs 2/kg, he would not convert it into ghee unless the price of ghee was at least Rs 26/kg. From the 1950s through to the early 1970s, ghee prices prevailing in Indian markets included not only the value of milk fat but also some of the unrealised value of SNF.

In a dairy economy characterised thus, an isolated operator buying 7 per cent fat and 9.5 per cent SNF buffalo milk and converting into ghee and skimmed milk powder (SMP) by using a modern powder plant would get out of the same 13 kg of milk, around 1 kg of ghee and another 1.35 kg of SMP. If he is able to sell ghee at the Indian market price, which already includes some of the value of SNF, effectively he gets paid for SNF twice. Against this, he has to incur some additional cost in using an energy-intensive drying technology. The net SNF surplus thus is the difference between the value of the SMP output less the incremental drying cost. This SNF surplus is available only to those who have access to a powder plant and who as a result have a unique and powerful competitive advantage vis-a-vis the traditional milk trader.

This has several implications. First, in general, powder making has been more profitable in India than liquid milk marketing; this is contrary to the trend the world over. As a result, private dairy plants in India have as a rule operated only as product factories. Second, even for dairy co-operatives, especially those without direct access to a large liquid milk market, conversion of milk into fat and powder has in most years been as profitable as, or usually more so than, marketing liquid milk. This is suggested in the fact that many Anand Pattern dairy co-operatives routinely make powder even in summer. Finally, the advantage of the SNF surplus exists only as long as the household sector dominates in ghee manufacture. In fact, over the past two decades, there has been a massive shift in this position as co-operative dairies have increased their share in ghee making. With this, the SNF surplus has got progressively diluted; this process will inevitably continue in the future and weaken the competitive advantage of the Anand Pattern co-operatives vis-a-vis traditional as well as modern sector operators in dairying.

Many of these issues have been dealt with extensively in one of my earlier papers (Shah 1984). For our purpose here, it is important to note that for Amul as well as for other Anand Pattern co-operatives established during the 1960s and the 1970s, the SNF surplus created by the powder plant was a source of powerful competitive advantage. It made it possible for co-operatives to offer to their members for buffalo milk a price in terms of kg of fat which was far higher than even the prevailing retail price of ghee. Under this situation, it was very difficult for traditional operators to compete with a co-operative unless it was extremely badly managed; more, it made it entirely uneconomic for members to make ghee at home. Both these enabled new Anand Pattern co-operatives to quickly come into their own and rapidly attract loyal membership: no competitor could better the deal offered by a reasonably well-managed Anand Pattern union.

Kurien has not highlighted the contribution made by the SNF surplus in Amul's development perhaps because during 50 years before Amul started, cream separators were widely in use in Kheda. When Koehler, the German businessman, began to convert SNF into casein, the SNF surplus was already tapped by competitors.<sup>9</sup> However, in few other areas outside Kheda district was dairying as technologically developed. In Mehsana, Sabarkantha, and Banaskantha, the SNF surplus gave a decisive advantage to dairy co-operatives. In Erode district in Tamil Nadu, where creamery operators separated cream from milk and dispatched low-fat milk in cans to distant consumer markets like Bangalore and Trivandrum after cooling the cans in canals, the Anand Pattern union established under the first Operation Flood scheme had to face stiff competition from the traditional system.

### **Proposition 6: Member Control and Professional Management**

The existence of the SNF surplus heightened greatly the chances that a new Anand Pattern union, if reasonably managed, would rapidly become a powerful engine of rural economic growth and prosperity in the district. However, Kurien had noted that the mere presence of this engine in a district was not enough. After all, in Kheda itself, Reid, Koehler, Polson and several other entrepreneurs had used modern dairy technology to build and run profitable dairy businesses; but they had passed on little of the value added to farmers. As a result, there was massive opposition to them from farmers who had been used as mere 'suppliers'. Multinational dairy companies operating elsewhere in India too maximised the SNF surplus; and yet, during the 1950s and the 1960s, none of them had shown any interest in farmers or in the development of dairy farming; even efforts like Hindustan Lever's Etawah project came only after the rise of Amul and other co-operatives in Gujarat. It was thus perfectly possible for a district to have a modern dairy factory using pump-priming and marketing to get a secure foothold in the traditional system, collect the bulk of the milk marketed by farmers, maximise the SNF surplus, and yet use all these to build a lucrative business for a small group of shareholders by paying farmers 'reservation prices'.<sup>10</sup>

The alternative scenario that dominated the Indian scene was the government accepting the first five propositions and setting up an Amul-type system but managing it in a bureaucratic manner. By observing the Delhi Milk Scheme at close quarters, Kurien had realised how callous, self-serving and inefficient a bureaucratic management system can get especially when it is also subject to intense political interference. Lack of concern for efficiency, absence of managerial and technical expertise, an unhealthy internal and external task environment, and above all, absence of member orientation could nullify all these advantages.

Kurien referred to the necessity of farmer control and professional management more as positivistic propositions (hypotheses) rather than as a basic value position. The underlying premises were: (0) In the absence of professional expertise, it would be difficult to quickly gain a market foothold on the scale needed and exploit the full advantage offered by the SNF surplus. (b) Whose interests a successful business enterprise serves will depend upon whom managers are accountable to, in principle and in practice. (c) If the development of a district's milk producers is the goal behind building the business, then this goal could be best achieved by ensuring that the business is managed by professionals and technocrats who are and 'feel' accountable to producers through their elected board.

## **CONCLUSION**

### **Summary**

What then is the Anand Pattern? In our understanding, the Anand Pattern represents not so much the structure and features of a co-operative system but a *methodology* of building and sustaining an economic enterprise on a scale that would reach and transform the household economies of an area's rural population. The methodology involved has a 'core' and an 'auxiliary' component. The elements of the 'core'-the six propositions we detailed-are necessary for the successful replication of the Anand Pattern; if any of them is violated in spirit, the replication



would undoubtedly fail. The auxiliary component-includes some elements/features which have proved harmless or even beneficial but whose essentiality is yet to be verified; there are others whose utility has been established by repeated success in different settings of a design-concept of which these were elements." However, by experimentation or by a priori analysis, it is possible to argue how changes in each of these elements might leave the final results unchanged or better.

The 'core' of the Anand Pattern ensures three things for a new co-operative organisation: (a) how to quickly establish a foothold in a traditional procurement and marketing system; (b) how to rapidly expand, become viable, and achieve scale of operations needed to become a truly 'going concern'; and (c) how to ensure that this business remains subservient to and leads to the development of the rural producers of the district/area. The particular set of bye-laws, the three-tiered structure, the input programmes, and the rest are supportive but not essential. Cotton co-operatives in Gujarat adapted many of these auxiliary features of the Anand Pattern; and so did tobacco co-operatives. Even co-operative banking has a three-tiered structure. None of these produced the Anand Pattern results. In contrast, there are examples, though rare, of private dairy businesses, such as Chitale's in Maharashtra, who produced comparable results even though they violated the Anand Pattern auxiliary (Apte 1996).

The first five of the six propositions of the Anand Pattern offer valuable guidelines about how to build any large agro-business and run it successfully; these are basically the formula for the 'engine- assembly' with little attention paid to the shape, size and styling of the body to which that engine is to be fitted! In that sense, the theory underlying the Anand Pattern is as relevant and useful to a Nestle or a Pepsi as to a farming community contemplating a co- operative. The key issue is how can farmers ensure that the engine-assembly works for them. The last proposition, in a broad sweep, suggests that the only way this 'engine' can be made to work for the producer is by ensuring that he is in the driver's seat, no matter what the shape, size, colour or style of the body to which the engine is fitted!

### Three Chinks in the Anand Pattern Armour

Even when we get the 'core' and the 'auxiliary' right, there are three areas in which the conceptualisation of the Anand Pattern - and therefore, its replication-remained somewhat inadequate and weak; these are governance structure, capital accumulation and long-term competitive advantage.

**Governance Structure:** The 'formal' statement of the Anand Pattern adopted a distinct if somewhat doctrinaire approach to the governance structure of co-operatives. Issues related to electoral rules, and criteria for zoning and voting rights, which have crucial roles in determining the kind of elected board a co-operative gets, were seldom analysed closely. The Anand Pattern offered little by way of a theory (or coherent logic) on which electoral process has the best chance of producing a board which will govern the co- operative in the best interests of its members. For example, in village co-operatives, the norm of one-member-one-vote was prescribed because of an a priori notion that it was a good norm, not because of the certain knowledge that there was no alternative norm which could yield better probability of good governance. Instances of extensive violation of this norm-one-member-one-vote--in village co-operatives are generally ignored as aberrations rather than as significant data to test prior assumptions. Likewise, logical answers to many questions are not easily forthcoming because they have not been thought about: Why should members from all zones be expected to vote for each candidate? Why cannot zoning occur on the basis of volume of business? Why is the union chairman not elected by the entire primary membership directly? Why should seats be reserved for special categories of members, such as women or Scheduled Castes, regardless of their patronage concerns? Answers to these do not exist because these issues have probably not received the attention they deserve; and answers that exist and practices currently in use are based on inadequate conceptualisation about how governance structures can influence the course co-operative organisations take and how different designs of political structures affect the kind of governance structures they get.

Thus, there is little in the design-concept of the Anand Pattern-any more than in case of other co-operatives-to ensure that its political structure and processes maximise the probability of routinely producing governance structures that will: (0) guard and assert their sovereignty against external interference; (b) make performance demands (on the management) which ensure that the organisation operates in the best interests of their members; and (c) ensure that members as individuals and as a collectivity perform their expected role vis-a.-vis the co-operative so that the co-operative can serve the aggregated interests of the members.

**Capital Accumulation:** Another major flaw in the design- concept of the Anand Pattern is that it has no built-in device for self-financing; the co-operative has to depend on some supplier of initial capital; as a result. its governance can never assert its sovereignty. In the first section. we noted that once the core of the Anand Pattern is in place. many things begin to fall in place; village co-operatives get quickly and easily organised; their staff get trained; milk starts flowing; procurement transport gets organised; input programmes start. Creating the organisation thus becomes a relatively simple affair; if there are snags, these are easily fixed. But if there is a problem at the processing or the marketing end, it disrupts the entire chain and checks the growth of the organisation. A major reason why Mehsana, Sabarkantha and Banaskantha unions could not grow faster was that they had to wait until some one found the capital for them to build the processing facilities. All these unions were lucky; Mehsana got UNICEF and Government of India assistance; Sabarkantha and Banaskantha had to wait until the first Operation Flood scheme began. No union evolved and used a mechanism to raise debt and/or equity capital to be repaid from member contributions of capital as in sugar co-operatives. This dependence on external capital inflow as a 'trigger mechanism' was another inadequacy in the design- concept of the Anand Pattern. I believe this had profound influence on the way Anand Pattern co-operatives emerged later in states outside Gujarat. If the design-concept of the Anand Pattern had included a device for members to self-finance their processing plants or to use methods of raising capital which enabled them to remain true to Proposition 6 (professional management account- able to an all-powerful elected board), then the Anand Pattern would perhaps have succeeded better than it has.

**Long-term Competitive Advantage:** Finally, the design-concept of the Anand pattern (as presented in this chapter) does not explain how Amul will retain the loyalty of its members in a competitive environment in which private or investor-owned firms can replicate the relevant portions of the Anand Pattern; that is, they can offer to farmer members the same or significantly better terms in comparison to Amul to win them away, and as the co-operative begins to weaken, give it a final blow that sends it to the dumps and then run amok a *La Polson*. The conception of the Anand Pattern (discussed in this chapter) shows how to build a successful farmer co-operative in the midst essentially of a traditional competitive environment; the Anand Pattern has no answers in a district where a Nestle (as in Punjab) or a Hindustan Lever (as in Etawah) or even a Chitale dairy (as in Pune) can replicate, in a truly utilitarian style, all those elements of the Anand Pattern which produce the biggest bang. Now that the dairy sector is gradually getting delicensed, dealing with this inadequacy in the Anand Pattern will become critical.

### **Replication in New Business Systems**

There have been many efforts to use the design of the Anand Pattern in building farmer organisations. The most widely known are Operation Flood I, II and III in which the National Dairy Development Board tried to create Amul-type dairy farmers' co- operative organisations in over 250 districts of India. The NDDB's Oilseeds and Vegetable Oils Project tried to create first state-level Oilseed Growers' Co-operative Federations to which village-level oilseed growers' co-operatives were affiliated, but later introduced regional oilseed growers' unions as an intermediate layer of institutions. The Tree Growers' Co-operatives supported by the NDDB too use elements from the Anand Pattern as do fishermen's co-operatives in southern India. The overall success in this effort in building truly autonomous, self-sustaining and vigorous producer organisations has been less than expected. Three reasons explain this: (a) Most attempts at replication paid more attention to the 'auxiliary' component of the Anand Pattern than to the 'core'.

As mentioned earlier, the 'auxiliary' component is observed easily and therefore replicated easily; its replication does not require a great deal of imagination and sagacity; replicating the 'core' of the Anand Pattern requires creative solutions and imagination; these too would have become possible but for the other two reasons. (b) In state after state, the state governments and their bureaucracies easily wrested control over the new co-operatives and violated all or most of the 'core' propositions, particularly Proposition 6. (c) When the design of the Anand Pattern was adapted to other business systems, insufficient attention was paid to what the Anand Pattern was best at doing and to the nature of the competitive environment in the new business.

Take, for example, the NDDB's oilseeds project. In the late 1970s when the NDDB began organising oilseeds growers' co-operatives, the competitive environment in Gujarat's oilseeds sector was radically different from what it was in Gujarat's dairy sector in the late 1950s. There seemed no way the oilseeds co-operatives could get an upper hand over organised competition from the Telia Rajas (the so-called vegetable oil barons of Gujarat); indeed, there seemed no way co-operatives could survive unless special protection and/or 'free' resources were available or some equivalent of SNF surplus was created. The original project document had envisaged a *dal-analog* which was to realise better value for de-oiled oilseed cake by using it for human rather than animal consumption. This however did not work out as envisaged; as a result, barring the advantage of the low-cost fixed and working capital made available by the project, the oilseeds co-operatives had no basis to compete until the NDDB launched Dhara as well as the Market Intervention Operation which together took care of propositions 1, 2, 3 and 4 for the co-operatives. Both these, however, represented capabilities developed by the NDDB and not by the co-operatives; and to that extent, the performance of oilseeds co-operatives became contingent upon the success of the NDDB's marketing strategies rather than on the intrinsic viability and robustness of their design.

There is a similar problem of strategic orchestration in the attempts to replicate the Anand Pattern in rural electricity co-operatives, in co-operatives of canal water users and in tree growers' co-operatives. Let us take the last case. The Anand Pattern is an outstanding example of an incentive-compatible steady-state system; its key strength is that it builds upon rural producers' intense desire to increase economic returns to their dairy enterprise. One must never forget that all the social benefits the Anand Pattern is claimed to have produced are strictly in the nature of spillovers; and to the extent we twist the Anand Pattern to achieve other goals important more to outsiders (such as government agencies, donor agencies and lobbying groups) than to co-operative members whose patronage makes the co-operative a 'going concern' (such as women's development, environment, social justice and poverty eradication) we end up progressively blunting a weapon which is otherwise perfect for its particular purpose.

It seems reasonable that if rural families were convinced that trees growing on private and common lands can enhance their incomes and livelihood, it becomes possible to create an Anand Pattern tree growers' co-operatives with some adaptations in its design. However, environmental gains of such effort-which may be stupendous-must nevertheless be viewed to be only a spillover; the focus of the organisation itself must be on value adding through superior processing and marketing of tree-produce raised by members. The moment we impose environmental goals over the Anand Pattern, we have the problem of break-down in incentive compatibility; and the organisation we are likely to end up with will be anything but one with the elan, vitality, and *swayambhoo*-ness of the Kaira and Mehsana unions in the 1960s.

## NOTES

1. Note that this implies an average of nearly 12 litres/member daily, which the Kaira union has not reached even 45 years later. The lesson: most early supporters of Amul were large, probably enlightened Patidar farmers with high capacity to experiment and take risks.

2. Hardly any subsequent Anand Pattern union, nay, state federation has ever had a management team as star-studded as the Kaira union (of 1957) which had 64 village co-operatives, 27,000 farmer members and an average daily procurement of 87,000 lb of milk. By the 1990 standard, this is less than one-fifth the size of today's Panchmahal union: yet, Amul at that time had nearly 20 senior officers with masters' degrees or doctoral-level technical qualifications, mostly from foreign countries; 11 of these had been sent for specialised training to foreign countries (Singh and Kelly 1981).
3. The background for the Gambhira co-operative was created in the early 1940s when at the end of a flash flood, the river Mahi changed its course, submerging large areas of farmlands and leaving numerous small landholders in the villages along the river bank landless, depending for their livelihood on farm labour and scavenging. When he became the chief minister of the erstwhile Bombay State, Morarji Desai assigned revenue wasteland to each of these affected families on the condition that in each village they would form a joint farming co-operative and cultivate their land collectively. Of the scores of villages in which such *patta* land was given, Gambhira was the only village where the co-operative truly worked. In all other villages, the *patta* holders kept bribing the local officials so that they could continue to cultivate their parcels as private holdings while keeping the co-operative going on government records. For a detailed account of this experiment, see Kumar (1979,1990) and Shah (1988).
4. A detailed investigation by three of my past students to understand why an early effort to replicate Gambhira in the neighbouring Mahammadpura aborted within five years suggested that Chhaganbhai's presence ensured member faith in the 'integrity of the relationship between members and the co-operative' (see Shah 1995). Several Mahammadpura co-operative members reminisced that the first cracks in the alliance developed when members began to suspect that some group leaders were doctoring the records on who contributed how much human and bullock labour; but significantly, the co-operative still did not break up until members began to suspect that the chairman *knew* it! In Gambhira too, we found several sources of irritants and tension; however, no one ever had any doubt about Chhaganbhai's high sense of propriety and justice. Moreover, he had virtually enslaved the members by the sheer weight of his sacrifice and godliness!
5. Once stated, the logic underlying the Anand Pattern becomes simplicity itself; remarkably, however, even development professionals well-versed in economic analysis and management overlook its full import as a development theory, leave alone put to use its almost truistic lessons. One study by a professional NGO, for example, had the following to say about the Anand Pattern: 'there are a large number of people out there, 300 million of India's rural people, who are not surplus producers of any commodity, including food grains. The Anand Pattern. . . cannot be the first step in the solution of the problems of the rural poor. . . . We must remember that rural India is not the colony of the urban, a vast hinterland which only produces milk or potatoes to be converted into chocolate or chips or whatever else "*humko maangta*" (PRADAN 1990: 54). While the pun was hard-hitting, it clearly missed the point. Strangely, the Anand Pattern, as we have seen it here, *may well be* the first step in the solution of the problems of the poor, never mind if labour is the only thing they have in surplus. Indeed, NGOs working for the poor would post uniformly better results in organising for livelihood generation if only they learnt *correctly* from the Anand Pattern. Small (if ever beautiful) is increasingly becoming the trouble spot of the NGO movement when seen in the backdrop of a vast country like India. Despite strong donor support and often high concentration of management talent, it is common to find NGOs spending dozens of years organising as few as a hundred poor families into a viable, self-sustaining organization -- be it for mushroom cultivation or backyard poultry or lift irrigation. The Anand Pattern has powerful lessons for all those engaged in building livelihood organisations: between 1960 and 1966, a relatively short period, and without the benefit of 'development professionals', the Mehsana co-operative

expanded from 30 to 25,000 members and from 5 to 250 village dairy co-operatives, reached a procurement of 190 lakh kg of milk per year and improved total member incomes by at least 30 per cent!

6. This confusion about the Anand Pattern is worse confounded by some researchers who have suggested that the Anand Pattern may include even the milk production conditions that prevailed in Kheda. George (1992:115), for example, writes: The 'Anand Pattern as propagated by the NDDB differs significantly from the pattern as practised by the milk producers of the Kheda district.' Elsewhere, however, George too is unequivocal that the 'Anand Pattern refers to the *structure and functioning* of this [Kaira] dairy co-operative' (emphasis added).
7. An earlier analysis (Shah 1987) compared co-operative and non-co-operative villages in Sabarkantha, Periyar and Bikaner districts in an attempt to understand the impact of mature and young dairy co-operatives. One of the main conclusions was that the stimulus that an assured, stable and attractive market for milk generates brings about structural changes in a village's dairy economy; in the immediate run, farmers seek to use up a substantial 'slack' available in farming, dairying and family labour to maximise the yield per animal by better feeding and management; but over time, farm families try a variety of strategies—such as reducing calving interval and lengthening the lactation period, reducing the proportion of males and the young to total animals, culling out old, dry animals and adopting crossbreeding to optimise dairy production within the constraints of labour, capital and land supply. Production enhancement programmes help in these strategies; but they cannot be the first step to improved productivity.
8. The first Operation Flood scheme, launched in 1970, aimed to establish 17 Anand Pattern district co-operative unions in Gujarat, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, West Bengal, Punjab, Haryana and Rajasthan, and form them into four regional milk grids that would link these unions with Mother Dairies (in Bombay, Delhi, Calcutta and Madras) which would feed these markets. The strategy of the first Operation Flood was based on pump-priming; donated milk powder and butter oil were to be recombined into milk in Mother Dairies which would capture commanding shares of city milk markets a la Baroda dairy; the vacuum thus created in the hinterland by driving out milk vendors from cities would be used to simultaneously create structures of rural co-operatives in the target districts. For putting this strategy into action, aid was needed in the form of commodities and not cash.
9. Somjee and Somjee (1989: 3) narrate a beautiful story to describe how the technology of making casein spread in Kheda before Amul started. Koehler, the German technologist, was in fact invited by a silk merchant to start a casein-making plant in the village of Samarkha. Until then, creamery owners extracted all the milk fat and drained the fat-less milk into the gutter. Koehler first started buying the fat-less milk at very low prices; but soon, when people discovered his game, the price of fat-less milk increased. Then Koehler began buying full-cream milk which he would make into ghee and casein, thus extracting the full SNF surplus. To guard the secret of his casein-making technology, Koehler had sworn all his staffers to secrecy and made them sign an undertaking that they would not start any business in competition with his. Besides, as a double-check, he never shared with anyone the secret chemical he mixed towards the end of the process from which casein was made. This game went on until Koehler once went out leaving the unit to Kapasi, a special assistant, along with some quantity of the special chemical. A suspicious Kapasi ran the whole process deliberately without mixing the chemical and found that casein was made all the same. He generally made it known that Koehler had been fooling everyone until then! Thereupon, Koehler, seething with rage, chased Kapasi with a gun, shot at him but missed. Afterwards, several private dairy plants with casein manufacturing facilities came up in Kheda.

10. 'Reservation prices' are the lowest possible prices that farmers would accept rather than put their marketable surplus of milk to the next best use, such as conversion into ghee or drinking it!
11. Daily payment for milk, considered to be an important element of the Anand Pattern has been extensively violated within Gujarat and outside. The fact that in many unions, low payment frequency and delays in disbursement hit milk procurement suggests that frequent and regular payments matter to members; but the fact that many unions with weekly payments or even fortnightly payments have succeeded in retaining members' confidence suggests that insistence on 'daily' or even 'weekly' payments may be misplaced. Similarly, the for-one-village-one-co-operative rule, the no-credit norm, electoral rules, and even the particular design of the federal structure associated with the Anand Pattern all represent elements of the auxiliary component. Surat and Valsad unions in south Gujarat, two of the finest specimens of the Anand Pattern, have systematically violated some of these and have kept getting stronger. The Valsad union formed six viable co-operatives in one of its villages; it collaborated with a nationalised bank to open cash credit accounts for the members of its women's co-operatives with the union standing guarantee. Surat never had daily milk fat tests nor did it ever provide technical inputs and veterinary services.

# **The Impact of Democratic Control on Co-operative Decision-Making**

**Bruce L Anderson<sup>1</sup>**

## **Introduction**

Democratic control by members is a fundamental characteristic of co-operative organizations.<sup>2</sup> Over the years co-operative practitioners and researchers have spent a great deal of energy extolling the merits of democratic control, but have given attention to its potential problems. Only recently have co-operative researchers begun to recognize that the political aspects of co-operative decision-making have an important impact on economic performance.<sup>3</sup> While our understanding of the political economy of co-operatives is still in its formative stages, one must applaud these efforts and encourage their continued development. Moreover, for co-operatives to arrive at the best decisions it is imperative that co-operators have a thorough appreciation of both the advantages and the disadvantages of democratic control.

The purpose of this paper is to examine the impact of democratic control on co-operative decision-making. It will explore the dynamics between various groups of members as well as between the membership, the board of directors and management. This is done through the presentation of two conceptual models. However, every attempt is made to make the paper applied and practical through the presentation of several co-operative examples. It is hoped that both co-operative decision-makers and researchers will find the discussion interesting and useful.

In the next section decision-making rules for co-operative and non-co-operative firms are presented. The remainder of the paper is then devoted to analyzing the problems of democratic control that could arise in co-operative organizations. In addition, strategies to deal with the weaknesses of democratic control are identified.

## **Decision-making in Co-operative and non-cooperative organizations**

The general goal of a co-operative organization is to improve and maximize the economic well-being of its members. This section is concerned with the decision rules required to attain this goal. In addition, decision-making rules of co-operative organizations are compared to those used by non-cooperative firm<sup>4</sup>.

## **Decision Making in Non-Cooperative Firms**

The goal of non-co-operative firms is assumed to improve the economic well-being of its owners by maximizing profits. Figure 1 illustrates the factors profit-maximizing farmers and a non-co-operative firm would consider when each makes their decisions to achieve this goal.

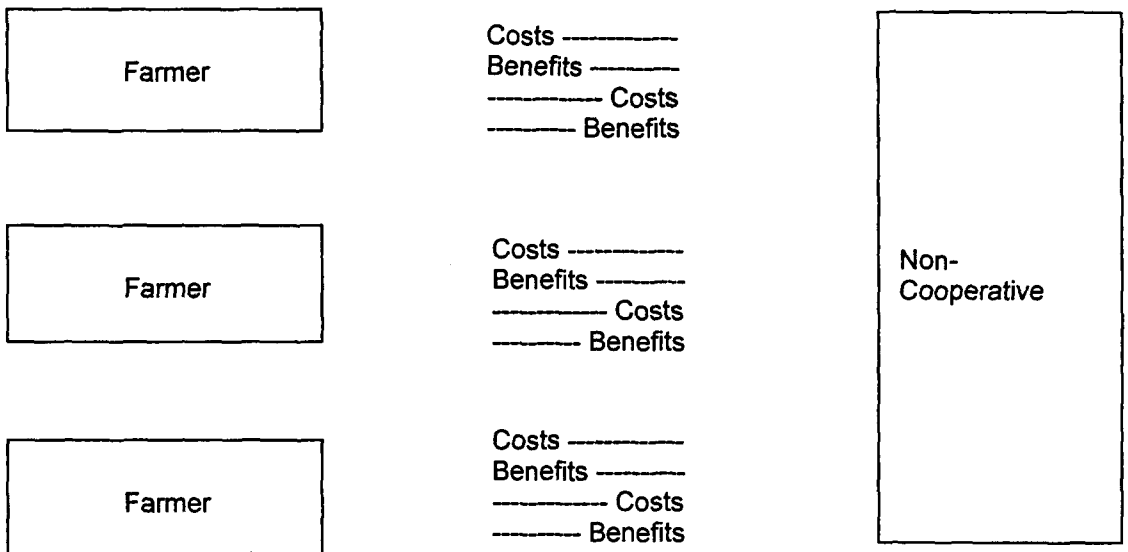
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<sup>1</sup> Dr. Bruce L. Anderson, Visiting Professor, Institution of Economics and Statistics, Swedish University of Agricultural Sciences and Associate Professor of Business Management and Marketing, Department of Agricultural Economics, Cornell University.

<sup>2</sup> Throughout this paper the co-operative principle refers to "democratic control" rather than "one-member-one-vote". The former is broader than the latter and includes such forms of decision-making as voting based on patronage, voting based on equity and mixed forms of voting.

<sup>3</sup> Vitaliano (1978), Ladd (1982), Knoeber and Baumer (1983), Staatz (1983), and Buccola and Subaei (1985).

<sup>4</sup> The term "non-co-operative firm" is used throughout this paper to distinguish all other types of firms from co-operative associations. Non-co-operative firms include public corporations and partnerships as well as individual proprietorship.



Each Farmer Only Analyzes His/Her Own Costs and Benefits in Making His Decision

Each Non-Co-operative Only Analyzes Its Own Costs and Benefits in Making Its Decisions

**Figure 1: The Relationship between Farmers and a Non-Co-operative Firms**

The dotted lines around each farmer and the non-co-operative firm (Figure 1) indicate that each party only considers the costs and benefits a decision imposes on their individual operations. For example, before a farmer decides whether or not to accept a proposal made by a non-co-operative firm, the farmer only studies the private costs and benefits that accrue to him. Likewise, the management of the non-co-operative firm will only consider the private costs and benefits associated with the decision alternatives it faces. Both farmers and non-co-operative firms should accept those proposals where the private benefit exceed the private costs, and reject those where the reverse is true.<sup>5</sup>

In a non-co-operative relationship each party is only concerned with its own personal costs and benefits. No party is interested in the impact a proposal or decision has on the other parties involved. In a non-co-operative relationship the parties assume a very provincial view. The purpose of the dotted lines surrounding each party is to illustrate this provincialism.

### Decision-Making in Co-operative Organization<sup>6</sup>

How does decision-making differ in co-operative organizations? Figure 2 illustrates the ideal relationship between members and their co-operative.

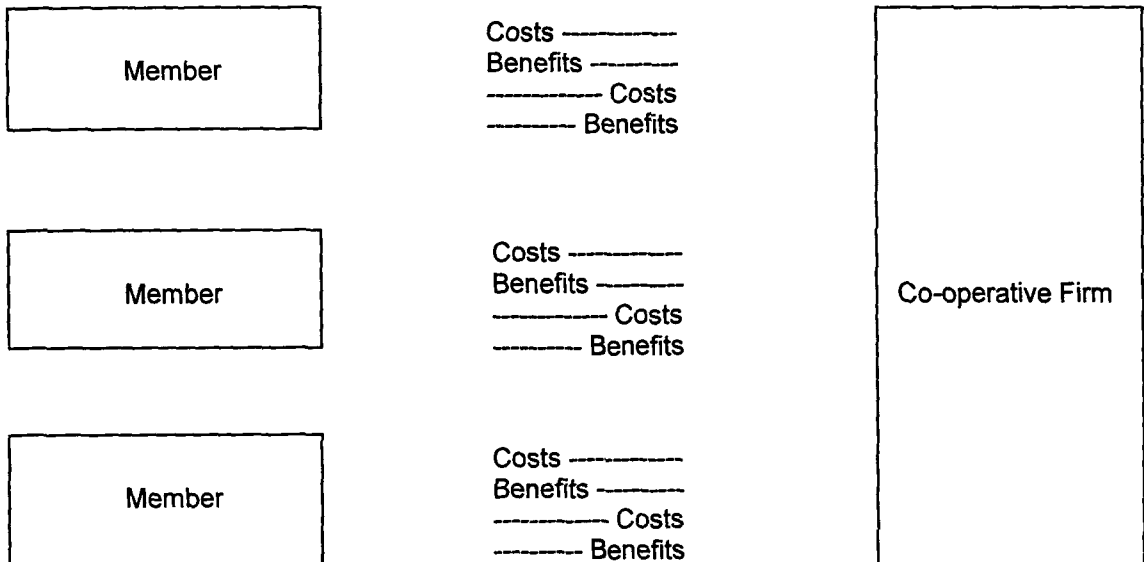
<sup>5</sup> When the time dimension is incorporated the decision-making rule becomes: Accept all independent alternatives where the net present value of the private cash inflows and outflows are positive. For mutually exclusive alternatives, the firm should select the alternative with the largest net present value based on its private cash inflows and outflows.

<sup>6</sup> The term "co-operative organization" refers to both the co-operative firm and its membership.



Rather than consider the impact of a decision on any individual party, a co-operative organization should consider the total impact of a decision on the co-operative firm and all its members. The dotted line that includes all parties in Figure 2 indicates co-operatives should consider the costs and benefits of a decision on all members as well as the co-operative firm. Consequently, the appropriate decision rule for a co-operative organization is to accept those proposals where the total benefits accruing to the co-operative firm and all its members exceed the total costs imposed on the co-operative firm and all its members. Conversely, the organization should reject proposals where the total costs are greater than the total benefits.<sup>7</sup>

The unique characteristic of co-operative organizations is that they consider the impact of a decision on all concerned parties rather than merely focusing on the effect of any individual entity. This should only apply to decisions that have economies of scale or economies of scope and are related to the general mission of the co-operative. If these conditions are not met, it is probably better to leave the decisions to individual members or to other types of organization.



In Making Decisions Co-operative Organizations Should Analyze the Costs and Benefits of All Members as Well as the Co-operative Firm

**Figure 2: The Ideal Relationship in Co-operative Organizations**

At first glance it does not seem troublesome that a co-operative organization should analyze the total impact of its decisions. Recognition of interdependence is a major reason for the existence of co-operative organizations. Moreover, this interdependence in decision-making results in three unique situations co-operative organizations must confront. They are the following:

- a) Some issues impose different patterns of costs and benefits on different groups of members.
- b) With some types of issue the co-operative firms bears a disproportionate share of the direct costs, while its members receive a disproportionate share of the direct benefits.
- c) With other types of issue members bear a major share of the direct costs, while the co-operative firm garners a disproportionate share of the direct benefits. (While the co-operative receives the benefits in the short run, members should benefit in the long run as patronage refunds are passed along to members.)

<sup>7</sup> To incorporate the time dimension, the decision rule is to accept all independent alternatives where the present value of the total benefits of all parties exceeds the present value of the total costs imposed on all parties. For mutually exclusive alternatives, the organization should accept the alternative with the largest net present value, based on the costs and benefits of all parties.

These three situations, it should be noted, only arise in co-operative organizations. When parties are looking out for their own individual interests, as is the case in a non-co-operative relationship, they will never be faced with these three dilemmas. The consequences of each of these unique situations are analyzed in the following sections.

### **Different patterns of costs and benefits among members**

Before analyzing the impact of different patterns of costs and benefits among different groups of members it is first necessary to outline the assumptions used in the analysis. Throughout the analysis it is assumed all members are solely interested in their own individual welfare and they can perfectly estimate the impact of a proposal on their welfare. Consequently, when a proposal is presented, the member will analyze the impact of the proposal on his or her own farm operation by estimating the personal costs and benefits it implies. Whether a member will favour or oppose the proposal will depend on the individual benefits and costs experienced by the member. Decision-making rules for individual members are assumed to be the following:

Favour proposal if: Member's Benefits > Member's Costs  
Oppose proposal if: member's Benefits < Member's Costs

Further suppose all members vote on all proposals or perfect representation prevails.<sup>8</sup> In addition, assume democratic control involves one-member-one-vote and a majority (i.e., 50% of the membership) is required for any proposal to be adopted. Finally, for every issue suppose there is a majority opinion (represented by more than 50% of the membership) and a minority opinion (represented by less than 50% of the membership). The primary difference between the majority and minority is the relative magnitude of the costs and benefits experienced by each group. Before proceeding, two points concerning co-operatives majorities and minorities are worth noting. First, the issue being considered determines which members constitute the majority and minority. A common division in many co-operatives is for small-volume producers to assume the role of the majority and large-volume producers to assume the role of the minority. But, depending on the issue, other divisions are also possible: younger versus older members, diversified versus specialized producers, members located close to major markets versus those located some distance from markets, farmers interested in the highest possible prices and no co-operative services versus those interested in a multitude of incorporated services and lower prices, etc. Second, the composition of the majority and minority will change as issues change. Any given individual can be a member of the majority on one issue and a member of the minority on the next issue.

Table 1 illustrates six different types of membership issues faced by co-operatives. The issues are identified by capital letters in Column (1). Column (2) indicates the relationship between the costs and benefits experienced by the majority on each issue. Column (3) illustrates the costs and benefits relationship for the minority. The impact of each proposal on the total membership is shown in Column (4).<sup>9</sup> (4)<sup>8</sup>. Issues A through C have a positive net effect on the organization, while proposals D through F have a negative impact.<sup>10</sup> Column (5) indicates the ideal decision for the organization as a whole and is based on the decision rules discussed above.

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<sup>8</sup> Perfect representation implies that co-operative delegates and directors can perfectly analyze, aggregate and summarize the impact of an issue on the membership, and that elected representatives vote in the same proportions as the members would have, if they had voted.

<sup>9</sup> For the time being, assume the proposals are only concerned with the distributional impact of costs and benefits on different groups of members, and have no direct impact on the co-operative firm. The effect of decisions on the co-operative firm will be discussed below.

<sup>10</sup> It is possible for an issue to have a positive net impact on the organization when the costs exceed the benefits for the majority (i.e. Type B proposals), if the net benefits that accrue to the minority outweigh the net costs imposed on the majority.

**Table 1**

*The impact of majority rule, vote-trading and interest groups on a co-operative's performance*

1	2	3	4	5	6	7	8
Type of Issues	Net Impact on:			Ideal Decision	Simple Majority Rule	Majority Rule Plus Vote-Trading	Majority Rule - Vote-Trading + Interest Group
	Majority	Minority	Membership				
A	B>C	B>C	B>C	Pass	Pass	Pass	Pass
B	B>C	C>B	B>C	Pass	Pass	Pass	Fail
C	C>B	B>C	B>C	Pass	Fail	Pass	Pass
D	B>C	C>B	C>B	Fail	Pass	Fail	Fail
E	C>B	B>C	C>B	Fail	Fail	Fail	Pass
F	C>B	C>B	C>B	Fail	Fail	Fail	Fail

**The impact of simple majority rule**

With simple majority rule only those proposals where the benefits exceed the costs for the majority will pass. Conversely, if the costs exceed the benefits for the majority the proposal will fail. The results of applying simple majority rule to each policy proposal is illustrated in column (6) of Table 1.

With simple majority rule all decisions will correspond to the ideal decisions, except Type C and D proposals. Simple majority rule will result in suboptimal decisions for Type C and D issues.

Although the proposals are of net benefit to the co-operative as a whole, Type C issues are rejected because the costs experienced by the majority are greater than their benefits. The proposals should pass because the net benefits derived by the majority outweigh the net costs borne by the majority.

A few years ago a U.S. milk co-operative realized that its average costs of handling milk was above of the competition. Upon further examination its board and management came to the conclusion that the higher costs were due to the fact that the co-operative's producers were, on average, smaller and more expensive to serve than those of the competition. The co-operative leadership endorsed a change in the structure of membership fees. The change involved moving from a uniform per hundredweight charge to a uniform monthly charge and a lower per hundredweight fee. The purpose of the proposal was to lower the total cost of membership for high-volume producers and thereby make it more attractive for them to join the co-operative. However, the proposal also increased the total cost of membership for low-volume producers. When the proposal was presented to the co-operative's delegates it failed, as the model predicts, since small producers made up a majority of the membership.

Since Type C Proposals fail they are not enduring issues. However, during the periods they are being considered by the membership, these issues usually provide for lively co-operative meetings. With simple majority rule Type D, proposals pass since the benefits exceed the costs for the majority: but the issues are of net detriment to the co-operative as a whole because the net costs imposed on the minority exceed the net benefits accruing to the majority.

Type D proposals are difficult to identify, not because they do not exist, but because they have existed for so long they are assumed to be a normal part of a co-operative's normal operations. In fact, many Type D decisions are made when an organization is founded. These decisions are detrimental in two ways: they are suboptimal to some current members, and they limit future membership by discouraging non-members from becoming members. The original fee structure in the co-operative discussed above was a Type D decision when it was initially adopted.

Many co-operatives offer an array of general services that are used by a large portion of the membership. The reason for high usage is because the services are either free or highly subsidized by the co-operative. Subsidization can be so subtle that few are even aware of it. It involves not allocating the full costs of labour, capital and facilities to the service. Competitive alternatives usually exist for these services, but due to subsidization the co-operative's prices can be so favourable a member is foolish not to take advantage of them. In practice the services are paid for by lower than necessary prices or patronage refunds. If this is the case, large-volume producers pay a higher price for these services (through lower total income or patronage refunds) than small-volume producers. This may explain why large producers often give insufficient price and patronage refunds as their major reasons for not joining co-operatives.

An example of such a service is the supply departments of many marketing co-operatives. In discussing the supply department in his marketing co-operative, a director indicated how price competitive his co-operative was compared to the regional supply co-operative. When asked about the pricing policies in the supply department, it became readily apparent that the price of supplies was essentially the variable cost of the supplies. Mark-ups were minimal, and covered only a portion of the total labour costs involved, while no consideration was given to capital and facility costs. Another marketing co-operative had an aggressive product distribution programme for members. The programme was so highly regarded by the membership that no one questioned whether its revenues covered its costs. I understand they did not, and I would assume the co-operative was not allocating all associated costs to the operation.

Another co-operative recently discussed whether or not to provide membership signs to its producers. This proposal was extremely well received by the general membership, because there was an implicit assumption that the signs would be free, or highly subsidized. In private the chief executive officer expressed his reservations but admitted that it was a sensitive issue, and one on which he would probably need to make concessions.

### **Ways to correct the problems with simple majority rule**

Since simple majority rule can result in suboptimal decisions, it is essential for co-operatives to have a set of strategies to correct the potential problems. The following are strategies co-operatives can adopt to deal with the problems outlined above. Co-operators will not find the list surprising, since many co-operatives already use these measures.

As the strategies are discussed, keep in mind how they could change the results of simple majority rule outlined in Column (6) of Table 1. The purpose of these strategies is to convince members of the majority to refrain from the natural instinct of pursuing their individual welfare at the expense of the long-run performance of their co-operative.

The first, and most important, strategy is for the co-operative to carry out a thorough and objective analysis of issues. The analysis should include an examination of the impact of the proposal on different groups of members, as well as the co-operative as a whole. While this suggestion seem obvious, many co-operatives spend too few resources analyzing internal decisions, especially member services and long-established policies. In addition, few co-operatives have a well-developed data base and objective methods to analyze the impact of a proposal on different groups of members.

Not all issues can, or should be analyzed. In some cases, a study may cost more than it will save. However, the easiest part of any such analysis is determining the impact of the proposal on the co-operative. It is more troublesome to estimate the consequences of a decision on the membership, to say nothing of the difficulty and uncertainty involved in predicting the effect of an issue on different groups of members. For decisions with a minor impact, it may be sufficient to only compute the economic impact of the issue on the co-operative firm and express the results on a per member basis or as a percentage of projected patronage refunds. Co-operatives should

be cautioned against expressing the impact only on a per unit basis (i.e. per bushel, per hundredweight, per ton, etc.) or as a percentage of the producer prices. In the latter case, there is a tendency to make the impact of a proposal seem inconsequential. It is "the little things" that distinguish excellent organizations from average organizations and management should be encouraged to magnify the impact of "the little things" to the extent possible.

It is essential that the evaluation includes all the costs and benefits associated with the specific proposal. This includes overhead costs as well as variable costs. Both long-run and short-run costs and benefits should be incorporated. Long-run costs and benefits even involve the impact of a proposal on membership trends and the co-operative's market share, since these factors often have an important effect on the co-operative's economies of scale and economies of distribution.

A second strategy is to institute an aggressive member-education programme. For members, perceived costs and benefits are more important than the real costs and benefits. When data is lacking there is a tendency for members to underestimate the costs and overestimate the benefits associated with decisions they favour. The reverse is true for proposals they oppose. Therefore, it is essential that members have an accurate idea of the likely economic consequences of proposals. Member education should be based on information generated from the analysis.

When presented with objective information farmer-members generally act in the long-run interest of their co-operative, but not always. Consequently, a third strategy is to keep reintroducing proposals that initially fail but are expected to improve co-operative performance. The co-operative discussed above, that tried to change its fee structure, reintroduced the proposal two or three times before it was finally adopted. The last time it was presented it was accompanied with an aggressive member education programme that included substantial supporting data.

A fourth strategy is to accompany the above activities with pleas of solidarity and loyalty. The role of solidarity and loyalty is to say: Listen, this proposal will adversely effect you personally, but it is for the good of the co-operative and it should benefit you in the long-run. For members to respect requests for solidarity and loyalty, the predicted results of previous calls must be generally realized. Consequently, even this strategy is dependent on a sound analysis of the issue.

Continually reviewing the co-operative's existing policies is a fifth strategy. Since most Type D proposals have already been adopted, it is necessary for the co-operative to have a built-in mechanism to review established operations and services that are taken for granted. If this is not done, existing operations and services will only be reviewed when they start causing major economic problems. This single strategy can be a significant source of improved performance for many co-operatives.

The final strategy to correct the problems associated with simple majority rule is to transfer decision-making responsibilities from members and delegates and to the board of directors. Many agricultural co-operatives have already done this. There are three primary reasons to transfer decision-making responsibilities to the board of directors. The first reason is to increase the speed of decision-making. The second reason involves the fact that members have a greater tendency to look after their own individual interests, while the board has the legal responsibility to promote the long-run interests of the co-operative. Since vote-trading requires a small number of decision-makers, the final reason for moving major decisions to the board is to increase the probability of vote-trading.

The concept and impact of vote-trading are analyzed in the next section.

## Vote-trading and simple majority rule

Vote-trading involves various members of a group exchanging votes on different issues to arrive at a decision different from, but preferred to, the one that would have been made with simple majority rule. In the public choice literature, vote-trading is also referred to as logrolling and hypothetical compensation.<sup>11</sup> Ideal vote-trading can correct the problems associated with simple majority rule. Vote-trading is most easily explained in the context of hypothetical compensation.

Hypothetical compensation operates in the following manner: If net benefits can be derived from a proposal, the members who benefit should be willing to completely compensate the members who experience increased costs since, if the proposal is approved, those who benefit will still be better-off by the amount of the net benefit. Conversely, if a net cost is involved the members that would experience the loss should be willing to completely compensate the members that would benefit. In so doing the members who would lose are still better-off by the net cost of the proposal if the issue is rejected. The concept is illustrated below using the suboptimal Type C and D decisions that resulted from simple majority rule.

Assume a co-operative consists of three members (X, Y, and Z) and the proposals have the characteristics presented below. Note that with the Type C proposal a majority of members (X and Y) are opposed to the issue although it is of net benefit to the organization as a whole. The exact opposite is the case for the Type D proposal.

Type of Issue	Impact on Members			Net Impact	Impact of Vote-Trading	
	X	Y	Z		Without	With
C	-1	-1	+5	+3	Fail	Pass
D	+1	+1	-5	-3	Pass	Fail

In the case of the Type C issue, Member Z should be willing to pay Members X and Y one dollar each to make them indifferent to the proposal and abstain from voting against the issue. Although Z pays the other members a total of two dollars, Z is still three dollars better off if the proposal is adopted. With the Type D issue Member Z stands to lose five dollars if the proposal is approved. Therefore, Z should be willing to pay X and Y one dollar each to make them indifferent and abstain from voting for the proposal. If successful, it has cost Z two dollars, but he has avoided losing five dollars.

Naturally, money never really changes hands. That is why one of the names of this concept is "hypothetical compensation". In practice, votes are traded. In the case of the Type C issues the scenario would be similar the following: X and Y agree to vote for the proposal in exchange for Z promising to vote for proposals that are of major interest to X and Y when they arise. Vote-trading works best in small groups. It can work at the board level, but would be difficult if not impossible to implement at the delegate and membership level. At the board level, it assumes that directors act as perfect representatives of the entire membership.

At this point, a few words of caution are in order. The idea of vote-trading usually conjures negative connotations, and directors will vehemently deny that they, or their boards engage in vote-trading. In reality, vote-trading is a very subtle, implicit and personal process. Rarely are votes explicitly traded. Rather, board meetings involve the presentation of various factual and emotional arguments. When a board vote is taken there is usually greater unanimity than the previous discussion would have suggested. Moreover, there is a personal, often unspoken, realization among directors that some parties won and some parties lost, and that somehow the board will need to make it up to those who lost in the long run. Put differently, vote-trading is the act of compromise, and most directors freely admit they must constantly compromise their original positions.

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<sup>11</sup> See, for example, Buchanan and Tullock (1965).

If vote-trading functions perfectly, all Type C proposals will be approved and all Type D issues will fail. In other words, ideal vote-trading has the potential to completely correct the problems associated with simple majority rule. This is illustrated in column (7) of Table 1.

The above conclusion only applies to ideal vote-trading. There are several reasons why vote-trading may not operate perfectly. The following are a few of those reasons:

- a) Members and directors may not correctly estimate the impact (i.e., the costs and benefits) of a proposal. A thorough and objective analysis of the proposal, as well as sufficient member information, is required to correct this problem.
- b) Appropriate information may not be available because it is costly and time-consuming to carry out an accurate and thorough analysis.
- c) Directors may not choose to, or be capable of, accurately representing the aggregate opinions of the membership.
- d) One or more parties may try to capture all the benefits of vote-trading. In the case of the Type C issue above, Member X may try to convince Z that the proposal will really cost X three dollars instead of the actual one dollar.
- e) Different issues involve different magnitudes of net costs and benefits. For example, if Proposal C is approved, Z is obliged to vote with X and Y on issues that will cost Z one dollar each. However, on the next issue X may ask Z to vote for a proposal that will cost Z three dollars. How does Z react?
- f) Coalitions change, and it may be difficult for the obligations of the various parties to achieve political equilibrium. For example, Z may constantly find himself asking Member Y to vote with him on issues of major concern to Z and never have the opportunity to vote with and "repay" Y.
- g) Finally; interest groups may arise. Interest groups can cause serious problems and are discussed in the next section.

Although several situations may arise that inhibit ideal vote-trading, the purpose of this section has been to indicate the ability of perfect vote-trading (i.e. compromise) to improve the economic performance of co-operatives.

### **The impact of co-operative interest groups**

An interest group is a small minority of the membership which could experience relatively large and concentrated benefits or costs from a decision.<sup>12</sup> It has a strong incentive to ensure proposals of net benefit to the group are passed and those that are of net detriment fail. Consequently, an interest group is willing to invest considerable time, effort and resources assuring its proposals are acted on appropriately.

In the presence of interest groups the majority is docile. It is docile because the costs and benefits experienced by the majority are relatively small and dispersed. In co-operatives, the majority usually consists of the entire membership, excluding members of the interest group in question. The costs and benefits experienced by the majority are dispersed because they are spread over the entire membership. Members of the majority are docile and have little or no incentive to aggressively fight for beneficial issues, and vigorously oppose detrimental proposals, because the per member costs and benefits are so small and dispersed.

To illustrate the role of interest groups an international trade study example will be used. In testimony before a regulatory body a group of producers of a certain household product was trying to increase import restrictions on its product to enable it to charge higher prices. The numbers that follow are hypothetical, but thought to approximately represent the relative costs and benefits involved.

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<sup>12</sup> See: Olson (1965) for a comprehensive discussion of interest groups.

By increasing import restrictions, the five firms would increase total industry revenues by \$5 million annually. At first, it was surprising to read in the hearing testimony how many times the firms appeared before the regulatory body. It was also surprising to find no one representing the interests of consumers. However, this is an excellent illustration of the operation of special interest groups - the average benefit of the increased import restrictions on its product to enable it to charge higher prices. The numbers that follow are hypothetical, but thought to approximately represent the relative costs and benefits involved.

By increasing import restrictions, the five firms would increase total industry revenues by \$5 million annually. At first, it was surprising to read in the hearing testimony how many times the firms appeared before the regulatory body. It was also surprising to find no one representing the interests of consumers. However, this is an excellent illustration of the operation of special interest groups. The average benefit of the increased import restrictions would amount to \$1 million per firm per year. The firms could afford to invest significant time, energy and resources promoting their interests. The average annual cost of the proposal for the 200 million U.S. consumers amounted to 2.5 cents per person. Even if consumers were aware of the hearings, and there was no incentive for them to try to keep informed, it was not worth the time or energy of any individual consumer to write to their legislative representative, much less to make a personal appearance to oppose the increased trade restrictions. The example illustrates the large and concentrated benefits accruing to the minority and the small and dispersed costs experienced by the majority.

The effect of powerful interest groups in the presence of vote-trading and majority rule is minority rule rather than majority rule. Column (8) in Table 1 indicates the impact of interest groups. Note that Type B and E proposals deviate from the ideal outcome.

Type B proposals fail although they are of net benefit to the organization as a whole. An example of a Type B issue is a marketing co-operative that tried to adopt a different method to charge members for transportation. The board proposed changing from a uniform per-unit fee to a system with a stop-charge and lower per-unit fee. Through an intensive educational programme the co-operative was able to convince the general membership that the change was desirable. However, a small group of low volume producers in one local area became extremely upset by the proposal. Although the proposal was approved, the board adopted a much lower stop-charge and higher per-unit fee than originally intended. The board planned to raise the stop-charge at a latter date. That was several years ago. Despite five outside studies recommending a significantly higher stop-charge, the group is still causing such a disturbance that the co-operative has yet to adopt the recommended fee structure.

Consumers' co-operatives seem particularly susceptible to interest groups. This is due to their members having a wider range of expectations concerning co-operative activities, including several non-economic expectations. Some years ago, a U.S. consumer co-operative decided to establish day-care rooms in each of its retail stores, where members with children could leave their children, free of charge, while they shopped. It was viewed as an important service to members with children, and was expected to attract additional customers. When the service was originally proposed it was a Type E issue. After several years of losses, the board of directors proposed limiting the hours of operation of the day-care services, and possibly eliminating the service in a few stores. Since the co-operative served the entire community, members with children were in a minority. However, when the board made its recommendation, the negative reaction was so strong that it withdrew its motion. But the losses continued, and a short time later the board again proposed cutting back the service. Again, members with children reacted violently. Rather than withdrawing its proposal, this time the board proposed studying the issue.

The study revealed the day-care centers were an extremely expensive service. In fact, at two of its stores the per child hour cost of the service was approximately six times higher than the cost of a private baby-sitter. When this information was presented, it was easier for the board to reduce the service. The proposal to limit the service was a Type B issue.



Consumer co-operatives also provide examples of Type E issues. One U.S. consumer co-operative approved the boycott of a popular brand name beer due to the brewer's poor labour-relations. Shortly after implementing this policy, the co-operative discovered that particular beer was an important determinant of customer traffic and significant losses in the category resulted when the beer was removed. In fact, the co-operative was forced to cancel the boycott because of the issue's negative economic impact on performance. One of the major factors causing the demise of another consumer co-operative was attributed to high carrying costs and low turnover resulting from an unusually large product assortment. The wide product assortment was a deliberate co-operative policy to cater to the varied desires of its members.

### **Strategies Used By Interest Groups**

It is necessary to recognize their strategies in order to effectively deal with co-operative interest groups. The following are some of the short-run and long-run strategies used by interest groups.

When an issue of concern arises an interest group will be over-represented at co-operative meetings. The group will typically "make a lot of noise" and attempt to dominate the discussion. In its presentations, the group will most likely appeal to emotional arguments as well as co-operative ideology and principles. Often it will present extreme cases showing the negative consequences of not accepting its proposal. If resources are available, the interest group will even attempt to present its own "objective" estimates of the impact of the issue, which naturally support the group's position. Finally, interest groups will exert considerable effort lobbying co-operative officials (delegates, directors and management), individually and as a group.

Those involved with co-operatives probably recognize the above strategies. In fact, co-operators are more likely to consider these activities as essential characteristics of vibrant democratic control, and something to be encouraged, rather than the cynical ploy interest groups; something to be avoided. The point is: It is difficult to distinguish Type B issues from Type D issues and Type C issues from Type E issues. In all four cases the minority is trying to promote its positions by lobbying directors and management, as well as attempting to recruit the majority to its point of view. The only difference between the issues is their impact on the total organization. The first issue in each set will have a positive impact, while the latter issue will have a negative effect. The only way to distinguish between the proposals is through objective analysis. Moreover, given their strategies, it is often difficult to determine whether an interest group represents the interests of the majority or the minority.

Interest groups also use long-term strategies to achieve their objectives. One is to nominate and attempt to elect their candidates to co-operative decision-making bodies, especially the board of directors. Other long-run strategies include trying to change the attitudes of the majority and recruiting new members that share their point of view.

The short and long-run strategies of interest groups are a legitimate element of democratic control. Moreover, it is important to keep in mind that interest groups do not always have a negative impact on the co-operative. They are necessary for Type C issues to pass and Type D issues to fail. Consequently, it is essential to the co-operative organization as a whole. Once this is known, the leadership should encourage those issues that enhance the co-operative's performance and try to defeat issues that are likely to be detrimental. The strategies in the next section can be used by co-operatives to guard against the negative impact of interest groups.

### *Strategies for Co-operatives*

There are several strategies a co-operative can use to deal with the short-run efforts of interest groups. The first is to try to ensure a high degree of attendance at co-operative meetings. Second, the leadership should make sure that the majority, as well as the minority, is well

informed about the issue, and that the majority is prepared and willing to argue its position. Third, management, directors and members of the majority should not be hesitant to also use emotion, ideology and co-operative principles in making their case. Fourth, since the extreme examples used by interest groups are often also the result of unrelated external factors, the leadership should try to determine the external factors and discount the example appropriately. Fifth, co-operative officials should keep thoroughly informed, and be prepared to defend the position that is in the best interest of the organization. Finally, co-operative leadership should take the offensive, rather than be forced into taking a defensive position when dealing with interest groups.

There are also long-run strategies co-operatives can adopt. One is for the co-operative to have a well-structured nominating system. While minorities have the right to be represented, the system should ensure that interest groups do not become over-represented. Second, the co-operative should develop a workable two-way communication system that serves as a feedback and an early-warning system for member attitudes as well as a method to communicate information to members. Third, members should be made to realize that the purpose of a co-operative is to improve the long-run economic well-being of members, and that in the short-run, democratic decision-making means that any given member will win on some issues and lose on others. Finally, the above discussion again suggests that it is essential for modern-day co-operatives to develop a data-base and analytical techniques that can assist in analyzing the impact of various decisions on different groups of co-operative members.

### **Summary concerning different patterns of costs and benefits**

The purpose of the above discussion was to identify the impact of democratic decision-making on different groups of members. The discussion suggests that democratic control can result in suboptimal decisions. A question that arises is: of the decisions a co-operative makes during any given year, what proportion corresponds to the ideal and what proportion is suboptimal as a result of the influence of simple majority rule or the activities of co-operative interest groups?

Up to this point we have merely examined how different groups of members react to different types of proposals. It was assumed the issues considered had no or, only an indirect, impact on the co-operative firm. In the next section we examine what happens when costs and benefits are unevenly distributed between the membership and the co-operative firm.

### **Conflicts between co-operative members and management**

In discussing the decision-making rules for co-operative and non-co-operative organizations it was pointed out that co-operatives should consider the total costs and benefits of a decision. Three primary differences between co-operatives and non-co-operative firms were identified. One difference has been discussed. The other two differences concern the uneven distribution of costs and benefits between the membership and the co-operative firm, and will be addressed in this section.

In co-operatives, there are issue decisions where the co-operative firm bears the costs and members receive the benefits. There are other decisions where the membership bears the costs and the co-operative receives the short-term benefits. In the latter case, members will receive the benefits in the long-run through higher patronage refunds.

In exploring the impact of the uneven distribution of costs and benefits between the membership and the co-operative firm, it is necessary to make a few simplifying assumptions. Assume the membership is a homogeneous entity, and the problems of majorities and minorities discussed above do not arise. Also, suppose members are only concerned with the impact of a proposal on their individual operations and they ignore its effect on the co-operative firm. Consequently, the membership will:

Favour proposals if: Total Membership Benefits > Total Membership Costs

Oppose proposals if: Total Membership Benefits < Total Membership Costs

Further, suppose the primary goal of management is to only promote the economic interests of the co-operative firm. In other words, management ignores the impact of an issue on the membership. This implies management focuses on maximizing the financial results of the co-operative firm in the same manner as the management in a non-co-operative firm. Consequently, assume that management adheres to the following decision-making rules:

Favour proposals if: Benefits to Co-operative Firm > Costs to Co-operative Firm

Oppose proposals if: Benefits to Co-operative Firm < Costs to Co-operative Firm

1	2	3	4	5	6	7	8
Type of Issues	New Impact on			Ideal Decision	Co-operative Dominated by		
	Total Membership	Co-operative Firm	Total Organization		Members	Management	Board
I	B>C	B>C	B>C	Pass	Pass	Pass	Pass
II	B>C	C>B	B>C	Pass	Pass	Fail	Pass
III	C>B	B>C	B>C	Pass	Fail	Pass	Pass
IV	B>C	C>B	C>B	Fail	Pass	Fail	Fail
V	C>B	B>C	C>B	Fail	Fail	Pass	Fail
VI	C>B	C>B	C>B	Fail	Fail	Fail	Fail

Table 2 presents six alternative relationships between co-operative members and management. The alternatives are identified in Column (1) by Roman numerals. The reader will note Table 2 is somewhat similar to Table 1, except the headings have changed. Column (2) indicates the relative costs and benefits experienced by the membership for the six different proposals. The cost and benefit relationships experienced by the co-operative firm (i.e., management) are presented in column (3). Column (4) shows the net impact of each proposal on the total organization (i.e. the total costs and benefits of both the membership and the co-operative firm). The ideal decision for each proposal is present in Column (5).

Before continuing our analysis, it is appropriate to make a further comparison between co-operative and non-co-operative firms. Non-co-operative firms will primarily limit their activities to Type I and VI issues. With Type I proposals, both farmers and the management of the non-co-operative firm agree that the issues are of net benefit, and they are implemented. In the case of Type VI issues, both parties agree that the proposals are detrimental, and they are not implemented. Co-operative organizations will make the same decisions when confronted with these issues.

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**Table 2**

**The Impact of member-dominated, management-dominated and board-dominated co-operatives on the organization's economic performance**

A primary difference between co-operative and non-co-operative firms, however, is that co-operatives will be forced to consider Type II, III, IV and V issues. Due to the inherent nature of

these four issues, there will always be conflict between co-operative members and management with respect to the appropriate decision. This conflict will not normally arise in non-co-operative firms. If a party, whether it be a supplier, customer or provider of capital, is in disagreement with a non-co-operative firm's policies, the party can easily cease its relationship with the firm, at least with respect to the policy in question.

Non-co-operative firms will most likely ignore Type II and IV issues because they only benefit farmers. However, there are exceptions. The astute management of a non-co-operative firm may realize that if Type II proposals are adopted, they will generate such benefits to farmers that the non-co-operative firm may be able to capture some of the economic rents that would otherwise accrue to farmers.

On the other hand, farmers will most likely ignore Type III and V proposals made by non-co-operative firms. If competitive alternatives are available, exit is easy and farmers can refuse to deal with non-co-operative firms that institute such proposals. While non-co-operative firms are likely to adopt Type III proposals, only farmers who are in agreement with the issues will deal with the firm or take advantage of the product or service.

Unlike non-co-operative firms, co-operative organizations must confront the internal conflict associated with Type II, III, IV and V issues. Moreover, co-operatives have the opportunity to increase the economic well-being of their members if they adopt the appropriate decisions. However, there is the possibility that democratic control will result in the wrong decisions, and the economic well-being of members will deteriorate.

#### *A Member-Dominated Co-operative*

Let us first examine the performance of a member-dominated co-operative. A member-dominated co-operative is defined as one in which the desires of the membership always prevail. This is likely to occur in co-operatives with a strong board of directors and a weak management team. Although the board is sincerely interested in the welfare of members, it goes to extremes advocating member interests.

Column (6) of Table 2 illustrates the decisions that would be made by a member-dominated co-operative. There are two deviations from the ideal; Type III and Type IV issues.

Type III issues should pass, but in a member-dominated co-operative they fail. For the organization as a whole, the total net benefits outweigh the total net costs. Since the co-operative firm derives the majority of the benefits and members bear the short-run costs the proposal is defeated.

The history of marketing co-operatives is rich with examples of organizations that could not convince their members of the need for a constant supply of high-quality products. Several fruit and vegetable co-operatives have failed because their members refused to agree to volume contracts and rigorous quality standards. The co-operatives were victims of Type III issues. Without commodity contracts, the co-operatives were flooded with products when prices were low and alternative outlets few, while they could not obtain sufficient products when markets were strong. In addition, the products these co-operatives received were typically of low quality since members would save their high-quality products for the best markets. Co-operative management was often aware of the benefits of a constant supply of high-quality products, but members were not willing to assume the short-term costs the policies implied.

The need for strong equity financing and aggressive marketing programmes are well recognized in the co-operative community. However, many co-operatives have an extremely high degree of leverage, and few co-operatives have marketing programmes as aggressive as those of their

non-co-operative counterparts. One explanation is that members are too concerned with the short-term costs these issues imply. In other words, the co-operative may be member-dominated and these become Type III issues.

In a member-dominated co-operative Type IV issues pass, although they should fail, since they have a negative impact on the organization as a whole. The reason they are approved is that members derive the benefits and the co-operative firm bears the costs.

At several annual meetings of a U.S. marketing co-operative, members proposed and adopted a resolution requesting the association to initiate a member distribution programme of the co-operative's products. Management studied the issue and found that it is cheaper for members to buy the co-operative's products in any grocery store than through a member distribution programme. Since membership resolutions of this co-operative were only advisory and not binding, the programme has not been instituted. However, the issue kept coming up for several years and, if members had had their way, the co-operative would currently have a costly member service. Fortunately, the leadership was finally able to convince the membership that the programme was not worth the cost.

The subsidized supply department and membership signs of the marketing co-operatives discussed above are additional examples of Type IV issues that can arise in co-operatives.

The above discussion suggests that co-operative membership does not instinctively know what is best for the co-operative as a whole. It is ironic that member-dominated co-operatives will not always make decisions that are in the best interest of the membership. However, many co-operators recognize this possibility, and realize that to improve the long-run economic well-being of members, co-operatives must be operated in a business-like manner. In fact, one will even occasionally hear someone suggest that co-operatives should operate in the same manner as non-co-operative firms. We now turn to an examination of this alternative.

### *Management-Dominated Co-operatives*

A management-dominated co-operative is one where management proposals always prevail. Management-dominated co-operatives usually arise when an organization has a strong management team and a weak board of directors. One possible sign of a management-dominated co-operative is when one hears: "This co-operative is run just like Corporation X." This does not imply cynical motives on the part of management. Strong management is often sincerely interested in the welfare of the association. However, it primarily focuses on improving the financial performance of the co-operative firm. A management-dominated co-operative does this by adhering to the management decision rules outlined above, and ignoring the impact which proposals have on the membership.

The type of issues approved and rejected in a management-dominated co-operative is illustrated in Column (7) of Table 2. The results indicate that all decisions correspond to the ideal outcome, except for Type II and Type V issues.

Type II proposals fail, although they should have been approved. The issues are of net benefit to the organization as a whole, with the majority of the benefits accruing to the membership. But management vetoes the proposals because they impose a net cost on the co-operative firm.

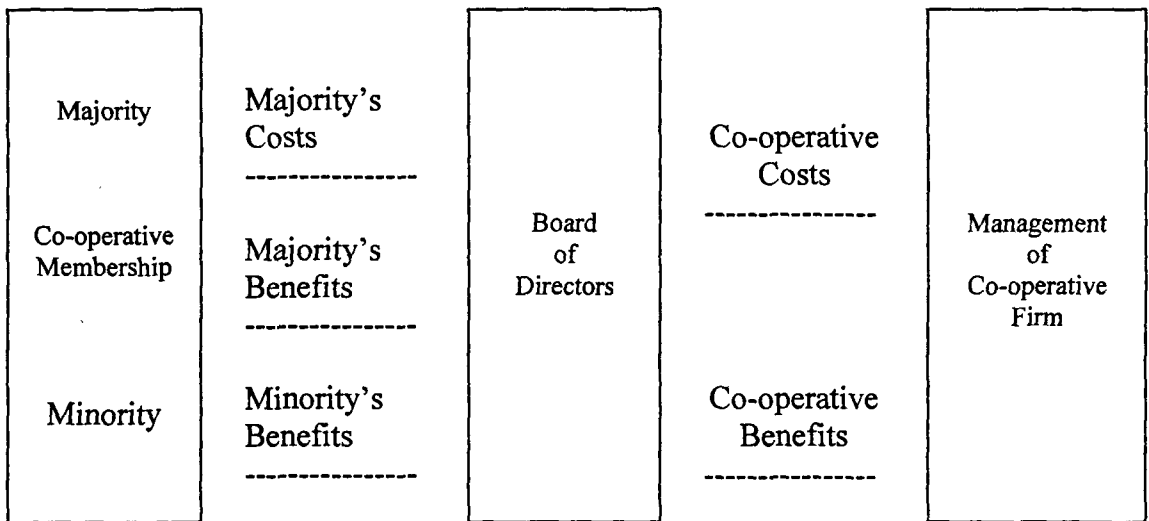
The number and level of member services are typically more limited in management-dominated co-operatives than in other co-operatives. In fact, this type of co-operative may not offer services that are of major benefit to members. Such services include: member education, technical production advice, and a reasonable assortment of products. Moreover, management-dominated co-operatives may be so concerned with the firm's performance that members experience an antagonistic attitude from management. These are examples of Type II issues in a management-dominated co-operative.

Lack of co-operative strategies to improve long-term planning, increase member equity and strengthen marketing programmes is other possible examples of Type II issues. Although contemporary co-operative management is aware of the advantages of these strategies, management may not feel the personal rewards are worth the enormous effort required to implement them. Although they should fail, Type V issues are approved in management-dominated co-operatives. They are of net detriment to the organization, but of net benefit to management or the co-operative firm. Management ignores the fact that a major proportion of the costs are borne by the membership.

Management emoluments (such as corporate aircraft, country club memberships, luxury automobiles, and excessive staff) are examples of Type V proposals. It is interesting to note that co-operative managers generally have fewer perks than their non-co-operative counterparts. Perhaps the career paths of co-operative managers have taught them not to expect, or ask for, management perks. However, Type V issues can also take other forms. Managers of management-dominated co-operatives can pursue strategies and operational alternatives that enhance management income, prestige and power at the expense of the membership. For example, co-operative growth or diversification for its own sake are Type V issues. Moreover, management-dominated co-operatives may be more likely to use unallocated equity (i.e. tax-paid retained earnings) as a major source of capital. The use of unallocated equity rather than allocated member equity may reduce member interest in the activities and performance of the co-operative, and thereby give managers greater decision-making freedom. It is now possible to conclude that not even a management-dominated co-operative will guarantee that the organization is operated in the long-run economic interests of its members.

*The Role of the Board of Directors*

The key to an effective co-operative organization is an independent and analytical board of directors. The above discussion suggests the role of the board may be even more important than previously thought. The board must balance the interests of members and management, as well as the different majorities and minorities within the membership (Figure 3). The analysis can also assist in identifying the general factors a board should consider when making decisions, the type of studies the board should request, and the temptations the board should resist when establishing co-operative policy.



**Figure 3. The Relationship Between a Co-operative's Members, Board and Management**

Co-operative corporation law gives the board of directors ultimate responsibility for the survival and well-being of the organization. The board cannot merely represent the interests of the membership; nor can it automatically approve the recommendations of management. The board of directors is the only entity that can, and must, consider the welfare of the total organization. It must balance the interests of different groups of members as well as the interests of the total membership and the co-operative firm. Since the primary goal of the board of directors should be to maximize the net benefits of the total organization, the appropriate balance, as suggested in Figure 3, depends on the relative magnitude of costs and benefits experienced by the various parties. Consequently, the board must have an accurate estimate of the impact of various proposals on the membership as well as the co-operative.

To achieve the ideal decisions indicated in Column (8) of Table 2, a co-operative must have an informed, analytical and independent board of directors. To maximize the net benefits of the total organization, the board must also be willing and able to determine and make the appropriate compromises between management, the membership and various groups of members. At times this may result in conflicts and tensions between the board and management, and between the board and the membership. In fact, healthy and creative conflicts and tensions may be the true sign of vibrant democratic control in co-operative organizations.

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## **MEASURING PERFORMANCE OF COOPERATIVES**

Evolving of an objective, rational and valid mechanism to evaluate performance of an organisation purely economic or socio-economic and its field level impact becomes absolutely necessary in a developing economy, if for no other reason than to ensure realisation of broad objectives and optimum utilisation of resources in the task of nation building.

The obvious importance of such an exercise, however does not imply that it is a simple or an easy task. Far from that, especially when the organisational objectives are multiple and embrace both economic and social aspects. Basically, two basic issues are involved in evolving a rational, valid and objective mechanism for evaluating; what instrument should be applied and what attributes should be evaluated. The first aspect presents formidable problem in that it calls for exercising value judgement, and thereby fashioning of a yardstick to measure. The second aspect seeks to identify those core characteristics or the qualities or the segments of the aims of the organisation, that need to be measured and evaluated.

In a private, western oriented profit seeking organisation, these issues have been sorted out by adopting the scales of a western organisation; profit, return on capital, cost of production, and other elements of cost; the attributes are output, growth, market share sales, production etc., relative to various inputs or as independent and results. But these are all limited concepts. They seek to relate and evaluate the input-output relationship, and costs, in terms of cash expenditure and commitment of internal resources. Moreover these concepts are based on traditional western values of rationality, efficiency and profit mechanism at the unit level.

A cooperative unit on the other hand is a self-denying institution. Its greatest achievements lies in reaching benefits to others – its members and the community at large, rather than in its own growth, surplus or efficiency per se. Added to this is its well-articulated concern for social purpose, commitment to uphold democratic traditions, its aim to promote a cause, and bring about a social and economic change. All these make the conventional tools and measures employed to gauge the performance of profit seeking units, of somewhat limited relevance.

### **Aims System of Cooperation**

Let us at this stage pinpoint our attention on the aims system of a cooperative. Aims system of a cooperative can be viewed in terms of targets (large goals) and operating objectives (results of an activity/operation), the latter being a means to attain the former. How, in most developing countries, these targets and operating objectives are not independent variables, they are not determined and given to the cooperatives by any one particular agency or a group. Rather these are determined by cooperative members, the dominant elite (representing the dominant sections of the community i.e. leadership) and the government, particularly the ruling political party. In a way, a cooperative functions and operates within the constraints of micro policy formulated locally by members and cooperative leadership, and macro policy formulated by the government to attain the targets and operating objectives.

At times the operating objectives as determined by the members and the leadership and the government are counter to each other. They compel the cooperatives to work at cross-purposes. Take for instance, the case of a sugar cooperative. One of the operating objectives of a sugar cooperative as conceived by its members and the leaders, is to fetch a higher price for the cane for the members, but the government may not exactly perceive its role in the same manner. It may rather expect a sugar cooperative to sub-serve its own political, or even administrative objectives and, therefore, may insist on the sugar cooperative, to function as a "socially" informed organisation, which as a matter of deliberate policy, should aim at to keep the sugar price to the minimum for the ultimate consumer. Thus one may encounter a certain amount of dualism in the targets and operating objectives, in the aims system of a cooperative. This not only makes the task of measuring the performance of the cooperatives almost impossible, but



may also result in sub-optimum utilisation of available resources. For giving optimum performance some amount of homogeneity in targets and operational objectives is inevitable.

The openness of cooperatives as a system, however makes this task extremely difficult, for, their survival and growth is dependent, in no small measures, upon the linkages that these organisations establish with the outside environments, more particularly with the government and the dominant elite, especially when these perceive a different sort of role for the cooperatives.

### **Activity Mix of Cooperatives**

Whatever may be the degree and extent of dualism in the aim system of a cooperative, and irrespective of the quality of linkages that a cooperative succeeds in establishing with the outside environments, it has two basic functions to perform; and its achievement, resulting from the performance of these functions, alone should truly reflect the measure of its effectiveness and efficiency. These two basic functions are economic efficiency and social development. Since these functions will have different connotations, at varying stages of cooperative development, a detailed explanation on these aspects will be in order here.

### **Stages of Cooperative Development**

#### **1. *Traditional Model***

Here the cooperative organisation conforms more or less to the Rochdale Pioneers model of a cooperative, where members look up to a cooperative as a protector of their interest. The economy of the members is not really integrated with that of the cooperative. The latter functions as an executive organ of the community of members as represented by the general body. The effectiveness of a cooperative, though influences the economy of individual member, yet it (cooperative organisation) does not determine or decisively affect the economy of the members. A rural consumer cooperative store, functioning as a fair price shop falls in this category. Naturally, the efficiency measure or purpose of the cooperative unit under this stage of cooperative development will be different than the ones explained below.

#### **2. *Integrated Model***

In this model of cooperative development, the economy of the member is almost totally integrated with the economy of the cooperative. The efficiency of a cooperative is decisive in determining the member's economy. Here, the cooperative is an extension of the common activities of the members and to that extent directly contributes to the increased profitability and effectiveness of the operations and activities conducted by the members. The cooperative does not only protect but also promotes the interest of the members. The sugar cooperatives in Maharashtra or the dairy cooperatives in Gujarat are some of the outstanding examples of this integrated model of cooperative development in India.

Here the measure of efficiency, or performance of a cooperative will be different and will have to reckon not only with the efficiency of the cooperative organisation, but also the resultant impact that it has on the operations and activities of the members.

#### **3. *Quasi-Market Model***

This is a fairly advanced model to be commonly found in Western European countries. Here a cooperative is apparently no different than any other private organisation in so far as the member's economy is concerned. A cooperative generally acts as a powerful countervailing force, against the wiles and tricks of the powerful private interest. The cooperative treats members and non-members alike in economic matters and passes on

no additional economic benefit to the members, but merely provides an alternative to the existing private agencies. Most of the large cooperative department stores, and even the two giant fertilizer cooperatives, IFFCO and KRIBHCO, in India, fall in this category. Here the measure of efficiency, or performance may have to be more or less the same as are generally applied, by any large private sector organisation.

Thus we see that the measure of efficiency or performance of a cooperative is directly linked to the stage of cooperative development and the model that we envisage for its activities.

We have only touched the economic activities, and stages of economic development and the likely nature of the criteria appropriate to the measurement of performance of a cooperative unit. The social development activities of the cooperative however add another dimension to the problem of evolving appropriate measure relevant to our targets and objectives. Take for instance, the case of a dairy cooperative. It helps its members to switch over to better breeds of cattle, to improved methods of cattle management and to use of balanced or by-pass protein cattle-feed for improving the milk yield, and consequently the economy of the member. In the process, it is also expected to set in a process of modernisation in attitudes and outlook. A new value system conducive to change and development may also emerge. Democratic aspirations may take firm roots. A feeling of self-reliance and mutual help may replace the hitherto sense of dependence and fierce individualism. All these are priceless attributes; but how does one measure the performance of a cooperative in such areas especially when after giving a commendable performance viz-a-viz membership in such areas, it may itself be in loss. The question of evolving suitable measures of efficiency and performance will involve an examination of a host of complex issues and not merely the simple task of comparing the output with the given input, or in relation to commitment of resources or costs).

### **Concept of Profitability and Cooperatives**

Profitability as a measure of efficiency is seldom employed to a cooperative enterprise. For, the corporate member (i.e. shareholder) relationship in a cooperative transcends the usual linkages of a shareholder with a private sector enterprise. A cooperative is not only an enterprise, but also an association of human beings. Its efficiency or extent of its success is usually measured as much in terms of its rate of growth, residual surplus and market share, as in maximisation or returns for its members in proportion to his business with it, social good that it generally promotes within the community around and services that it renders. To the extent profitability reflects, in a book-keeper's language, surplus of income over cost, then the valuation of social good in monetary terms, combined with the additional return to the members and the residual surplus left with the cooperative, should be deemed as an index of its profitability. Conceptually, thus, profitability of the enterprise and the user-members of its services. Looking merely at the profitability of a cooperative organisation will be as much a betrayal of ignorance of the cooperative philosophy as is it is a failure to evaluate its real efficiency or lack of it. In the cooperative sector, profitability of the enterprise is inseparable from that of the user-members of its services. Taken together, alone can it have a meaning in this context.

Traditionally the profit policy of the cooperatives has been not to have any profit. The insistence so far has been that all costs of operations should be borne by the user-members, in proportion to their dealings with the cooperative, and no surplus should be created or accumulated. It is only recently and in the wake of growing competition, increasing size, mounting requirements of capital and the imperatives of growth and expansion that the cooperative leadership has reluctantly reconciled to the need to generate and retain adequate residual surpluses. Otherwise, on principle, all residual surplus after meeting the costs and other requirements, must of necessity, go back to the members in proportion to their business.

Obviously the profitability of a cooperative organisation as an index of its efficiency has severe limitation and can hardly reflect the real position of the cooperative performance.

Apparently, efficiency in the context of a cooperative organisation is a highly localised concept, but related as it is to the macro as well as micro policies for and of the concerned cooperative, has stage of cooperative development and the type of objectives that are mutually agreed for it for accomplishment. There may not be any general efficiency indices or blanket ratios that can readily convey the real performance or efficiency of the cooperative organisation. The usual norms of efficiency for measurement of performance, and based on western values and concepts, or those which are conventionally applied to the working or a private profit seeking organisation, can hardly be applied here. These neither cover the entire gamut of activities of a cooperative, nor do they reckon with the multiplicity of objectives as perceived by the government and the group of members nor indeed the very purpose of organising the cooperatives.

Several issues have been raised here; some of which need closest attention of those who constantly harp upon improving the efficiency of the cooperatives, without ever caring to define the basis and norms of its measurement. One approach to measuring performance of a cooperative can be to consider it both as an economic enterprise, and a social institution. The weightage to be assigned to these two equally vital aspects can be locally worked out, keeping in view the environmental variables.

### **Measuring Performance of Cooperative as an Economic Enterprise**

As discussed earlier, the performance of a cooperative as an economic enterprise needs to be measured at the members level, as indeed, at the organisation level itself.

The key performance areas this can broadly be identified as under. These are illustrative and not exhaustive.

#### *At Membership Level*

- Rate of growth in net income
- Rate of growth in production/output
- Rate of growth in productivity
- Development/maintenance of infrastructure
- Development and maintenance of community services
- Access of different sections of membership to the services of cooperatives
- Equity/distributive justice.

#### *At the cooperative Level*

- Capacity utilisation
- Rate of growth in productivity of capital, labour, other factors
- Rate of growth in assets
- Return on investment/other financial ratios
- Cost of services to members and their quality
- Coverage of range of membership needs
- Extent of reliance on government/support agencies
- Cost cutting efforts/diversification of activities essentially as a means to reducing costs of services to members.

## **Measuring Performance of Cooperative as a Social Institution**

### *Main Characteristics of a Social Institution*

The following are the main characteristics of a social institution, as distinct from an economic enterprise.

- An institution is a change inducing and change protecting formal organisation
- Its functions and services are related to society's commonly agreed upon requirements as tested by its adaptability to human needs and values.
- Its internal structures embody and protect commonly held norms and values of the society.
- Its achievement include influencing the environment in positive ways through values it creates.

Keeping these characteristics in view, the following can be identified as the main objective of a cooperative as a social institution.

- Members' active involvement/participation
- Combating exploitation and raising members, incomes
- Harmony in relations within the cooperative structure
- Openness, commitment to ethics and integrity in business

The key performances areas vis-à-vis the above social objectives, of a cooperative can thus broadly be identified as under:

### **1. Members Active Involvement/Participation**

- Regularity of election
- Regularity of meetings of the board/sub-committees
- Members contact programmes
- Women/youth participation
- Flow of information/performance reports to members
- Members education programme and their impact
- Responsiveness to members complaints/grievances
- Existence of members groups/study circles and cooperative's response to their deliberations
- Representation to various sections of membership in decision making bodies
- Responsiveness and sensitivity to members needs and problems

### **2. Combating Exploitation and Raising Members Incomes**

- Timely and regular payments for produce/services
- Assistance in improving quality and productivity of produce/services
- Extension and member education programmes for all and their impact
- Impact of members contact programmes
- Availability of inputs, particularly to weaker and poorer members
- Crop/produce/care delivery system and its coverage of weaker members
- Assistance in arranging credit for asset building
- Membership skill improvement programme
- Frequency of visits by extension staff to members households and responsiveness to feedback
- Surprise and/or comprehensive inspection, regularity of audit and check on primary cooperatives by the staff of federal cooperative

- Composition of membership and rate of its growth
- Representation of weaker/poorer members in decision making bodies
- Effectiveness of grievances handling mechanism
- Investment in community development work and its impact on different sections of the community
- Yield/productivity variations among members' economies and steps initiated to reduce such variations.
- Leadership development programme and opportunities for weaker sections in participation in such programmes.

### **3. Harmony in Relations Within the Cooperative Structure**

- Extent of decentralisation in favour of primaries
- Regularity of elections
- Free flow of information
- Unbiased ruling in case of differences/disputes among cooperatives within the vertical structure
- Responsiveness of grievances handling mechanism
- Institutional mechanism for blending imperatives of democratic control with managerial efficiency
- Regularity of audit and inspection of primary by the federal cooperative and listing reasons for sub-optimum performance and follow-up action
- Respect for the representatives of member-primaries
- Support to democratic functioning at all levels
- Frequency of meetings to sort out infrastructural problems
- Confidence in higher level cooperatives among the base level cooperatives
- Feeling of mutuality and inter-dependence among all concerned.

### **4. Openness, Commitment to Ethics and Integrity in Business**

- Preparation of comprehensive future plans and their presentation for discussions and approval in sub-committee/board/general body meetings.
- Regular social audit, follow-up action thereof and their presentation in the general body meetings.
- Timely financial audit and its compliance
- Evolution and circulation of a code of ethics for leadership, staff and members and then monitoring of its observance
- Openness in dealings and business transactions
- Freedom of access to members to records/documents of the cooperative
- Observance of all laws, rules and regulations in letter as well as in spirit
- Blending of economic imperatives with social obligations
- General image of the cooperative within the community.

These are some of the key performance areas which need to be reviewed, at periodic intervals, if only to keep a cooperative committed to its basic values and responsive to the social and economic urges within the community.

## **Performance of the Macro Level**

In addition to the above areas for measuring performance at the micro level, performance of cooperatives must also be measured at the macro level, either as a branch of the movement, or movement as a whole.

A few areas, where such macro level measurement needs to be done are:

- Innovation
- Quality services
- Social and cultural development
- Environment Protection and quality of life

### **Innovation**

Innovation here should be seen in the classical sense: development/production of new products/services, or production of existing products/services in a new way. The development and progress of a modern society critically depends on innovation. Cooperatives must therefore, play their historical role, and encourage and support innovation in areas, particularly which contribute to the welfare and well-being of the people at large.

This criterion of innovation should also apply even to range and nature of activities/services offered by cooperatives.

### **Quality of Services**

Responsiveness to the society at large, particularly while providing services, and the quality of such services, is yet another areas where cooperatives must come up to high and exacting standards. Shoddy services and indifferent staff behaviour should not typify the performance of cooperatives in the public mind.

### **Social and Cultural Development**

To the extent, cooperative movement contributes to the social and cultural renaissance, it performs its expected historical role. Support to revival of traditional arts, development of sports, setting up health care delivery systems, particularly for the aged and encouragement to education, particularly of women, and importance in its standards, are all areas of utmost importance to the society. Mature cooperatives are expected to perform and contribute in these areas as well.

### **Environment Protection and Quality of Life**

And finally, there is the problem that must engage the attention of all people in the future namely, preservation of ecology, environment protection and improving the quality of life. Undoubtedly, these areas are going to be of direct concern to the society. Cooperatives as a movement must respond to the challenges posed by the deterioration of environment, and quality of life and appropriately respond both in deeds as well as through members consciousness raising efforts so that the planet earth continues to remain a livable place.