Final Report

Management of Agri-business Contracts & Organizations

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Foreword

The Centre for Management in Agriculture (CMA) is engaged in applied and problem solving research in agribusiness management as well as achieving broader goals of agricultural and rural development since its inception. As a result, over the years, CMA has developed an expertise in a large spectrum of issues in agribusiness sector including agri-input marketing, agro-processing, agri-food marketing, rural and market infrastructure, grass-root innovations, appropriate technologies for arid-and semi-arid regions, international agricultural trade including the WTO issues, global competitiveness, commodity markets, food safety and quality issues. CMA undertakes researches of this kind not only on its own, but also at the request of its clientele group, which includes the Ministry of Agriculture, Government of India.

Since its inception, CMA faculty has been working on topics of current interest and issues, which are of interest to the country and the relevant global community at large. So, quite naturally, Prof. Samar Datta initiated this study to examine the relevance and applicability of the growing literature on contractual-organizational design in the context of Indian agri-business management. He picked up a much-debated area of rural credit, and conducted intensive case studies of two well-known, but contrasting forms of organization – namely, primary agricultural credit societies of Gandevi Taluka in South Gujarat, and BASIX, a special type of micro-finance institution, both of which are engaged in delivery of credit to rural masses. The lessons and suggestions arising out of his study seem to help the causes of rural credit, agri-business and rural micro-finance institutions in choosing appropriate contractual-organizational format and also in their pursuit for necessary policy reforms in these segments.

I hope that policy makers, academicians and policy makers will find the study interesting and useful.

April 6, 2010

Vijay Paul Sharma
Chairperson
Centre for Management in Agriculture

Preface

Agri-business organizations are apparently much more complicated as compared to their counterparts in industry and services, given the fact that they usually need close coordination between isolated agricultural farms in the backward linkage component, on the one hand, and agro-processing and marketing units in the forward linkage component, on the other. With spread of liberalization and globalization, agri-business organizations have undergone further changes in their structure and functioning. At the same time, the traditional theory of the firm has undergone sea changes with advancements in theories of property rights, agency theory, corporate governance, stakeholder cooperation etc. Changes in structure and functioning of agri-business organizations cannot be independent of recent evolution in the theory of the firm and associated concepts. The present study is a modest attempt to link the two sides with the help of two crisp but intensive case studies of two contrasting agri-business organizations engaged in delivery of credit in rural India.

As credit can't stand alone, and almost invariably it gets interlinked with several related markets, especially in a rural context, delivery of agri-business credit becomes the natural choice of field to examine application of the evolving concepts of modern contractual-organizational designs. Primary agricultural credit societies in a cooperatively vibrant area Gandevi Taluka in Navsari district in South Gujarat, with their emphasis in input-output marketing and agro-processing alongside credit operations, become our first choice in this context. A sharp contextual contrast is provided by the rural credit operations of BASIX, a special type micro-finance institution, which combines the virtues of a 'for profit' company with those of a non-profit livelihood school in its credit operations, and has taken a broader developmental approach towards rural credit for small, marginal and vulnerable sections of the community. Intensive case studies of these two organizations are undertaken with the hope that this study will not only highlight applicability of modern organization management tools in agri-business operations around credit, but also provide important clues toward improving performance of credit in this country.

While the author had conceptualized the study proposal himself, in the process of its implementation he incurred a lot of debt. First and foremost, he would like to take this opportunity to record his special gratitude to Professor Milindo Chakrabarty of St. Joseph's College, Darjeeling, who took pains to undertake field work in certain pockets of BASIX's area of operation alongside the undersigned and prepared a draft report on the case study of BASIX. The authorities of the two selected organizations have always been constant source of inspiration, encouragement and support, though we fear we have not been able to tap the full potential of their willingness to help, given pressure of our other commitments and obligations. We are nevertheless extremely indebted to them for their kind gesture and help. The Ministry of Agriculture, which sponsored this study, has always been very kind and understanding, as completion of the study took much more time than anticipated for reasons beyond our control. Several research staff came and left this project during this prolonged period, often providing only partial support to the undersigned. Nevertheless, the author would like to record his thanks to them for whatever help they could provide. Ms. V. Ramany deserves the author's gratitude for providing secretarial assistance in this study.

The author would feel gratified if the study can generate some interest among academics, policy makers, researchers and practitioners in this field.

IIM, Ahmedabad
April 06, 2010

Samar K. Datta

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Chapter 1

Introduction

Samar K. Datta

Abstract

Global market conditions are displaying increasing competition and quality concerns, on the one hand, and high incidence of a large number of small, direct or indirect stakeholders facing various forms of market imperfections and even market failures in the Porter value chain of any agri-business enterprise, on the other. Against this backdrop, this research study aims at making a brief review of the literature on agri-business contracts and organizations, highlighting the need for suitable institutional response in terms of building up appropriate agri-business organizations together with appropriate contractual forms to rope in all important stakeholders as well as to take care of their concerns. The study proposes detailed case studies of two agri-business organizations – one cooperative and another private, both engaged in credit and credit-complementary activities to cite live examples and to extract necessary lessons there from.

Section I: The Context and the Main Issue

1.1 Management of contracts and organizational format seems to have assumed new importance in the current era of liberalization and globalization. The growing trends seem to have several important implications in today's context.

1.2 First, availability of a global market has created an urge in business to scale up their operations. Consequently, there is a sharply increased demand for new technology, financial capital, skills, capabilities and commercial intelligence at a scale, which was hitherto unknown to the world. Naturally, a craze has begun for finding out appropriate sources of supply of critical resources and roping in potential suppliers of such resources.

1.3 Second, the non-reversible liberalization process has made the organizational forms fluid and susceptible to continuous tinkering in response to even the slightest change in both internal and external forces. As a result, the traditional pure forms of

corporate business seem to have been undergoing tremendous changes not only in response to fresh opportunities for sub-contracting arising from market reforms, but also in response to the need for having holistic forms of business organization, which can embrace a large number of stakeholders even outside the formal boundaries of a business enterprise. Mixed forms of business organization, combining features of for-profit as well as non-profit forms of business seem to be coming up, and the corporate sector has shown tremendous appetite for change not only in learning from rival organizational forms like cooperatives, NGOs etc., but also even in promoting or striking strategic alliances with rival forms of organization to suit the requirements of time and context. However, similar efforts on the part of agri-business cooperatives seem to be missing, in general.

1.4 Third, the urge to achieve global competitiveness – not only in distant export markets, but also at home against liberal imports – has imposed a lot of demands on modern business. Economizing in all fronts whether through cutting down on transformation cost or transaction cost, or whether through achieving economies of scale or scope, has become the order of the day. The demand for commercial intelligence to constantly gauge changing consumer perspective around the world or to know about the likely moves by rival businesses seems to be increasing over the years. Conducting business in a global market at the same time has demanded close acquaintance with the rules of trade and business around the world, besides full awareness of the WTO Acts and Statues and the changes therein. In global market conditions, managing a business is not merely managing the government and economic policy environment at home, but managing the same across the world. Since managing powerful and sometimes turbulent outside environment is no cup of tea to a small business, networking with similar and even powerful outside bodies has therefore become necessary for survival and growth in today's world.

1.5 Finally, the opening up of the global market has brought in its wake global concern for quality and standards – thus increasing importance of not only product standards, but also input standards (e.g., labor standards), process standards (e.g., HACCP, ISO etc.), and even resulting environmental standards. All these have made

management of any business a subject which goes far beyond the scope of the business firm itself. Thus, managing outside and indirect stakeholders outside the realm of the business firm as traditionally defined, through informal or formal mechanisms has become almost a primary task of modern business. It is therefore no surprise that organized business today is seriously talking of corporate social responsibility and pursuing local development goals under private-public-community partnership.

1.6 Given the above-stated trends, the issue is whether it is possible to manage business under global market conditions through coordination of isolated pieces of transactions in the market place, or through internal transactions inside a traditional and usually vertically integrated firm, or whether we need a more holistic approach often combining the virtues of both approaches. The overwhelming importance of this problem constitutes the main thrust of the current research study – namely, how to rope in a large number of diverse stakeholders to a business under the banner of a single organization (whether corporate or cooperative) through appropriate tinkering of the latter. In other words, the issue is how to offer suitable contracts to diverse stakeholders consistent with the organizational goals and objectives. As Figures 1.1 and 1.2[2] below demonstrate, the stakeholder approach to the firm, which is becoming more and more relevant in the current context, goes far beyond the production function view of the firm and constitutes an expanded managerial approach to the theory of the firm.

Section II: Relevance of the Problem in Agri-business Context

1.7 The above-stated problem – i.e., designing a suitable organizational-contractual format becomes even more important in the context of agri-business enterprises for several reasons:

- Market failure is a rule rather than an exception with respect to a large number of agri-business inputs and products/services, which is further reinforced due to public good or common property characteristics of some of the underlying resources, information asymmetry and presence of several risks. Table 1.1 below

[2] Adapted from Archie B. Carroll, Ann K. Buchholtz (2000): *The Stakeholder Approach to Business, Society, and Ethics,* Chapter 3, pp. 67-68, © Cenagauge Learning, 7th Edition.

displays how various types of contractual problems arise in the presence of informational asymmetry and unforeseen contingencies. The contractual parties are here classified into two categories – one group, which is better informed, and another, who is usually less informed as compared to the former group.[3] While the relatively informed side may have either hidden action or private information, contractual action may be initiated either by the better informed side, or by the relatively uniformed side, thus giving rise to the following 2x2 contingent situations[4]:

Table 1.1: Role of Information in Contractual-Organizational Design

	Informed party's	
Actions initiated by	***Hidden action***	***Hidden information***
Uninformed party	Incentive contracts to overcome moral hazard	Screening to overcome adverse selection
Informed party	Self-serving action	Signaling to overcome adverse selection

- Market imperfections in various inputs and outputs constitute another salient characteristic of agri-business enterprises, which often invites government intervention or regulation of one kind or the other. This means agri-business contracts and organizations must willy nilly be ready to accommodate such features of government controls and regulations[5].
- Because of presence of a large number of small and diverse stakeholders, sometimes located in far-off places and in far-off time points in the future, agri-business contracts and organizations almost invariably encompass a much larger number of stakeholders along a much longer Porter value chain. This makes the task of organizational management and contracting a much more complex and difficult task in agri-business than in other contexts.
- Extra-profit and developmental concerns like maintenance of environment, landscape, biodiversity, employment, income, etc. especially for backward communities and regions in a developing country context, make contracting and

[3] *When there is perfect information and no information asymmetry, the standard market exchange is usually sufficient to conduct transactions. The beauty and complications of a contract arise when there is information asymmetry.*

[4] *A fifth scenario arises when both the sides of a contract suffer from informational problem, resulting in 'locking-in' or 'hold-up' problem under contingent situations.*

[5] *Controls and regulations of course don't preclude subsidies and concessions.*

organization building an even more difficult proposition. Just because these concerns and considerations sometimes don't enter explicitly in contracts and organization making, doesn't at all mean that they are unimportant and can be ignored. Often agri-business propositions are subservient to such broader societal considerations, which remain at the forefront of any contracting or institution-building exercise.

Figure 1.1

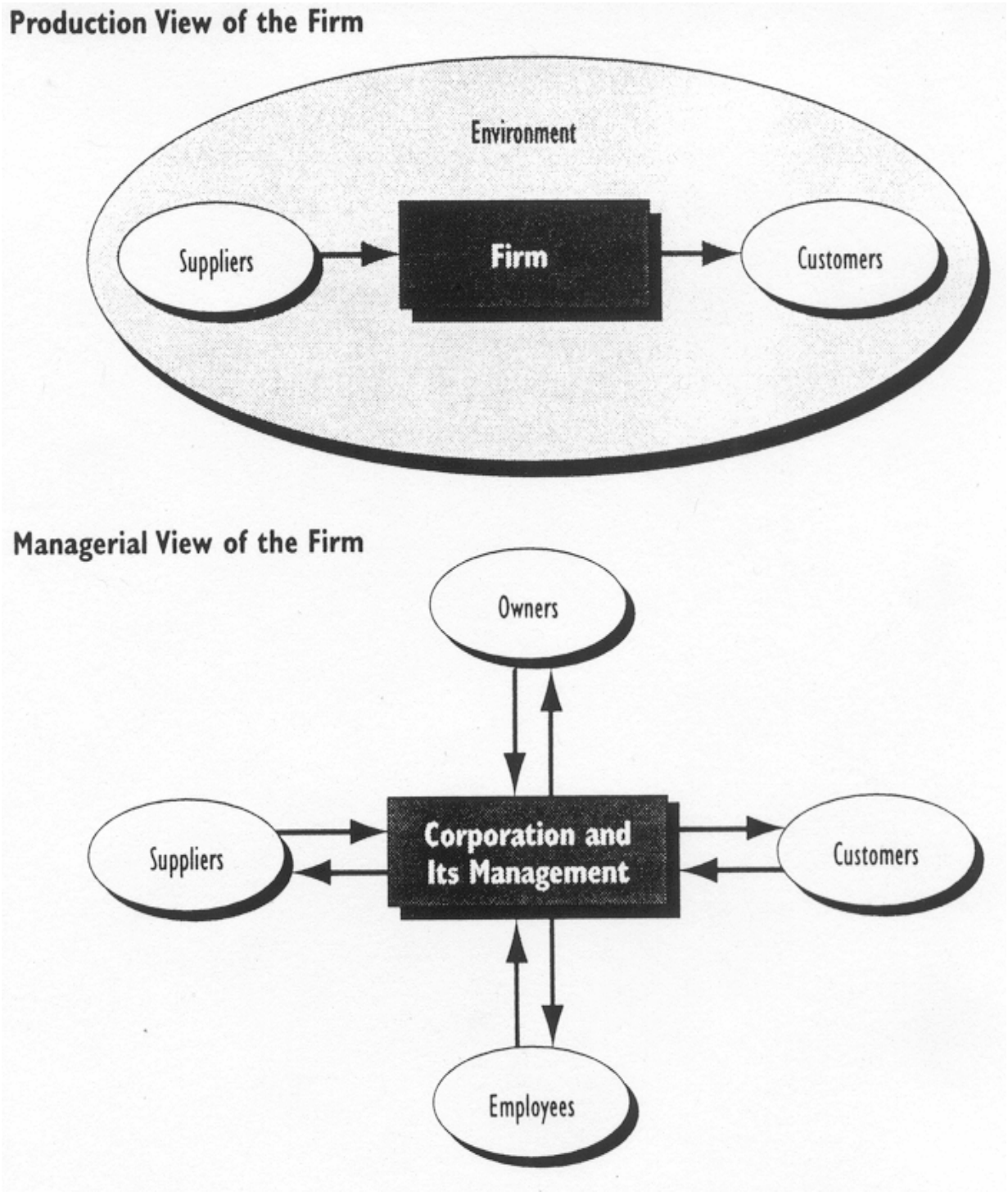
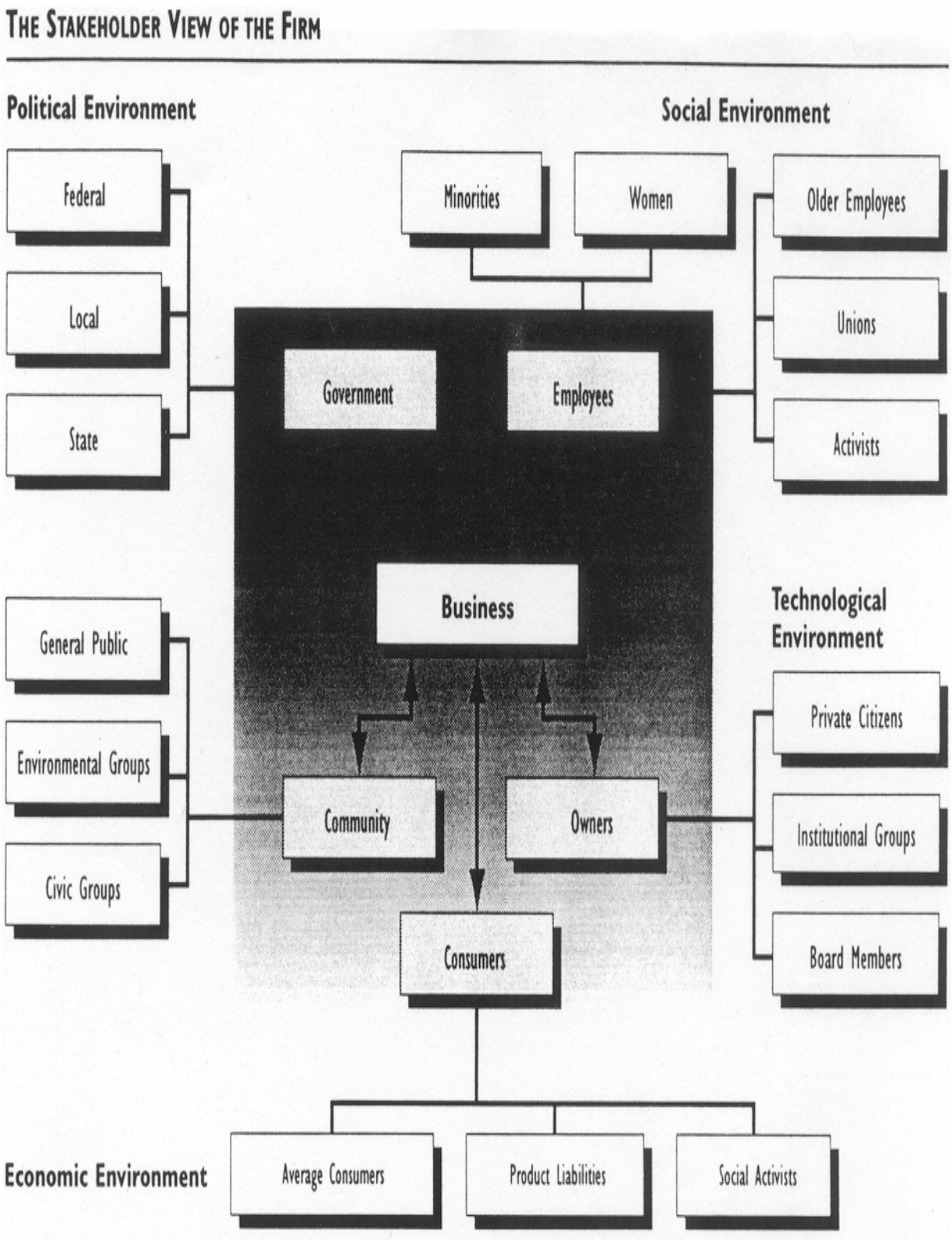


Figure 1.2


THE STAKEHOLDER VIEW OF THE FIRM
Political Environment
Social Environment
Federal
Local
State
Minorities
Women
Older Employees
Unions
Activists
Government
Employees
Business
General Public
Environmental Groups
Civic Groups
Community
Owners
Technological Environment
Private Citizens
Institutional Groups
Board Members
Consumers
Economic Environment
Average Consumers
Product Liabilities
Social Activists

1.8 The above-stated considerations therefore further strengthen the case for studying agri-business contracts and organizations, especially in today's liberalized, global and highly dynamic market conditions.

Section III: Objectives

1.9 The precise objectives of this study are two-fold:

1. To bring out the stylized features on how successful modern agri-business propositions in this country are redefining the boundaries of their organizations in the context of an important segment of agribusiness – namely, credit, besides coming up with innovative forms of contract for their stakeholders at intra-firm, inter-firm and extra-firm levels in response to the changing circumstances.
2. To come up with a possible listing of action points in the context of management of agri-business contracts and organizations, so as to promote and harness the full potential of agri-business activities around credit.

Section IV: Study Design, Methodology and Coverage

1.10 Given the fact agri-business propositions can be quite varied and heterogeneous probably requiring a life-long efforts to bring out the beauty of their contractual-organizational designs, the current study attempts to achieve a very modest goal – namely, to apply an intensive case study method to highlight the role of contractual-organizational design in delivery of agri-business credit. This is done in the two chapters, which follow, in the backdrop of two contrasting organizational formats – one following a cooperative format and the other following broadly a corporate format, but admixture of non-profit elements.

1.11 These two case studies are undertaken against the background of a summary review of the managerial theory of the firm and related and emerging concepts like corporate governance, stakeholder cooperation, public-private-community partnership and handshake/brotherhood organizations, which, as we shall see, have strong relevance

for promotion of agri-business propositions. We summarize below some of the important points/concepts arising out of our review of the literature:

- The vast and rapidly growing literature on the theory of the firm, following on the landmark contributions from Coase, Alchian and Demsetz, Barzel, Williamson, Jensen and Meckling, Hart, Tirole, Zingales, Collin, Turnbull[6] etc. seem to have brought out at least in descriptive terms changes in the structure and boundary of the firm, besides the various drivers of change. Authorities on this subject seem to have classified three broad types of contract – intra-firm (across stakeholders within an organization), inter-firm (across organizations) and extra-firm (between firms, on the one hand, and government bodies, NGOs and even communities, on the other). The present study therefore attempts to bring out the distinctive characteristics of these three broad forms of contract prevailing in agri-business organizations, covered under the study.
- Standard market forms of transaction are based on the principle of output control, when attributes of the product can be easily observed and monitored *ex post facto*. If outputs can't be easily measured, one needs to monitor application

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[6] *Alchian, A. A. (1993), "Thoughts on the Theory of the Firm," Journal of Institutional and Theoretical Economics, 149, 365-369.*
Alchian, A. A. and H. Demsetz (1972), "Production, Information Costs, and Economic Organization," American Economic Review, 62, 777-795.
Barzel, Y. (1987), "The Entrepreneur's Reward for Self-policing", Economic Inquiry, 25: 103-116.
Collin Sven-Olof (1993), "The Brotherhood of the Swedish Sphere: A Third Institutional Form for Economic Exchange", International Studies of Management and Organization, Vol. 23, No. 1, pp. 69-86.
Coase, R. H. (1937), "The Nature of the Firm," Economica, 4, 386-405. Reprinted in G. J. Stigler and K. E. Boulding (Eds.), Readings in Price Theory, Chicago: Irwin, 331-351.
Hart, O.D. (1988), "Incomplete Contracts and the Theory of the Firm", Journal of Law, Economics, and Organization 4, 119–141.
Jensen, M.C. and Meckling,W.H., (1992), "Specific and General Knowledge, and Organizational Structure", In: Werin, L., Wijkander, H. (Eds.), Contract Economics. Blackwell Publishers, Cambridge, pp. 251–274.
Jensen, M. C. and W. H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics, 3, 305-360.
Tirole, J. (1986), "Hierarchies and Bureaucracies: On the Role of Collusion in Organizations", Journal of Law, Economics and Organizations2, 181-214
Turnbull, S. (1998), "Should Ownership Last Forever?", Journal of Socio-Economics, 27:3, pp. 341–63, <http://papers.ssrn.com/paper.taf?abstract_id=137382>.
Williamson, O.E., (2002), "The Theory of the Firm as Governance Structure: From Choice to Contract" Working Paper, Berkeley
Zingales , Luigi and Rajan , Raghuram G. (1998), "Power In A Theory Of The Firm", The Quarterly Journal of Economics, MIT Press, vol. 113(2), pages 387-432

of inputs, which is done by firm like organizations. Under Swedish network or brotherhood organizations, which a lot of business federations or associations follow, there is neither exclusive output control, nor exclusive input control, but a large order of premise control to fill in the gaps in input and output control systems – firms interact with each other in the spirit of brothers on the basis of some commonly shared values to achieve some common goals. Given this approach, we need to see in the two case studies covered whether, to what extent and how our agri-business organizations are filling in the existing institutional vacuum.

- The study also attempts to identify the stakeholders to an organization and evaluate through case studies whether and to what extent the stakeholder concerns are being addressed. The study thus proposes to follow clues already provided in the literature on typology of stakeholders, and different approaches, strategies and principles to handle multifarious stakeholders to an organization. For example, stakeholders are broadly classified into two categories – primary and secondary. Primary stakeholders are those who have a direct stake in the organization and its success, whereas secondary stakeholders are those that have only a public or special interest in the organization. Alternatively, stakeholders are categorized as core, strategic and environmental. Core stakeholders are essential to the survival of the organization; strategic stakeholders are vital to the organization and the threats and opportunities the organization faces; environmental stakeholders, on the other hand, are all others in the organization's environment. Based on this classification, the literature provides three alternative views on stakeholders – strategic, multi-fiduciary and synthesis approaches. Strategic approach considers stakeholders primarily as factors, managers should manage in pursuit of shareholder profits. Multi-fiduciary approach considers stakeholders as a group to which management has a *fiduciary* responsibility. The synthesis approach, on the other hand, considers stakeholders as a group to whom management owes only an ethical, but not a fiduciary responsibility. Therefore, the key questions, which need to be

addressed in the context of stakeholder management in an organization are: (i) Who are the stakeholders? (ii) What are the stakeholders' stakes? (iii) What opportunities and challenges do the stakes and stakeholders present? (iv) What economic, legal, ethical, and philanthropic responsibilities does the firm have towards the stakeholders? (v) What strategies or actions should the firm take to best manage stakeholder challenges and opportunities? Four broad types of strategies are generally suggested towards different types of stakeholders as shown in Table 1.2. The choice of contractual-organizational form is thus clearly dependent on stakeholder analysis, which the two case studies intend to pursue.

Table 1.2: Ingredients for Stakeholder Analysis

	Stakeholders' potential for threat to the organization	
Stakeholders' potential for cooperation with the organization	*High*	*Low*
High	Stakeholder type-IV: Mixed blessing; Strategy: Collaborate	Stakeholder type-I: Supportive; Strategy: Involve
Low	Stakeholder type-III: Non-supportive; Strategy: Defend	Stakeholder type-II: Marginal; Strategy: Monitor

- The textbook model of a corporate form of organization is engaged in maximizing the rate of return on equity-holders' capital using a vertically integrated pyramid-type control structure (commonly referred to U-form), in which each layer of employees are subservient to directions and control by its immediately higher layer. The multi-divisional or M-form, in which each division of a company was granted more autonomy, allowing each of them to function as independent profit centers, brought elements of a horizontal structure in the functioning of a firm, though not totally dismantling the vertical control of a central office. Decomposition of production processes, and more importantly, diversification of business of a company into related products and services based on economies of scope seem to have reinforced the tendency to move towards M-form of organization. Irrespective of whether it is a U-form or M-form or a combination of the two, another important trend in the control structure of corporate business

observed in recent times pertains to corporate governance. While the need to achieve stakeholder cooperation across major stakeholders is recognized all over the world, especially after the observed success of Japanese form of corporate firms called *Keiretsu,* at the same time strong debate is going on in the literature is how to bring the main levers of control, especially with respect to senior managerial staff, back into the hands of equity-holders.

- Another recent development in organizational format is evolution of public-private-community partnership, though this format is still in the process of evolution and yet to take concrete shape. In traditional public-private partnerships, either the state or the private sector is found to be playing a dominant role, and the community is relegated to the status of either a consumer of the product or service under consideration, or a vendor in charge of supply of certain stipulated service against fixed claims. Community participation in the working of public enterprises and corporate social responsibility are only some examples of this kind of endeavor. In none of these cases, the community is hardly assigned any residual control or residual claim right. In other words, the community is never looked upon as a partner in the production process, who, like other partners, will have some control over decisions about the various processes involved and also have a share in the profits or losses arising from the decision process.

Chapter 2

A Futures Perspective for Agri-business Cooperatives: Lessons from Gandevi Taluka in Gujarat, India

Samar K. Datta, Rahul Nilakantan, Subho Biswas, Abir L. Mukherjee, Ajay Joshi & Sanjaybhai Desai*

Abstract

Against the backdrop of continual erosion in India in the functioning and effectiveness of cooperative form of organization, in general, and agricultural credit cooperative societies (PACS), in particular, this chapter attempts to provide an analysis of available secondary data from India and the state of Gujarat to highlight the basic malady of credit cooperatives that credit can't stand alone. The rest of this chapter provides a detailed case study of multipurpose credit cooperatives in a cooperatively vibrant region called Gandevi Taluka in South Gujarat, where a lot of cooperatives came up in the aftermath of Gandhi's historically famous 'Dandi March' through this region, to find out whether and how these traditional and long-standing cooperatives are tackling the challenge of liberalization and globalization, besides the above-stated basic maladies of cooperative form of organization and credit transactions. Concepts of competitiveness analysis, stakeholder analysis, public-private-community partnership, member centrality and domain centrality are applied to evaluate the functioning of credit cooperatives of this region, to understand evolution of agri-business organizations centering around credit as well as to evolve future strategies for their growth and sustainability.

Section 1: Background & Objectives of the Study

2.1 Cooperatives seem to be facing a number of generic problems, which have contributed to their relative inefficiency and decline over the years almost everywhere in the world so much so that one wonders whether cooperatives have already reached the end of their roads (see, for example, Chapters 1-3 of Datta, 2004 for a review of the relevant literature). The predatory growth of the corporate form of business, always being

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strengthened, refined and redefined by continuous inflow of fresh, young and promising talents from all over the world, seems to have further exposed the weaknesses of cooperatives. The current trend towards privatization, liberalization and globalization seems to have posed further challenges to the survival and growth of cooperatives, in spite of their once-commanding size and popularity, especially in the context of developing countries like India. The major weaknesses of cooperatives today seem to be flowing from several generic factors; as elaborated in the paragraphs which follow.

2.2 As cited in the literature, the relative inefficiency of cooperatives follow from three fundamental problems – horizon problem, transfer problem and control problem. The first problem arises because cooperative shares don't appreciate even though the net worth of an organization rises. This problem is coupled with the second that cooperative shares are not tradable and transferable. As a result, cooperative members tend to a take a very short-term view of things, which discourages longer-term investment in assets, including intangibles like brand name. Because of lack of transferability of shares, members investing in cooperative shares can't achieve optimum portfolio selection based on their risk perceptions. Investment in capital whether human or non-human capital, thus becomes a critical bottleneck for cooperatives, especially in today's context. In the absence of a market in cooperative shares, where variation in the health of an organization can be discerned from movement in the price of its shares, the shareholders would have no clue to the health of a cooperative unless they put in special efforts to follow the day to day functioning of cooperatives – a fact giving rise to what is known as control problem in cooperatives. Modern cooperatives have sometimes tried to overcome these limitations, but only partially through compulsory and additional voluntary deposits from members and creation of an informal market in cooperative shares within their respective areas of operation. The main areas of concern for today's cooperatives are broadly elaborated below.

2.3 The mismatch between the natural size of a market allowing strong economies of scale and scope, on the one hand, and the geographic area allocated by law to a

cooperative for its operation, on the other, has surfaced prominently in recent times in the wake of liberalization and globalization, which cooperatives, given their structural deficiencies, have found extremely difficult to cope up with using the traditional knowledge and tools of business. The concepts of strategic alliance, stakeholder cooperation, public-private-community partnership and networking not only among cooperatives, but also between cooperative and non-cooperative forms of business, which have become increasingly important in today's context, are yet to be tapped to their full potential by the cooperatives.

2.4 Although several new pieces of legislation for cooperatives have come into being in the form of a Parallel Act as in the case of Andhra Pradesh Mutually Aided Cooperative Societies' Act, the amended Multi-State Cooperative Societies' Act, or the Cooperative Producers' Companies Act, most cooperatives are still following the traditional Acts, and are therefore yet to free themselves from the clutches of almost day to day government control.

2.5 Although SHG and NGO movement has picked up to some extent - at least in certain parts of the country, the traditional cooperatives in most cases have remained largely outside the sphere of SHG-NGO activities. As a result, no permanent bridge seems to have been built between cooperatives, on the one hand, and women's groups, environmentalists, social activists, trade unionists etc., on the other, to reinforce each other's causes. It is therefore no surprise that the cooperatives are generically weak in lobbying activities.

2.6 Member participation has always been a worry not only for weak cooperatives, but also for mature and advanced ones. As opportunity cost of member's time increases over time and market imperfections are getting corrected to bury the 'second-best' advantages of cooperatives, many good cooperatives are found to be suffering from poor member participation in economic activities and even political processes, sometimes making a mockery of the democratic character of such organizations. While member-centrality (measured by the cooperative's share in all kinds of economic activities of

members) and domain-centrality (measured by the cooperative's share in all kinds of economic activities taking place in the domain of the cooperative) concepts are being used to increase not only the degree of participation of existing members, but also to rope in fresh members within the domain of a cooperative organization, lack of innovative ideas and manpower coupled with the other generic constraints stand in the way of better utilization of these concepts.

2.7 Probably the most serious constraint affecting today's cooperatives is shortage of dedicated manpower to manage and lead such organizations in today's complex and competitive world. Most of them, as they often grew in a sheltered atmosphere, have hardly any clue to the meaning of competitiveness. Apart from import and export-competitiveness, they must be locally competitive such that not only members will prefer to continue their activities with their cooperatives rather than being lured by rival organizations, but also the non-members will feel an urge to become members to cooperatives to reap greater benefits. Creation of such incentive-disincentive structure through suitable designing and fine-tuning of organizations seems not to have been pursued enough in the context of cooperatives. Poor image, poor skill, poor pay scale and promotional opportunities, besides societal stigma against progressive economic well-being of leaders alongside the growth and development of members, have often stood in the way of preserving and attracting the necessary reserve of talents in the cooperative sector. Inadequate training and scope for up-gradation of skills and knowledge have merely added to the misery and plight of cooperatives.

2.8 The problems seem to be even more serious for primary agricultural credit cooperatives (PACS) for several reasons. First, most such cooperatives are intermediate bodies, which distribute refinanced credit from higher tier bodies at fixed commissions and are very often engaged in credit and credit operations only, without often getting into effective supply of credit-supporting and credit-complementary activities. This stand alone approach towards credit deprives them of useful information about client behavior and activities both ex ante and ex post facto, besides severely restricting their monitoring as well as promotional role. Second, although it is true for primary cooperatives of all

kinds, this is an especially severe weakness of PACS that they depend critically on their higher tier bodies for supply of funds, guidance and investment opportunities, even if they are engaged in deposit collection. A third factor inhibiting functioning of PACs is that they are subject to dual control, if they are really recognized as cooperative banks, as they are subjected to cooperative laws under local state government jurisdiction, besides the central government banking rules as enforced through the Reserve Bank of India. Very often these two sets of regulations are often in conflict with each other. As we shall see shortly, these factors seem to have seriously handicapped the functioning and effectiveness of cooperative credit, in spite of its vast network even in remotest parts of the country side.

2.9 Against this background, this chapter proposes to examine the functioning of several multipurpose (rather than mere credit) cooperatives from a selected pocket of South Gujarat. Gandevi *Taluka,* which is looked upon as one of the cooperatively most active and vibrant regions of the country. The Gandevi *Taluka* Union as well as its constituent member-societies have been deliberately chosen for this case study to get analytical answers to the questions posed behind the three major objectives of this study. Probably because of its close proximity to the final destination of Gandhi's 'Dandi March', this region got the maximum exposure to Gandhi's ideas and thoughts leading to the birth of a good number of cooperative organizations as well as a fairly good supply of dedicated and competitive leadership. Attitudes, culture and habits also seem to have undergone some changes in this atmosphere to facilitate organization of business using the cooperative route. It is because of these *prima facie* reasons this region appears to be an ideal place for preparing this case study on the futures perspectives for primary agricultural credit cooperatives in this country.

2.10 The precise objectives of this chapter are:

- To identify the generic weaknesses of PACS based on whatever scanty amount of data are available data on the functioning of cooperatives in this country.

- To find out how and to what extent the Gandevi *Taluka* Union together with its constituent member primary credit cooperative societies (PACS) are handling the generic weaknesses of the cooperative form of business in the current era of globalization, liberalization and privatization;

- To evolve future strategies for survival and expansion of business of PACSs in the form of a business plan, while at the same time not only overcoming their generic weaknesses, but also neutralizing or even converting into opportunities the threats posed before them by the current era of globalization, liberalization and privatization; and

- To identify the additional ingredients needed in terms of training and education to implement the above-stated business plan, and to prepare a road map to acquire the needed resources.

2.11 This chapter is organized as follows. The next three sections introduce the status of PACs in India, besides identifying several reasons for their poor functioning. Section 5 introduces the study area besides describing the case study methodology. Section 6 performs a competitiveness analysis of the major economic activities of the PACS, while highlighting the notions of member-centrality and domain-centrality, if these societies have to sustain themselves and remain as relevant as before to their members, other stakeholders as well as to their domains of operation. Section 7 briefly reviews the activities of Gandevi *Taluka* Union. The last section indicates future directions of research and concludes this chapter.

Section 2: Position of PACS in India

2.12 Primary Agricultural Credit Societies (PACS) are the lowest tier of the Indian cooperative credit structure (CCS), and are responsible for providing short and medium term rural credit for both agricultural and non-agricultural purposes. While the majority of PACS are pure credit societies, the data on PACS include data on Farmer Service

Societies (FSS) that may also provide farm inputs as well as services for marketing farm outputs, and Large Scale *Adivasi* Multipurpose Cooperative Societies (LAMPS) that serve *Adivasis*[7]. A large proportion of PACS also serves as outlets for agricultural inputs as well as food and other essential items, besides providing godowns for storage of produce. Unfortunately, given the current state of reporting of data, it is not possible to distinguish the PACS that provide credit alone from those that provide other services as well.

2.13 The 106,384 PACS in India[8] comprise a credit delivery network that is unrivalled in coverage, with almost 1 PAC for every 6 villages[9]. In fact, Vaidyanathan Committee (2004) notes that PACS have over twice the number of rural outlets and one and a half times the number of customers than commercial banks and regional rural banks put together.

2.14 PACS serve a huge membership base of 125.2mn people, of which vulnerable groups like scheduled castes (SC) and scheduled tribes (ST) comprise 30.5mn and 11.7mn respectively, and 70% of members are small and marginal farmers. PACS have issued loans worth Rs.429bn[10] of which Rs.356bn are short term loans and Rs.73bn are medium term loans. Agricultural loans comprise of 67.5% of all loans. This works out to an average loan per borrower of Rs.9315, as compared to Rs.31585[11] for the commercial banking sector. The smaller average loan size of PACS is a sign of the greater outreach of the CCS in terms of small and marginal borrowers.

2.15 In 2004-05 108779 PACS, LAMPS and FSS[12] together marketed agricultural produce worth Rs.291.4bn, distributed agricultural inputs worth Rs.352.9bn, retailed Rs.18.3bn worth of consumer goods and operated around 65085 godowns (storage facilities). Of these societies, 59.8% provided godown facilities, 34.3% distributed inputs

[7] *Original (long resident) inhabitants that are usually among the most vulnerable sections of the society.*
[8] *All data on PACS from NAFSCOB (2006)*
[9] *Vaidyanathan (2004)*
[10] *Approximately $10bn at an exchange rate of Rs.42.9 per dollar*
[11] *Vaidyanathan Committee (2004)*
[12] *NCUI (2006)*

to their members, 35.6% retailed consumer goods to their members, but only 6.8% provided produce marketing services.

2.16 While the sheer coverage of the PACS system is impressive, there are systematic weaknesses in the system that threatens its future viability. For example, while the membership base is extremely large, the number of active borrowers is only 46mn (just 37% of the membership base). The picture is even worse for the vulnerable sections, with only 22.8% of SC members and 28.5% of ST members being active borrowers.

2.17 While the quantum of credit disbursed is large, recovery performance is poor, with overdue of Rs.155mn i.e. 30.4% of all credit outstanding. Short term credit has a lower overdue rate of 27.4%, while 43.7% of all medium term credit was overdue. Vulnerable borrowers have greater trouble repaying loans, with 38.5% (60.9%) of short term loans to SC (ST) borrowers being overdue, while the overall overdue rate for short term loans is 27.4%. The same picture repeats itself for medium term loans, with 44.2% (67.1%) of loans to SC (ST) borrowers being overdue, while the overall overdue rate for medium term loans is 43.7%. The overdue situation is far worse for agricultural loans at 31.5% versus 19.6% for non-agricultural loans.

2.18 According to the NAFSCOB classification, only 62.5% of PACS are viable, while 27.9% are only potentially viable and the remaining 9.5% of PACS (around 10,000) societies are either dormant or defunct. Further, only 45.5% of all PACS are making current profits[13].

2.19 The systemic weaknesses that lead to low recovery rates, low percentage of borrowing members, and large number of loss making societies, jeopardize more than a century old mission of PACS to deliver low cost rural credit[14]. Numerous task forces have been appointed by the government to look into the problems of the cooperative credit structure, and all of them have pointed to excessive governmental interference in

[13] *The number of PACS with accumulated losses but current profits is unknown. Vaidyanathan (2004) has estimated total accumulated losses of PACs at Rs.46bn.*
[14] *PACS were introduced in India by the British with this mission in 1904.*

what should have been a member driven organization, as well as weak governance structures weighted in favor of borrowers (who are not simultaneously savers and hence have no financial stake in the system) as the root cause of the PACS system's ills.

2.20 However, credit is just one requirement of the rural development process. While it is necessary to fix the systematic ills plaguing the CCS that encourage willful default by borrowers, it is also necessary to investigate the problems of the rural borrower that make him unable to repay and hence default involuntarily. In this context, the Johl committee report[15] has shed some light on why distressed farmers are unable to repay their loans to either the formal or the informal sectors. We summarize the findings of the Johl Committee report in section III. In section II we contrast the relative performances of the PACS system with its mainly credit focus with that of FSS that provide credit complementary services as well as just credit.

Section 3: Credit versus credit plus complementary activities

2.21 While it is not possible to disentangle the performance of the PACS from that of the LAMPS and the FSS for most recent years, the National Cooperative Union of India does provide disaggregated data on the performance of LAMPS and FSS alone, albeit after a lag of around 8 years. LAMPS and FSS focus on both credit as well as credit complementary services such as input provision, output storage and marketing, consumer goods retail etc.

2.22 By comparing the performance of FSS with PACS, we can make some preliminary observations on the relative performance of institutions with focus mainly on credit (PACS) with institutions that provide more than just credit (FSS). We do not compare LAMPS[16] with PACS since LAMPS focus on the most disadvantaged groups, i.e., the *adivasis*, and hence do not have a comparable member base to PACS. FSS on the

[15] *Johl (2006) hereafter*
[16] *Recall that all PACS data includes data of FSS and LAMPS.*

other hand has a membership composition[17] that closely resembles that of PACS, as is seen in Table 2.1.

Table 2.1: Membership composition of PACS, LAMPS and FSS

Society	1997-98		1998-99	
	%age SC	%age ST	%age SC	%age ST
PACS	11.1	6.2	11.9	4.8
FSS	17.2	2.9	16.6	2.1
LAMPS	12.8	48.8	14.0	54.9

2.23 Given data limitations, we can only provide a comparative picture of the relative positions of PACS and FSS for the years 1997-98 and 1998-99 in Table 2.2. As we can see from this table, PACS and FSS have broadly similar membership compositions. PACS average loan sizes are almost three times larger and are more heavily weighted in favor of short term loans. PACS members are more active borrowers than FSS members. However, PACS as a whole experience poorer repayment performance as measured by loans overdue, with 35% for PACS over 1997-99, versus only 27% for FSS over the same period. This raises the question whether the different scope of activities of PACS and FSS could help explain the different repayment experiences of the organizations.

Table 2.2: Relative performance of PACS and FSS in 1997-99

Indicator	PACS		FSS	
	1997-98	1998-99	1997-98	1998-99
# of societies	92838	95156	2473	2541
Membership (000)	80205	89568	4172	4988
% SC	11.1	11.9	17.2	16.6
% ST	6.2	4.8	2.9	2.1
% borrowers[18]	53.7	57.7	30.4	26.8
Total loans advanced (Rs. bn)	137.2	177.7	5.0	6.9
% short term	86.6	87.9	61.5	81.2
Avg. loan per borrower	3186	3441	1199	1383.3
% loans overdue	35.3	34.95	28.15	26.29

[17] *in terms of %age members that belong to SC and ST groups*
[18] *%age of members who are active borrowers*

Section 4: Reasons for farmer distress in India

2.24 While addressing the credit scenario for farmers, Johl (2006) observes that 58% of outstanding credit to farmers is from formal sources (e.g. banks, cooperatives etc.), while over 25% is from moneylenders. Of the outstanding credit, 58% is for agricultural purposes, only 7% for non-farm business and 35% for consumption / miscellaneous purposes.

2.25 Agrarian distress as measured by male farmer suicide mortality rates (SMR) has been on the rise in India since 1995, with the SMR going up from 9.7 in 1995 to 19.2 in 2004, whereas for non-farmers it has remained more or less stable, ranging from 12.6 in 1995 to 13.4 in 2004. Johl (2006) argues that the increasing farmer SMR is a sign of an agrarian crisis, and identifies the following reasons for the crisis:

- Low levels of farm income - average returns per hectare of Rs.6756 (Rs.9290) in Kharif (Rabi) with average paid out expenses as a percentage of value of output of 44% (42%) respectively;
- 83% of farmers have land holdings of less than 2 hectares;
- Limited non farm income opportunities - 59th round of NSS in 2003 reveals that for all landed farmer households, 74% of returns from all economic activity (value of output minus paid out expenses) was from cultivation;
- Increasing input costs and substitution of self generated inputs with marketed inputs;
- Supplier induced demand for inputs;
- Low quality of inputs;
- Overuse of inputs especially pesticides;
- Limited availability of water and rising irrigation costs;
- Inadequate institutional extension services;
- Absence / under-provision of risk mitigation services;
- Yield risk;
- Price risk;
- Capacity risk (sickness or death of farmer);

- Declining public investment in agriculture;
- Gross fixed capital formation in agriculture as a percentage of GDP decreased from 3.1% during 1980-85 to 1.6% during 1997-2002.

2.26 Clearly, one cannot hope to address the agrarian crisis just by credit alone. Johl (2006, p.47) observes that *"Although credit is a very important factor in distress amelioration, provision of mere credit without proper evaluation of the credit needs and repaying capacity of the borrowers will only worsen the indebtedness situation of the farm sector."*

2.27 It is in this context that one must look for a rural development strategy that recognizes that credit cannot stand alone. No matter how much the governance structure of PACS are fine tuned to eliminate voluntary default by members, unless something is done to address the problem of involuntary default due to various kinds of risk in a context of multiple rural market failures, neither will PACS become viable, nor will the agrarian crisis be ameliorated.

2.28 The broad objective of this case study in this context is to demonstrate how primary agricultural credit cooperative societies along with their Union in the Gandevi *Taluka* of Navsari district in South Gujarat – an area closely associated with Gandhi's 'Dandi March' and looked upon as a cooperatively rich region of the country - are coping with the generic weaknesses of the cooperative form of business as exposed by the current trend of liberalization, privatization and globalization, and can develop a perspective business plan, based on their local resource base and using the principle of Cooperation among Cooperatives, to sustain themselves and thrive further in the future.

Section 5: Study Area and Case Study Methodology

2.29 Appendix 2.1 provides a broad overview of the study area, whereas Appendix 2.2 provides a listing of all important organizations functioning within this study area. Table 2.3 enlists the major activities of the PACS of this region, most of which came into being

in the immediate post-Independence period, though some of them were born earlier and some others are of more recent origin. The Gandevi *Taluka* Union is the next higher-tier cooperative organization of these PACS. All these cooperatives are engaged in marketing of main agricultural produce of the farmers as well as in marketing of agricultural inputs, services and various consumer items. While there is some overlap between the activities of the primaries and those of the Union, most activities undertaken by the Union seem profitable as per economic logic only at larger aggregative level rather than at primary level due to economies of scale.

2.30 Although the ultimate goal is to bring out qualitative answers to the questions posed implicitly behind the three stated objectives of this case study, not only quantitative information but also some quantitative data are collected in course of field work relating to various economic activities under these cooperatives. Qualitative data are collected through interaction with office bearers, employees, members and leaders of these cooperatives, besides interviews of prominent community leaders, NGOs, social activists, SHG groups, and important private businesses. This qualitative information collected with the help of a semi-structured questionnaire pertains to the following aspects:

(i) *determining competitiveness* of their agri-business operations to find out whether and how they have ensured that their members are better off by continuing their business relations with the cooperatives rather than switching over to a rival private organization; a second aspect of competitiveness analysis is to find out whether and why non-members to the organizations have wish to become members of this organizations.

(ii) *performing stakeholder analysis* to find out whether and to what extent these cooperatives are taking care of the concerns and thus strengthening their relationship with important stakeholders like members (e.g., by treating them distinctly from non-members), Board of Directors, employees, order suppliers and non-member buyers;

(iii) whether these organizations are pursuing public-private-community partnership to achieve a broader basis for cooperation and whether the ultimate goal of such partnership

is to put community at the central stage in terms of enjoying residual claims and residual controls to these organizations.

(iv) whether these societies are doing enough in terms of *member-centrality* and *domain-centrality* to improve upon member-participation, and what else needs to be done at individual and collective levels to tap economies of scale and scope, on the one hand, and to augment member participation, on the other.

(v) whether there is steady supply of dedicated employees and leaders to manage and lead these organizations, and if not, what needs to be done through *fine-tuning and institutionalization of necessary systems and processes* not only to improve exposure, education and training of existing staff and leaders but also to attract the new generation towards cooperatives to overcome possible future deficiencies.

Section 6: Competitiveness Analysis of Major Economic Activities of the PACS in Gandevi

2.31 As it can be seen from Table 2.3 below, a distinctive feature of the PACS in Gandevi *Taluka* is that these are multipurpose PACS engaged in a number of activities like marketing of inputs, outputs and consumer goods, besides regular banking. As a result, credit doesn't stand alone, as in the case of most PACS in this country, but is often backed up by at least another economic activity of the borrower with the cooperative society, where credit is being used. This section aims at judging competitiveness of major economic activities of these PACS – i.e., performing a SWOT analysis of each economic activity of PACS vis-à-vis the same for rival private sector organizations within this region.

Table 2.3: Activities of Multipurpose PACS within Gandevi *Taluka*[19], Dist: Navsari, South Gujarat

Name	Year	Economic Activities									Welfare Activities
		Bank-ing	*Output mar-keting*	*Input supply*	*Consumer activity*	*Cloth & Garments*	*Rice mill*	*Petrol pump*	*Tele-phone booth*	*Medi-cine*	*Fruit Fly*
1. Amalsad	1941	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes
2. Gadat	1944	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
3. Abrama	1948	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
4.Vedchha	1959	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
5. Dhanori	1918	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
6.Gandevi	1950	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
7.Kharel	1957	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
8.Manekpur	1925	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
9.Ajrai	1990	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
10. Navsari	1957	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
11.Mogar Partapar	1990	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
12.Bilimora	1956	Yes	No	Yes	Yes	No	No	No	No	No	No

A SWOT Analysis of Banking Activities

2.32 We shall first of all consider banking activities, which involve lending to borrowers and deposit collections from them, besides borrowing funds from outside. Traditionally, these PACS enjoyed easy access to member deposit at terms and conditions softer than they were to borrow from higher-tier organizations. At the same time, because of their pre-existence over a long period of time, they gathered enough reputation as well as confidence of the local population. Accordingly, most of these PACS managed to collect a huge deposit, which they could relend to the members again, in the process contributing to local area development with local funds – a feature which has further contributed to their reputation. Gandevi *Taluka* being a relatively affluent area, this task became relatively easy. However, in the changed current scenario with a lot of competition from both government and private banking organizations, the position seems to have changed abruptly, as we shall see from the following SWOT analysis of their (i) lending operation and (ii) function of deposit collection.

[19] *Navsari & Bilimora are currently giving only input loan in kind, while Gadat & Kharel have fast food corners, and Amalsad has a free homeopath dispensary.*

2.33 Although things vary from one PACS to another, these societies are broadly in a position to lend to their members under better terms and conditions, as compared to their rivals, for the following reasons:

- Given easier access to fund through member deposit, they generally lend at 1 percent lower rate as compared to the rate charged by government or private commercial banks.
- While the commercial banks' lending is based on NABARD's refinance as well as scale of finance norms which limit borrower loan size for crop loans and longer term loans, these societies are not constrained by such norms. As a result, their scale of finance is sometimes as high as 3 to 4 times the NABARD norm, which confers a special benefit to their member borrowers.
- Besides maintaining past credit records of their members over a fairly long period of their existence, these societies invariably prepare credit limits for each member borrower in advance based on the members' land records (as certified by the local *Talati*) as well as the average annual size of their other transactions with the society. This process of preparation of credit record is done in an objective and transparent manner. The credit limit thus arrived at remains valid for at least one year and even up to 3 years in some societies. Members can perform as many credit transaction as they want with these PACS in a year, subject to the set credit limit, as prepared by these societies and once approved by their Boards. So, the task of lending to a member borrower becomes a routine affair, which is generally completed on the same day a loan is applied for. Moreover, this process ensures that a member borrower enjoy the same facilities as a Kisan credit card holder, without formally going for it. In fact, when the members are holding compulsory deposits with the societies, as they do, they are in a position to instantly withdraw 80% of their compulsory deposits in the form of a loan. This process not only makes the task of borrowing by members an easy proposition, without worrying about NABARD-prescribed scale of finance, but also considerably reduces borrower transaction costs.

- The loaning process being very objective and transparent, there are no hidden costs like service charges, processing fees, documentation charges etc., as often levied by commercial banks.
- Although the PACS are not permitted by law to extend consumption loan, most of the of them within Gandevi *Taluka* permit a certain amount of interest free consumption loan (usually, up to Rs.2,000/-) for a stipulated period of time. However, high interest rates are charged on such loans as penalty beyond the stipulated interest-free period (usually 3 months).
- While most commercial banks and PACS, which concentrate only on credit activities, suffers from adverse usage of credit by the borrowers, the multi-purpose PACS of this region don't have that disadvantage. In fact, informally they allow adverse usage of production loan for consumption purposes without bothering too much about its adverse implications as long as loan repayment is guaranteed through borrowers' other activities (e.g., sell of agricultural produce) with the society.
- Although private commercial banks like ICICI, IDBI, Axis Bank, BOB, etc., are also replicating this virtue, these societies generally offer flexible working hours (usually 8 am to 12 noon and 2 to 5 pm) as compared to the traditional government commercial banks.
- These societies also offer enough flexibility in loan repayment to the members, which is rescheduled up to additional 2 years in case of member contingency, when a member cannot repay the loan within a year's time but is in a position to deposit the annual interest amount at the end of each year.
- The loans provided by the societies have built in incentives for timely repayment by the borrowers. For example, most societies provide 1 percent rebate in interest if a loan is repaid 15 days before the stipulated repayment date; on the other hand, 3 percent penalty interest is charged for delayed repayment beyond one year.

2.34 An additional strength of the lending operations of these PACS arises out of their disciplined approach towards credit, which contributes to their sustainability power. The following points are worth mentioning in this context:

- Reminder for loan repayment is sent religiously to each borrower on the first day of every month, so much so that the default rate has come down to even zero for some of the societies.
- Besides credit limit being fixed in advance for each borrower member based on land certification from *Talati* and past credit records, a producer member is required to stand as guarantee for each loan, and no producer member can act as guarantee for more than four loan requests.
- Each of the societies is maintaining a minimum number of a days' gap between old loan repayments and delivery of a fresh loan to the same borrower to avoid '*hawala*-like situation', to which certain commercial banks as well as cooperative banks have been exposed to in the past.

2.35 However, the lending operations of these PACS are found to be subject to the following weaknesses:

- Although commercial banks are not totally free from this problem, cooperative banks because of their member-driven character seem to be much more amenable to interest group pressure, often leading to bank failures. So far the government has shown much greater interest in rescuing failing commercial banks than failing cooperative banks. This is a general problem of cooperative banks, though it has not so far surfaced prominently in this area.
- As per law, PACS cannot formally give consumption loans, nor non-farm loans to their borrowers, which severely limit their lending activities, unlike in commercial banks. Although the PACS of this area have started giving interest free consumption loan for a stipulated period on their own, it is only in small amounts (generally up to Rs.2,000/- per producer member). Although private commercial banks have started providing consumption loans in an aggressive manner and there is enough room for larger business in consumption loans even in rural areas, the PACS are yet to come out of their traditional mind set as well as the existing legal limitations. As a result, a large size of landless population, who are acutely in need for consumption loans, remains outside their orbit. The same thing is true of non-farm loan, although it is well recognized that there is enough scope for

rural non-farm activities, which may be undertaken by landed population as well as by people having no land. Neither legally nor informally, PACS have been able to come out of this weakness in their lending activities.

2.36 At this stage the PACS in general and those in this region are encountering the following threats:

- Occasional announcement of loan waiver schemes by government puts the cooperative banks in particular under jeopardy. While commercial banks – thanks to their greater lobbying power - have managed recapitalization through government initiative, the cooperative banks are yet to get the same treatment, as highlighted and proposed for reversal of past trend by the Vaidyanathan Committee.
- The aggressive posture of some of the private commercial banks, which are hiring commission agents to push consumption loans and even coercively collect repayments to remain in service is likely to pose a serious threat to the future of cooperative credit business.
- Although the PACS of this region are hardly in need of borrowing from outside, technically speaking, they are exclusively dependent on the District Central Cooperative Bank (DCCB) for any borrowing. Existing commercial banks have so far expressed interest in lending to only financially sound PACS of this region. Given the weak financial position of most DCCBs, this is a serious lacuna, especially if the PACS, especially the weaker ones suddenly face sharp decline in member deposits as the main source of their loanable funds. This is no doubt pointing towards a possible threat to and rapid erosion in the structure of cooperative credit business.

2.37 The PACS in general and especially those from this region can certainly undertake a few action points to seize the following opportunities:

- As suggested by several expert committees in the past, the cooperative credit societies can possibly get rid of at least one tier of their cooperative structure, especially when there is hardly any value-addition to the credit products by

higher-tier bodies. Since most of these higher tier bodies are merely cornering fixed percentage commissions merely on their participation in the onward lending process to lower tier bodies, and hardly contribute to reputation and economic strength, such a step seems necessary in the interest of reducing cost of credit to cooperative borrowers. The Government of India and NABARD may be persuaded to offer direct refinance to well-functioning PACS – merely on the basis of their performance records.

- Micro finance being a thrust area of most governments, cooperative banks may utilize this opportunity to expand their business especially among landless populations, weaker sections and strategic sections like women folk through direct promotion of SHGs, and thus expanding their domain.
- Credit being a derived demand - derived from prices of the produce the farmers make - the PACS can possibly expand their credit business if they directly or indirectly market the farmers' produce. The PACS of this region are already engaged in generally primary processing of the farmers' produce and selling them in premium wholesale markets, as in the case of *chikoo* (sapota). More pro-active steps seem necessary to encourage secondary processing of the farmers' produce to suit varietal demand of consumers in premium segments of the market, as they have already started doing in case of *Kesar* mango. Institutional innovations to build up forward linkages or tie up arrangements with private marketing channels are likely to extend their business in a significant way.

2.38 We now turn to a SWOT analysis of the other side of banking activities – namely, collection of deposits from members. As mentioned earlier, these societies had traditionally got access to a large size of fixed deposits from members, mainly because of their local connection, proximity and confidence building activities over a fairly long period of time. However, in the current scenario of tough competition from public as well as private commercial banks, much of the traditional comparative advantage of these societies in deposit collection seems to have been lost. Yet, they seem to be enjoying the following plus points:

- While interest rate on saving and fixed deposit are continuously changing for the commercial banks, these cooperative banks have made it a point to keep the interest rate steady for a full year to develop confidence of their members.
- Because of anomaly of income tax laws between commercial banks and cooperative banks, the latter seem to be enjoying a temporary advantage from the view point of depositors as there is no compulsory TDS on interest accrual from cooperative fixed deposits.
- In order to attract member deposit, these cooperative banks provide free income tax consultancy service to their depositors (as well as borrowers).
- Intimate personal knowledge of the depositors makes administration of deposits a much easier job for the cooperatives. In other words, because of local knowledge of depositors, cooperative banks can afford to be generally more vigilant than commercial banks in checking the authenticity of the source of deposits.
- As it can be seen from Table 2.4 below, the cooperative banks offer higher interest rate on saving accounts as well as on compulsory deposits from the members. It appears as long as the cooperatives can draw compulsory deposits from the members based on the latter's other activities with societies (e.g., sale of agricultural produce) and afford to offer attractive rates of interest on compulsory deposits, they would not starve of funds to make loans.
- Although this is not true of all the societies within this *Taluka*, at least the prominent PACS are regularly consulting auditors and chartered accountants to ensure efficient management of their portfolio of funds and assets. In other words, they take professional help to closely monitor the market situation and adjust their cash balances every day, so that they don't suffer any disadvantage vis-à-vis the commercial banks.

2.39 The main weaknesses of these cooperative banks in their deposit collection activity lie in the following constraints:

- As it can be seen from Table 2.4, now-a-days most of the other institutional collectors of fixed deposits offer higher rates of interest than cooperatives. In other words, mainly because of rapidly dwindling investment opportunities, these

cooperatives are no longer in a position to offer higher rates of interest on fixed deposits, as they were traditionally doing.

- Traditionally, cooperative banks are looked upon as organizations of poor people and as such there have been traditional restrictions on use of depositors' funds for speculative purposes. As per law, these PACS are therefore supposed to maintain most of the deposits in DCCBs, which often fetch rather low and risky returns. Considering the current state of affairs of most DCCBs in the country, it appears that even though they are now-a-days permitted to put limited amount of funds in private commercial banks like ICICI, Axis Bank, Kotak Mahindra, IDBI, HDFC, etc. with permission from the Assistant Registrar of Cooperative Societies (ARCS), this is not a sustainable solution – at least in the interest of the PACS. After failing to utilize their deposits in profitable investments, which they ought to have been successfully doing, these cooperative banks seem to be on the edge of losing their hard earned deposits to their rivals!
- Not only because of the above-stated legal climate for investment of cooperative funds, but also because of their age old traditional mindset, most cooperatives tend to take a very conservative approach towards management and utilization of depositors' money. A professional approach towards management of deposits is often missing in cooperative banks.
- Another serious comparative disadvantage of cooperative banks is their reluctance to attract non-member deposits even within their assigned geographic areas for fear of implied income tax liabilities. An even more serious constraint is that they are not allowed in spite of their reputation or efficiency to attract members and deposits from outside of their geographic boundaries, which commercial banks can easily do. Thus, cooperatives have legal constraints to tap economies of scale in deposit collection, unlike commercial banks, even if the former are prepared to go outside of their geographic boundary and invite income tax liability. As far as our knowledge goes, only Sridharpur Cooperative Bank in West Bengal, which has branches in the block head quarters of Memari and in the district headquarter of Burdwan, seem to have been an exception to this general rule.

- Given the above-stated constraint on economies of scale in deposit collection from larger geographic area, it is no wonder that these cooperative societies are finding it very hard to advertise for deposit collection or even establish ATM services in competition with commercial banks.

2.40 The threats of these cooperatives in deposit collection seem to be arising mainly from the following two sources:

- The weak financial position of DCCBs (on which the PACS are highly dependent), further reinforced by rumors about falling health of the DCCBs, seems to be rapidly eroding the viability of the cooperative credit system. When DCCBs are weak, the sooner the viable PACS are delinked from them, the better.
- The prevailing trend towards aggressive hike in interest rate on commercial bank deposits, coupled with highly limited investment opportunities of cooperative banks, is likely to severely jeopardize the funding position of most cooperative banks in the near future.

2.41 However, this is not the end of all roads for cooperative banks – especially in Gandevi *Taluka*, which are not unfamiliar to practicing the principle of cooperation among cooperatives. Using this principle, they can jointly invest in hiring professional managers to better manage their funds, lobby for legal changes, establish joint ATM for several cooperative banks together and even advertise together for larger deposit collection. They can reverse the fearful trend and even flourish if and only if they can seize these opportunities in a pro-active manner.

A SWOT Analysis of Pooling Activities (in the marketing of chikoo and mango)

2.42 As stated in the beginning of this section, these cooperatives are engaged in pooling activities for marketing of three main agricultural produce of their members – *chikoo* (sapota), mango and paddy. The first two they do directly by themselves, whereas they do the third one only through the Gandevi *Taluka* Union to reap the benefits of scale effect. They are also engaged in marketing of two other minor produce – namely, *suran*

(elephant fruit) and banana, which are rather insignificant items. Generally, *chikoo* is available almost throughout the year (except for the months of July to September, when production drops to a minimum level), whereas the other crops are purely seasonal and short-duration in nature.

Table 2.4: Prevailing Interest Rates on Deposits in this Region as of March 23, 2007 (i.e., after recent hike in others' interest rates)

Maturity slab	*PACS of Gandevi Taluka*	*ICICI, Navsari*	*Kotak, Navsari*	*Central Bank, Amalsad*	*Bank of Baroda, Amalsad*	*DCCB, Valsad*
0-14 days	Not applicable (NA)	NA			3.5%	NA
15-30 days		3.75%	6.00%	4.75%	4.50%	
31-45 days		4.00%	6.25%	4.75%	5.00%	
46-90 days		4.40%	6.50%	5.50%	6.00%	5.00%
91-149 days		6.25%	7.00%	6.00%	6.00%	5.00%
150-180 days	5.5%[20]	6.25%	7.00%	6.00%	6.00%	6.00%
181-270 days	5.5%	6.25%	7.00%	6.00%	6.00%	6.00%
271-364 days	5.5%	6.50%	8.25%	6.75%	6.75%	8.00%
1 to less than 2 years	6-7%	6.75%	9.50%	7.25%	8.25%	8.50%
2 to less than 3 years	6-7%	7.50%		7.50%	9.00%	9.00%
3 to less than 5 years	8%	7.50%		7.75%	9.50%	9.00%
5 years & above	NA	9.50%		8.00%	9.50%	NA
Savings	4-6%	3.50%				
Compulsory deposits	9%	NA				

2.43 In *chikoo*, the most important rivals for these cooperatives are the private traders in the Agricultural Produce Marketing Committee (APMC) yard, which is located in front of the Amalsad Cooperative Society's office building and caters to producers of mango and *chikoo* from all over the districts of Navsari and Valsad. Although these societies have exclusive geographic jurisdictions for collection of members' produce, they still compete implicitly with each other in terms of prices, as members of any particular society easily come to know of the prices paid by others and compare price realizations as well as terms and conditions offered by other societies. However, the main competition is between each society and the private traders operating in the APMC yard.

[20] *This rate applies for a minimum of 180 days.*

2.44 Collection and marketing of *chikoo* by the societies and APMC traders generally take place in the following manner. Farmers usually harvest their *chikoo* in the morning and bring the fruits in sacks, after grading the same in their own ways, to society/APMC collection center in the afternoon, where they are graded as per the buyers' norms, weighted and packed before they are sent mostly by trucks to the main terminal market, that is, Azadpur Sabji Mandi in Delhi. Sacks of *chikoo* brought to the APMC yard passes through a bidding process with the help of official bidders in the presence of the prospective buyers. The farmer-sellers stand in a queue and they are picked up at random for bidding of their produce. Apparently, *chikoo* of this area, usually known for their sweetness, has only one parameter for selection - namely, its size. Because of separate bidding process for each farmer's produce, *chikoo* of same quality may attract different prices across farmers and at different points of time during the same day in the APMC yard. Sometimes a farmer is required to stand in the queue for 4-5 hours in the APMC yard for sale of his produce. Once the bidding price is completed, the sacks of the farmers are unloaded by private traders to get rid of fruits, which are damaged or tiny in size. Weights are taken only after the unwanted fruits are removed by the employees of private traders (which is not always an insignificant amount, as some of these employees are sometimes found engaged in retail sale of *chikoo* in the nearby areas) in the APMC market yard to arrive at the amount to be paid to the farmer. Although as per law the farmers are supposed to be paid the same day from the APMC market yard, it hardly happens in reality. Sometimes the farmer is required to chase the traders for months and instances of non-receipt of payments are not altogether unknown in the APMC yard. The private trader in the APMC yard charges 8% commission on *chikoo* sold to him. After sale, the farmer retains no right over the *chikoo* sold, and the private trader enjoys the entire residual return from sale of the produce in different markets.

2.45 The procedures are somewhat different in the societies. Given longer-term relations with the farmers, they are instructed in advance how to cleanse and grade the fruits before carrying them in homogenous sizes inside sacks. The weighting of *chikoo* in societies is done at the very first instance, before 10 kg. of *chikoo* is picked up and taken out at random from a farmer's sack, and the number of counts of *chikoo* are noted along

with total weight. Although Delhi market recognizes *chikoo* of only three sizes – namely, extra large, large and mixed, the farmers' produce is categorized by each society into 30-40 grades depending on the number of counts of *chikoo* per 10 kg of randomly drawn sample. After collection of *chikoo* from each farmer and recording of each farmer's delivery in terms of weight and grades (in terms of *chikoo* counts per 10 kg.), the entire collection is mixed up and allowed to pass through an objective mechanical grading machine which categorizes the produce into extra large, large and mixed size boxes, which are packaged automatically and stacked into trucks by custom made semi automatic machines in all societies. This grading-cum-packaging is done only manually in the APMC market. Although most of the *chikoo* is carried by trucks to Delhi, in peak production seasons cooperatives as well as the private traders join hands – mainly at the initiative or some of the prominent societies – to send their produce by train from Amalsad Railway Station all the way to the Azadpur Mandi. The wholesalers in Azadpur Mandi charge a certain percentage of commission (usually 4%) to sellers of *chikoo* from this area (whether a cooperative or a private trader, though private traders sometimes send a part of their collection to smaller markets in nearby states of MP, Rajasthan and Maharashtra). There are only several wholesalers in the Azadpur Mandi, who seem to be operating like a cartel, in which one dominant trader (in terms of his market share) fixes the price, which is accepted by the rest. Since trucks take generally 36 hours to reach Azadpur Sabji Mandi, the prices offered by the Delhi market are known only after 2 days' lag. The prices quoted by the Delhi market are publicly displayed by all cooperative societies, but not so far by the APMC market yard. Based on the quoted prices (precisely, the weighted average of prices for three categories of *chikoo* sold, which is taken as the base price), the societies decide on the pooled price of *chikoo* for each of the 30-40 categories only on the third day, though there are societies like Gadat, which apply each day's quoted price from the Delhi market (which is actually lagged by two days due to loss of time due to transport over this long distance) to price the farmers' produce at the time of delivery to the society by the latter. However, as the actual cost of transport, handling etc. becomes precisely known only at a later stage, the farmers are paid to the extent of only 86% of the amount due to them. The rest amount (after deducting 5% of the society's commission) is paid to the farmer only at the end of the

year, when all calculations are done. Even a part of the society's commission (which varies from year to year between 1.5 to 3.5%[21]) is deposited to each producer-member's compulsory deposit account to earn an annual rate of interest of 9%).

2.46 Against the above stated background, we perform a SWOT analysis of the PACS' pooling activity in *chikoo* vis-à-vis the same by the private traders. The following points seem to constitute the strengths of the cooperatives:

- A *chikoo* producer can sell any quantity and quality of *chikoo* to a society at an average pooling price, objectively and transparently decided by a well established system, which is evolved and tested over the years. This is in sharp contrast to a separate price offered to each basket of *chikoo* brought to the APMC yard, which varies not only across sellers but also at different point in time during the same day even for the same quality of *chikoo*. In other words, the APMC market offers a spot price or, more precisely, a separating equilibrium price, irrespective of what is happening to others in this market or elsewhere during the same day, whereas the society's average pooled price provides a hedge against such fluctuations. The price offered by cooperatives is thus a pooling equilibrium price, broadly speaking, though because of final classification of grades at the time of *chikoo* procurement, they seem to have attempted to mimic the efficiency property of a separating equilibrium.
- Apparently, separate price offered to each basket at different points in time by the APMC yard, which can be looked upon as a separating equilibrium price, provides a strong incentive to quality producers of *chikoo*, which is not the case in cooperatives applying an average price. However, the cooperatives seem to have overcome this too obvious disadvantage through a number of devices developed over the years. The first and foremost of these devices is to categorize each producer member's *chikoo* into 30-40 categories and apply separate average price to each category, as displayed in Tables 2.5a and 2.5b below. Because of small variation in quality of *chikoo* within each category (actually, the number of

[21] In bad years, when chikoo production or its price realized is unusually low, the society in its annual meeting decide to charge a lower commission rate and thus deposit a larger part of the 5% maximum commission rate collected to members' compulsory deposit account.

counts per 10 k.g.), a member selling better than average quality of *chikoo* within a category will have lesser incentive to move away from cooperatives, just like a supplier of lesser than average quality too will have lesser incentive to oversupply lower quality *chikoo* to the society. The second advantage of this artificial classification into 30-40 categories is that a member is clearly and openly rewarded for small improvement in *chikoo* size (i.e., for movement from a lower to a higher category), which is possible to achieve through appropriate efforts even within a fairly short period of time. This cumbersome process is followed even though the market does not recognize anything other than the three recognized sizes – extra large, large and mixed. In other words, the sub-categorization of *chikoo* into 30-40 size groups enables the societies to mimic the separating equilibrium prices of the APMC yard, while in no way sacrificing transparency and objectivity of the whole process of pricing of *chikoo* by quality. The third factor favoring the pooling equilibrium price of cooperatives over the separating equilibrium price offered by the APMC yard is that the former applies the terminal market price and charges a lower commission rate (precisely 5%), unlike the private traders (charging 8%). Fourth, because of a more transparent and objective system of weighting and quality judgment, the farmers seem to be less exposed to risks in their dealings with the cooperatives. Although no comparable data are available to judge the exact difference in farmer's price realization from sale of the same quality of *chikoo* to these two different markets, the afore-mentioned points seem to be tilting the solution in favor of a large number of average and probably slightly better than average *chikoo* growers in this region. However, the fact that the APMC yard still persists is a pointer to the fact that this market must be attracting certain types of *chikoo* growers (apparently two groups – first group of economically powerful large farmers producing larger size *chikoo* and second, farmers desperately in need of immediate money on sale of their total produce).

- These societies provide payments to the farmers routinely on the same day (in places like Gadat) and invariably by the third day after delivery of *chikoo* to the society, when Delhi prices become available. On the other hand, at the APMC

yard, although the farmers are supposed to get their payments on the same day, it is hardly strictly followed. As a result, many poor farmers and especially those who are relatively unfamiliar with the tricks of the private trader, sometimes lose their payments.

- In APMC yard, a seller of *chikoo* stands in a vendor relationship vis-à-vis the private trader, who reaps the entire residual benefit from sale of the same *chikoo* at higher price in premium markets. In case of cooperatives, the farmer does not lose his property rights over his produce, even when it is handed over to a society, as the society is required to make additional payments from residual gain out of sale at higher price (beyond first payments and deduction of implied expenses). Thus, the seller of *chikoo* stands in a longer term partnership relationship with the society.
- Since semi-automatic grading and packaging devices are used by societies, their *chikoo* comes in most standardized packages than is the case with private traders, who perform grading and packaging manually with hired employees.
- The cooperatives of this region have established a Fruit Federation through which they have acquired tremendous bargaining power in hiring trucks as well as requisitioning train services to dispatch their *chikoo* to the premium Azadpur market in Delhi. In other words, the cooperatives are market leaders in setting the prices for truck services for carriage of *chikoo* to the Delhi market, even though they have no bargaining power over Indian Railways' freight charges (which have suddenly been increased in recent times[22]), but still they set the dates and timings for movement of trains to carry their *chikoo* to the Delhi market, which the private traders in the APMC yard simply follow. Moreover, these cooperatives are offering incentive contracts to the truck drivers in the form of extra rewards for each hour of early arrival of their truck in the Delhi market as compared to the set norm of 36 hours for this trip. This additional benefit to truck drivers actually gives to the wholesale traders in the Delhi market more time to

[22] *The fact that the price of truck services has remained unaltered in spite of hike in train freight rate is a reflection of their high bargaining power as acquired through their Fruit Federation.*

dispatch *chikoo* in more distant lucrative markets, which not only benefits the Delhi traders, but also the supplier societies as well as the *chikoo* growers.

- Earlier each cooperative used to enter into an exclusive contract with one Delhi trader in the *Azadpur Mandi*. The recent trend is however towards choice of one exclusive trader by a group of 3-4 societies from this region. This is being done in order to enjoy economies of scale in transport of *chikoo* as well as to gain greater bargaining power vis-à-vis the Delhi trader, whereas the latter too enjoys economies of scale besides a larger market share, which enables the latter to offer better prices back to the societies. This is a strategic advantage these cooperatives seem to be enjoying at this stage, which is yet to be matched by a larger number of small traders in the APMC yard.
- Unlike the private traders in the APMC yard, cooperatives have traditionally strong backward linkages with their producers. The cooperatives sell to the farmers not only quality inputs (e.g., fertilizer, pesticides, manure, tractor, irrigation and extension services), but also a whole range of consumer items and construction materials at more favorable terms and conditions than are available to the farmers in the market.

2.47 Cooperatives, being farmer-owned and farmer-controlled organizations, have greater responsibilities than private traders in taking care of the problems of *chikoo* growers. So, many of the points presented below are weaknesses of the crop itself rather than the weaknesses of cooperatives. Nevertheless, these weaknesses are mentioned below to give to the reader an idea about where these cooperatives seem to be losing in terms of their future's perspective for development:

- Although *chikoo* is available almost throughout the year, its peak harvest period tends to coincide with the period when more popular seasonal fruits like oranges, grapes and even mango are in full flow into the market. In the absence of suitable R&D intervention, the attraction for *chikoo* tends to suffer. Neither the farmers themselves, nor their cooperative organizations have so far found a solution to this problem. This problem is further reinforced by the fact that *chikoo* ripens faster than other fruits, thus making movement of this fruit to longer distance

markets beyond Delhi a very difficult proposition. Although *chikoo* is a major fruit of the South Gujarat region, its lobbying power in the national scenario is much weaker as compared to mango, apple or oranges. The cooperatives seem to have failed to impress upon the national leaders to undertake the necessary R&D activities to increase the shelf life of *chikoo*, nor have they themselves been able to spend enough on R&D activities on *chikoo*.

- *Chikoo* producers seems to be facing certain unhappy trends in recent times – namely, their yields from older trees are going down and the costs of production are going up, but the market price realization is not going up in a proportionate manner, thus making agro-processing and production of value-added products on *chikoo* critical needs of the hour. The cooperatives, in spite of their apparently good performances, have not been able to rise up to the occasion.
- Planting of more *chikoo* trees seems to have created a situation of glut in the market, necessitating crop diversification away from *chikoo* on the part of the farmers, when not much value-addition is unlikely in the near future. The cooperatives do not seem to have taken much initiative thus far to guide their farmer members to undertake the necessary cropping pattern changes.
- Although no data is available to test this hypothesis, the private traders claim to have an edge in attracting larger size *chikoo* than the cooperatives, whereas the harsh treatment meted out to producers of lower quality *chikoo* in the APMC yard seems to be encouraging such farmers to rally more and more around the cooperatives. If this hypothesis is correct, cooperatives need further tinkering and refinement of their pricing system to overcome their limitation. The private traders also claim that the washing of *chikoo*, which they insist on the farmers before the crop is brought to the APMC yard for sale, constitute an advantage over the unwashed *chikoo*, which the cooperatives purchase from their member-producers. The cooperatives however don't agree with this view, as they feel that the richer customers like the natural soil color of *chikoo* and don't like washing by water sources available to farmers, which may be contaminating the fruit.

2.48 At the current stage, the cooperatives seem to be confronting the following threats in their *chikoo*-pooling activity:

- With amendment of the APMC Act, more private parties, who can now purchase directly from the farmers, are likely to enter the market. Even large private companies may enter into buy-back arrangement and even undertake harvesting management under an appropriate contract farming system. Labor scarcity being a serious local problem, this threat is really looming large in the eyes of the cooperatives.
- Year to year output fluctuations without a counterbalancing change in the price of *chikoo* are making the farmers very much vulnerable to income fluctuations. As a result, many farmers, who constitute the life-blood of the cooperatives, seem to be moving to alternative activities and especially to services, and are even leaving the villages. This is a serious disturbing trend for the cooperatives.

2.49 The cooperatives of this region, however, do have the potential to seize the following opportunities to promote their main crop – namely, *chikoo*, to safeguard their future.

- The cooperatives are in a strong position to enter into strategic partnership with the forthcoming retail chains for supply of *chikoo*.

Table 2.5a: Scheme for rewarding better quality *Chikoo*

Base (average Delhi)	Percentile distribution of *chikoo* in terms of size (counts/10 kg)								Gross buying price	
	61-65	66-70	71-75	76-80	81-85	86-90	91-95	96-100		
Additional incentives in Rs for better quality	Premium added to base price									
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	=	Rs.
	+2.5								=	**2.5**
	+2.5	+3							=	**5.5**
	+2.5	+3	+4						=	**9.5**
	+2.5	+3	+4	+4.5					=	**14**
	+2.5	+3	+4	+4.5	+5				=	**19**
	+2.5	+3	+4	+4.5	+5	+5			=	**24**
	+2.5	+3	+4	+4.5	+5	+5	+5		=	**29**
	+2.5	+3	+4	+4.5	+5	+5	+5	+5	=	**34**

Table 2.5b: Scheme for penalizing inferior quality *Chikoo*

Base (average Delhi) price	Percentile distribution of *chikoo* in terms of size (counts/10 kg)								Gross Buying Price	
	56-60	51-55	46-50	41-45	--	--	--	1-5		
Additional penalty in Rs for drop in quality	Penalty deducted from base price									
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
	-1								=	**-1**
	-1	-1							=	**-2**
	-1	-1	-1						=	**-3**
	-1	-1	-1	-1					=	**-4**
	-1	-1	-1	-1	-1				=	**-5**
	--								=	**--**
	-1	-1	-1	-1	--	--	--	-1	=	**-12**

- The cooperatives together may establish a website for dissemination of updated information regarding the specialty crops like *chikoo* and *kesar* mango for promotion of their markets both within and outside the country.

[23] *Base price is fixed at 60 percentile point.*

- The societies can also undertake concerted efforts to promote production of organic *chikoo* in carefully selected areas together with the necessary certification facilities to tap the advantages of premium markets.
- Scientific management of the inventory packaging boxes, through use of computers, is likely to further reduce the cost of transportation of *chikoo*.
- The cooperatives have already established a fruit federation to arrange better transport of *chikoo*, besides secondary agro-processing and marketing of value-added items in mango. They should probably use the same federation to undertake joint R & D, besides promotion of *chikoo* flakes, which are already being produced by farmers in the form of a cottage industry. Given the fact that packages of *chikoo* flakes are being exported to the U.S. for producing *chikoo* ice cream, the cooperatives must gear up their efforts to standardize and sell this item in their brand names, after appropriate packaging.

A SWOT Analysis of Input Supply Activities (e.g. fertilizer, seeds, pesticides, irrigation equipment, tractor services etc.)

2.50 The input supply system of the cooperatives of this region has the following strengths:

- The *Taluka* Union provides a 1% subsidy on the sales price of fertilizers out of the 2% commission it gets from the District Union, besides providing free transport of fertilizer bags to members' farms and extension knowledge. This comprehensive package of services is difficult for private traders to replicate, so much so that there is no private dealer in fertilizer in their area of operations
- Unlike private traders, societies do not try to "oversell" fertilizer to customers, i.e., pressurize or misguide them to use more than the required amount of fertilizer in the hope of making a quick profit regardless of the environmental sustainability of this practice. Rather, the cooperatives have started a group of progressive 25 farmers from 5 societies for experimentation on organic farming, aimed at minimizing the use of fertilizer. This initiative is being promoted through *kisan* (farmer) clubs.

- The cooperatives procure paddy seeds from the local agricultural university in Navsari. This allows them to assure the members of quality paddy seeds. However, they do not have any competitive advantage in quality seeds for crops other than paddy, relying on the same outside imported sources as private traders.
- The cooperatives sell only well known brands of pesticides, and do so at less than MRP (maximum retail price), besides giving 5% rebate on purchase value. Selling at MRP is a common practice in the retail trade in India, with products having the MRP stamped on them, and dealers being free to charge any price lesser than or equal to MRP. Cooperatives can offer discounts on MRP because of their scale of operation, and can recommend brands because of the inherent credibility of cooperatives in the eyes of their members.
- Cooperative society members can buy irrigation equipment on credit and are assured of only well known brands. They can also hire machinery at low hourly rental rates set by the society. The society has thus become the price setting market leader, with private agents having excess irrigation capacity leasing out their equipment to society for renting out to members at rates set by the society.
    - The cooperative also provides several welfare services to their members (which provide externality benefits to non-members as well) in their areas of operations. Examples of such activities are:
    - fruit fly control project, which controls attacks of fruit flies in mango and *chikoo*;
    - conducting periodic seminars and meetings between farmers and extension experts in which both members and non-members benefit;
    - providing extension pamphlets to members and non-members;
    - funding R&D projects on technological intervention in *chikoo* in a spirit of provision of public goods; and
    - Organizing health, eye operation, blood donation and relief camps (in case of any local disaster like the Surat flood in recent times).

2.51 While the cooperative nature of the organizations confer several advantages for their input supply operations, there are some inherent weaknesses:

- There have been no concrete efforts on part of *mandalis* (cooperatives) together to make bulk purchases, i.e., each *mandali* purchases on their own. This restricts the scale of operations of each society, and hence their available scale economies. Therefore, societies are not able to get best possible prices for their members.
- There is competition between the *Taluka* Union (higher tier – like a cooperative of cooperatives) and the societies in provision of several brands of fertilizers, which reduces scale economies in procurement. There is a lack of cooperation among the cooperatives. The cooperative approach would be for each society to focus on procurement of one brand in order to maximize the scale economies, rather than each society procuring all the brands.

2.52 These weaknesses lay the cooperatives open to threats from private sector fertilizer retailers, who operate at the national level on a much larger scale:

- Earlier fertilizer sale was routed only through coops, but now there is private sector participation in fertilizer retail. The private sector advertises its brands aggressively and is in a position to exploit the weaker market power and infighting amongst the coops.
- Big fertilizer companies can replicate the ancillary services that *Taluka* Unions and cooperatives provide to their consumers of fertilizer and thus threaten the coop movement.

A SWOT Analysis of Consumer Cooperation Activities

2.53 Consumer cooperation is an important component of the cooperatives' activities, and the cooperatives have several strengths in the provision of these services:

- They provide cash rebate of 3 to 5% on total annual transaction on specific grocery and medical items. However, they should really provide the rebate in quantity terms (e.g., buy one get one free) since the objective is to sell as much as possible. Nevertheless, the existing scheme is a powerful incentive to retain member business.

- Cooperatives have developed a reputation for quality assurance by always buying from high quality vendors and cultivating long term relationship with vendors. Unfortunately however, each cooperative enters into such relationship on its own, and hence lose out on scale economies. The quality reputation is particularly high for the case of petrol and diesel, where adulteration by private traders is often an unfortunate feature.
- The price is usually lowest in cooperative stores because *mandalis* buy from vendors on cash basis and hence get 2% commission that is passed on to consumers. Coops do this because they are flushed with funds and lack alternative investment avenues, hence they use their funds to make cash purchases.
- The cooperatives follow a unique asymmetric pricing strategy that reinforces their competitive advantage over private traders. If the market price goes up, cooperative stores raise prices slower than private traders, whereas if prices drop, then coop stores drop prices faster than the private traders.
- *Mandalis* also have a large footprint, with a small store in every village and an *atta* (flour) mill alongside private operators. These small *mandali* stores do not enjoy large scale operations unlike the main branch in the cooperative office, and sometimes even run at a loss. However, these stores are operated consciously even if they make losses, so that the cooperatives create a contestable market situation. This strategy has dynamic advantages since the store retains consumer loyalty while being in a position to scale up as consumer demand grows.
- Coops also offer attractive discounts during festive seasons on clothes and other items that are applicable to non-members as well. By attracting non-members they can reap greater scale economies especially during festive seasons.
- The main coop store is located in the *mandali* office complex to minimize transaction costs for members, and branch stores are usually in prime places throughout the villages. This gives them visibility in the non-member populace and pre-empts entry by other competitors.

- *Mandalis* also offer consumer credit up to Rs.500 for everyone, including non-members. Even B class members (landless) can get this credit facility. A category of members can get extra credit up to $1/5^{th}$ of the total annual transaction value in terms of sale of agricultural produce through the society. This facility is not provided in any systematic manner by private traders.

2.54 In spite of the impressive scale and scope of the consumer cooperation activities, there are several areas that can be improved upon:

- These coops hardly sell any consumer durables unlike Warana Bazaar. This is a large lacuna in the range of goods that they offer for their members, and can cause members to shop elsewhere for other products as well (not just consumer durables).
- Many of the cooperatives lack professionalism in the display and arrangement of items in store, and as a rule do not have air conditioning in stores. This is a liability when compared to well run modern retail chains that are springing up all around the country.
- Many cooperative stores are not able to optimally manage and utilize the space available to them in their stores, and consequently waste a lot of space that could have been used to display more goods.
- Consumer stores have less flexibility in timings, i.e., only from 8 am to 6 pm, while private traders operate even after 8 pm at night.
- Cooperative stores cannot avoid charging the 4% sales tax because they are forced to sell items with receipts, whereas private traders hardly pay sales tax – this feature severely reduces coops' competitive advantage.

2.55 Cooperative stores face the threat of entry from big private sector retail players e.g., Big and Star Bazaars even in small towns like Amalsad. So, *mandali* stores stand to lose their monopoly position in organized retail trade, and face competition that operates at a much larger scale. So, by failing to cooperate among themselves, they are worsening their luck against the threat from these private sector players.

2.26 There are however several untapped opportunities for coops to strengthen their position:

- They can tap all existing avenues of scale economies in making bulk purchases by apportioning procurement activities among themselves.
- They can organize occasional quality demonstrations of consumer products to educate consumers about brand quality, e.g., as is done in Warana Bazaar. This improves the trust between consumer and store, with the store undertaking to act as a watchdog on quality issues on behalf of the customer.
- They can readily tap the hitherto unexplored avenues of sale of large consumer durables as is being done in Warana, and even expand into trade in second hand large consumer durables.
- *Mandalis* should think in terms of providing services, not just goods. This will serve to increase domain centrality. For example, in Amalsad area there is acute shortage of laundry facilities. So, coops can start a laundry service in collaboration with local SHGs (self-help groups).
- Coops can organize food *melas* (festivals) to popularize different types of food habits and then increase member participation in the organization's activities as well as increase product lines for sale that may be more profitable.

A SWOT Analysis of Paddy Procurement Activities

2.57 Paddy is collected by the *mandalis* and transported to *Taluka* Union for sale as paddy as well as for processing and sale as rice. Paddy is classified into two groups – *masuri* variety and ordinary. *Masuri* is for local consumption and has better quality, while ordinary variety is lower quality and is for rice flakes and puffs. The following are their strengths in their paddy procurement activities:

- The *Taluka* Union is a near monopsonist for paddy procurement in Gandevi area. This is the result of the first mover's advantage since they were the first to start the rice mill. Over 99% of all paddy grown in this area is handled through the *Taluka* Union.

- Due to a surplus of resources, both physical and financial, there is a large amount of money available to stock rice as well as huge storage facilities of the constituent members to stock rice. This gives the Union a scale advantage.
- The society considerably reduces members' transaction costs in paddy supply since they provide gunny bags and transport facilities for paddy at nominal rates – the Union has its own trucks for paddy transport.
- The Union declares prices in advance and pays promptly in two installments – first installment in 3 days and the second installment at end of year after all accounts are settled and net benefits are accurately calculated.
- Societies supplying paddy to Union get commission of Rs.1 per bag of 70kgs and hence prefer to deal with the Union.
- The Union makes cash transactions with traders for prevention of opportunistic behavior by traders who buy on credit and then default. In return, the Union offers 2% cash discount.

2.58 While the Union has enjoyed some historical first mover advantages, it is in danger of frittering away its gains because of the following weaknesses:

- The Union's grip on market is weakening because of the death of a senior cooperative leader called Amrikbhai Patel, and a consequent leadership vacuum – at least for the time being.
- The production of *masuri* variety in Gujarat is stagnant, whereas that in neighboring UP is increasing, and is also easily available in Gujarat. The Union has thus far made no effort to correct this anomaly, i.e., handling competitive pressure from UP.
- There is limited cooperation by other societies for making available storage space for paddy even though space is available, i.e., poor space management. In fact, three societies have made it an issue to start their own rice mills, although none of them is in a position to utilize its own capacity. On the contrary, it has worsened capacity utilization of the Union's rice mill.

2.59 This has laid open the Union to the following threats:

- The *masuri* variety is available cheaply from UP. Private traders are therefore procuring it from UP and offering it for sale in Gujarat. This is threatening the Union's *masuri* (final product) trade.
- Not only is there competition in the final product, but also in the raw material (paddy) market. Good quality paddy at lower prices is also available from other states like UP, thus putting added pressure on the Union to maintain high procurement price.
- Private traders have begun entering into contract farming arrangements with farmers in the Union jurisdiction, thereby undercutting their business.
- Farmers are moving away from paddy to sugarcane, thus threatening paddy trade.

Section 7: Activities of Gandevi Taluka Union

2.60 The following are the strengths of the Gandevi *Taluka* Union, the higher level tier of the PACS of this region:

- The Union has gone ahead and played positive role in setting up a hospital, providing modern healthcare facilities at low rates to members and non-members. The Union also provides distilled water to public at a low cost out of the hospital premises. This is the first attempt by a cooperative sector into the multi-crore packaged drinking water industry in India.
- The Union offers a 50% subsidy on soil and water testing to members, with another 50% subsidy from the coop society. So, farmers get soil and water testing free. This is a good example of cooperation among different tiers of coops to provide value added services to members.

2.61 The following are the weaknesses of the Union:

- The Union membership is open to not merely primary coop societies, but also to individual members. This is in contravention of the principles of cooperation and violates principles underlying the three tier structure. Though it is now a matter of

history, but the same history continues without correction. Members and societies also do not operate in the same areas of business: for example, members are not only PACS, but also village dairy societies that have nothing to do with the activities of the Union. Every member is on equal footing according to coop law in terms of voting power. But, there are certain primary societies having no business with Union but are still represented on the Board of the Union. This represents a governance structure failure.

- The Union takes deposits only when needed, but not all year round – this is a casual approach to financing. They have not explored possibility of innovative and profitable investment avenues, hence have taken no steps toward deposit collection. This represents untapped opportunities for the Union to expand.
- As far as fertilizer provision goes, fertilizer flows through the Union as per the Gujarat government's fertilizer policy. The *Taluka* Union gets a 1% commission and primary societies also get 1% commission on fertilizer supply to members. However, neither the Union nor the society provide any administrative or value added function to justify this 1% commission. Therefore, the system is not going to be sustainable in the face of forthcoming private sector competition in fertilizer supply.
- In tractor business, the Union supplies the Mitsubishi brand of tractors. Loans for purchase of tractors are provided by societies. Gujarat government provides Rs.30,000 subsidy for each tractor purchase, but there is no benefit sharing by the Union with society. So, some societies like Ajrai have started selling different tractor brands. This is a case of competition among coops, i.e., the coops tempting to erode the tractor business of the Union, on account of the failure of the Union to share the benefits of tractor business with the lower level societies. As a result, all parties lose scale economies in tractor business.
- Around 300-350 tractors are sold per year in the *Taluka*. So, there is a huge scope for tractor repair services. Unfortunately, tractors of different brands are being sold by different societies without any coordination, thus losing economies of scale in possible provision of repair services.

- No preference is given to members for Union tractor repair service. This is a neglect to coop principles.
- Many small societies cannot have a full time secretary and cannot even afford a competent part-time secretary. The Union could have provided this administrative support to the member societies. The Union argues that it has no stable source of income such as mango and *chikoo* pooling. The Union's paddy income is too low. However, the next door Fruit Federation shares in the loss and profit of their members, and can therefore afford to cross-subsidize members in areas of administrative support. Gandevi Union could have re-designed itself along these lines.
- Rice milling operations have of late become less profitable. In the hunt for prestige, member societies such as Gandevi, Kharel, and Gadat have all started rice mills even though they do not have full capacity utilization. This is another case of deleterious competition among cooperatives. Why couldn't the Union prevent this from happening through provision of suitable incentives to the member societies? The investment of the member societies could instead have been used to upgrade the Union rice mill.
- There are 2 varieties of paddy – ordinary and *masuri*. The Union is selling ordinary variety (as well as *masuri*) to private merchants instead of value adding by making *poha* (a rice snack) for example. This weakness of the Union encourages farmers to move away from paddy production because of declining price realization. Further, private merchants are competing more aggressively and their share of paddy business is rising at the cost of that of the Union.
- The local variety of *masuri* is inferior to outside varieties. The Union could have undertaken some technological interventions through R&D support to improve the *masuri* variety. Private merchants have for example started plastic based packing instead of using gunny bags, thus stealing a march on the Union in attractive packaging of the product.
- Union operates grocery and building material stores replicating the job of the primaries, thus creating competition among cooperatives.

- Union fertilizer business is in tact because of the Gujarat government's canalizing policy. The moment the government makes space for private traders by reducing the commission to the Union, the latter may lose its competitive advantage.

2.62 The untapped opportunities for the Union to expand the scale and scope of its operations are:

- The Union can help member societies make bulk purchases of all inputs and then share the benefits among themselves to take scale economies to logical conclusion. For example, there are three major brands of cement in Gujarat: LnT, Ambuja and Hathi. Instead of each society or the Union procuring one brand, every unit procures all the brands. When the market rate is 150 per bag for example, the Union could have sold cement at 125 per bag if they had aggregated the cement business. The same is true for edible oil. Purchase price for Amalsad society at the time of investigation was Rs.11.20 per liter and the market rate was Rs.11.30 per liter. Had Amalsad purchased edible oil on behalf of all societies, it could offer it at a price even lower than Rs.11.20 per liter.
- The Union can enter into provision of innovative services. For example, near the river Ambika, there is a big public gathering every evening and scope for organized park services in consultation with the local municipality or panchayat. This would increase the domain centrality of the Union. Further, Kacholi area is naturally beautiful, and has scope for park services / retirement homes / eco-tourism.
- The Union must explore business opportunities in *chikoo* flakes as well as *chikoo* flavored bottled water.

Section 8: Conclusion

2.63 PACS of this region seem to have thrived and are even sustained in spite of heavy odds because of several favorable factors – first, a comprehensive rather than an isolated stand alone approach to credit; second, good organizational design created by competitive leadership; third, beautiful minds and local talents being attracted to cooperatives and

cooperative-like forms of organizations; fourth, in-house but informal training and education on cooperation prevalent in this region; fifth, no or negligible government intervention, though cooperative laws in Gujarat are as traditional as or even more traditional as compared to the same in other parts of India. Unfortunately, these factors are no longer as favorable today as they used to be earlier – say, even a decade earlier. While government is dragging its feet to reform cooperation policy, probably the cooperators themselves are not doing enough to promote existing or new business using the principles of member-centrality (i.e., by taking care of all member needs), stakeholder cooperation (i.e., taking along all direct and indirect stakeholders) and domain centrality (i.e., undertaking activities where the local resource base has clear comparative advantages).

Appendix 2.1: Summary of Registered Organizations in Gandevi Taluka of South Gujarat

No.	Type of Society	Nos.
	Cooperatives	
1	Primary Coop Credit Society (including one Farmers' Service Society)	14
2	People's Coop Bank, Gandevi	1
3	Employees' Credit Society (associated with schools, state govt. organizations etc.)	14
4	Other Credit Society	5
5	Fruit & Vegetable Society (Gandevi Federation)	1
6	Taluka Union	1
7	Primary Milk Cooperatives (associated with Basundhara Milk Union of Valsad and Navsari)	54
8	Poultry Cooperatives	2
9	Fisheries Primary Cooperatives	6
10	Primary Consumer Cooperatives	4
11	Housing Cooperatives	130
12	Primary Labor Cooperatives	11
13	Primary Irrigation Cooperatives	4
14	Others (for Rickshaw Transport Coop, Nursery Coop,	9
15	Gandevi Sugar Cooperative	1
	NGOs	
16	Rotary club, Bilimora	1
17	Giants' group, Lions' club, Lioness' club	3
18	Gandhighar Deaf & Dumb School	1
	Private	
19	A.P.M.C.	1
20	Private: New Heaven Ball-bearing Limited	1
21	Amalsad; GIDC, Bilimora	1
Total		264

Source: DG Patel Coop Education Center, Kamrej, Sahakar Shatabdi Sopan, 2003-04.

Chapter 3

Understanding Basix's Quest for an Efficient & Development-oriented Credit Delivery System

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Abstract

This chapter attempts through review of earlier literature and selective field studies an appropriate conceptualization of the combined role of credit, insurance and rural livelihood support service of BASIX, a private micro-finance institution (MFI), which has combined the attributes of both 'for profit' and 'non-profit' enterprises, to bring out the distinctive approach of BASIX, as compared to those of the traditional rural moneylender, state-controlled commercial banks, independent and para-statal cooperatives and NGO-promoted MFIs. By designing a suitable business model to cope up with various risks associated with (i) nature failure (e.g., failure of monsoon), (ii) exchange entitlement failure (i.e., in the exchange of inputs and outputs), (iii) capacity failure (due to borrower death and/or morbidity and (iv) moral failure (i.e., opportunism), BASIX seems to have moved in the direction of a Pareto-efficient general equilibrium solution involving several markets and beyond credit in both backward and forward directions.

Section 1: Introduction

3.1 Credit is a very significant input in the production system of a rural poor household that is often characterized by a relatively large endowment of unskilled labor-

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power. In tune with the generally observed inseparability between the production and consumption decisions of a typical agricultural household, credit plays an important role in consumption smoothing of a rural, agricultural household as well. The operation of a rural credit market becomes all the more complex as one realizes that it cannot operate in an environment characterized by inadequate supply of collaterals that could have effectively moderated the risks of default. The degree of complexities is well explained by strong presence of informal credit transactions in rural India even after almost four decades of nationalization of commercial banks. Regional Rural Banks, specialized organizations to take care of rural credit – all patronized by the State – could not effectively challenge the authority of the thousands of village moneylenders who are still operating as the most effective source of credit to the rural poor. The formal sources of credit cannot operate in an environment that is not collateral-centric. To the contrary, a lender operating in the informal sector often advances loans on the basis of oral agreements, with little or no collateral. However, repeat lending backed by long-term exclusive relationship – often leading to inter-linkages across land, labor, input and output markets – and flexibilities in repayment schedules is more prominently and efficiently executed by a rural moneylender. Incidentally, available literature suggests an interesting similarity across these two seemingly unrelated sources of credit. They indulge in significant credit rationing[24] – borrowers are not able to borrow what they want, or some of them are even unable to borrow at all.

3.2 It is rightly argued that the world of informal credit is one of missing markets, asymmetric information and incentive problems, often leading to adverse selection, moral hazards and opportunistic behavior in enforcing contracts. While moral hazards may result from unforeseen shocks – crop failures, market failures and/or capacity failures, leading to non-willful defaults on the part of the borrower, opportunistic behavior contributes very much to willful default. So, smooth functioning of the rural credit market necessarily calls for an efficient operational model that can simultaneously take care of both willful and non-willful defaults of the borrowers. As we shall see in a following section, the models utilized by traditional village moneylenders in India,

[24] *The degree may however be less in case of informal lenders.*

mostly used extra-economic coercions to take care of such risks of default – with rack-renting and liquidation of collaterals (mainly, landed property and jewelries) being used as the main tools to take care of the risks of default. With Independence, and India becoming a republic, efforts were initiated to replace coercive tools by political economy rather than purely economic tools to tackle risks of default. Banks were nationalized, Rural Banks have been experimented with, and cheap lines of credits were initiated through the National Bank for Agricultural and Rural Development (NABARD). However, the rate of default remained alarmingly high, allegedly draining resources out of the credit system. The successful Nobel-winning experiment by Prof. Mohammad Yunous in Bangladesh opened the eyes of our policy-makers to the immense potential of self-help groups (SHGs) in managing credit facilities at lower social costs – characterized by negligible, almost zero rate of default. BASIX, in India, not only learnt from such experimentations with micro-credit, but also, as we shall argue in this chapter, initiated new efforts to take care of some of the weaknesses of the initial model of SHG-centric micro-finance. The objective of the present chapter is to identify and conceptualize the advances initiated by BASIX in the practice of micro-finance from a qualitative perspective, with the help of some anecdotal evidence. A rigorous statistical testing of the underlying hypotheses is of course called for, which will hopefully be taken up by a future researcher at a later stage, when a suitable time series of performance indicators would become available.

3.3 We divide this chapter into five sections. The next one provides a historical stylization of the Indian credit market. Such historical stylization helps facilitate conceptualization of the role of BASIX vis-à-vis other operators in the system in the subsequent section. The fourth section exclusively discusses the broad experimentations by BASIX as the latest entrant into the arena. The final section concludes.

Section 2: Historical Stylization of the Indian Credit Scenario

3.4 Designing an effective and development-oriented delivery system of rural credit for those trapped in poverty has always been a challenge to development practitioners the

world over. Indian experiences have been no exception to this reality. Several rural credit surveys later, with most of the commercial banks having been nationalized by 1969, Indian policy makers are still in the search for an efficient credit delivery mechanism that guarantees producers – not organized in a formal manner – access to credit.

3.5 Indian rural credit scenario rightly distinguishes between credit for consumption and that for production. Given the almost near total dependence of rural families on agricultural activities for subsistence, that was often seasonal and invariably dependent on weather, the traditional Indian credit institutions were suitably designed around the persistent demand for consumption loans. Consumption loans have significant qualitative difference vis-à-vis production loans. While the former is absolutely necessary for making a sustained living, the latter is more relevant in augmenting production, generating surplus, improving quality of living and subsequently reducing demand for consumption loan. As a result, while the bargaining power of a debtor negotiating consumption loan is almost zero, that while contracting production loan need not necessarily be always so low. Ideally, the bargaining power of the debtor looking for production loan should be increasing over time.

3.6 Even though commercialization of agriculture – production of agricultural crops for consumption of market goods and services – began during the British regime with introduction of indigo, tea, sugarcane and coffee and establishment of jute and cotton mills across the country, its spread was rather concentrated in certain pockets of the country. Post-Independent efforts at ensuring food security through new agricultural strategies, commonly known as Green Revolution, brought farmers in a larger number into the ambit of commercial trading of their produce, even in terms of food crops that were earlier produced only for consumption within the household – paddy, wheat, pulses, milk, fish etc. The farmers are no longer producing all they require for consumption round the year, rather they got into producing for the market, crops that they expect would bring them higher returns – in a quantity much larger than what they required for household consumption. The surplus was to be sold in the market and the value realized would be used to buy the other goods and crops that they never produced or stopped

producing but were necessary for daily sustenance. Thus, they are often required to go for 'production loan' which in effect is still a proxy for 'consumption loan'. Loans to produce for market and generate surplus are necessary to buy other basic consumption requirements – mostly food. During 2004-05, a typical rural resident of India had an average monthly consumption expenditure of Rs.559, and Rs.308 (55% of monthly consumption expenditure) was spent on food (NSSO Household Survey, 61st Round). Although the share of consumption expenditure in food has gone down considerably from 73% in 1972-73, the still high a share of food in consumption expenditure – more than half – underscores the importance of food – the basic requirement for sustenance – in the day to day life of a typical rural Indian.

3.7 However, the shift from production for self-consumption to production for market-assisted consumption has changed the qualitative characteristics of Indian credit delivery mechanism. Earlier the farmers were exposed to natural risks – droughts, floods etc. – and consequent crop failures. Now they have also been exposed to market risks that they may have to cope with, even in the years of bumper harvest. on the other hand. The interventions by the state, consequent upon the near complete nationalization of the banking system in 1969, was at the most an attempt to reduce (through subsidized rate of interest), stagger (through rescheduling of debts) and even absorb a portion of (through loan waiver) the burden of crop failure on the farmer. However, no interventions were ever designed to mitigate the risks associated with market failures – i.e., in the markets for products and activities, which were being supported through credit. And one should never forget that banks were nationalized when Indian farmers were gradually getting into production for market, thanks to the onset of Green Revolution in late 1960s.

3.8 The onset of Green Revolution also exposed the Indian farmer to the risk of procuring inputs for cultivation. Earlier, the inputs were mostly generated from within the households. Seeds were set aside from production of the previous year. Labor-power was obtained from within households. Barter exchange of labor across households within a community was also commonly practiced in parts of the country. Manures were made out of household wastes. Cattle maintained not only provided draft power for tilling, but also

supplied dung to be used as manure and fuel. In addition, they were a cheap household source of milk and milk products. Ponds came in handy for harvesting rain water for both irrigation and cultivation of fish and other edible aquatic animals. Common grazing land and crop residues were enough to feed the domesticated cattle. The onset of new technology made the farmer more vulnerable to 'double entitlement failure'. The farmer was now forced not only to sell the output in the market, but also to procure most of the inputs from the market as well – thus being exposed to the market risks on both occasions. Being a faceless seller confronting unequal buyers while disposing of output, on the one hand, and again a faceless buyer from powerful buyers while procuring the inputs, on the other, a farmer was thus beaten twice as he became too inconsequential to influence the exchange processes in both the transactions.

3.9 Traditionally, collaterals have played a significant role in reducing the risk of default for the lender. Any default on the part of the borrower is followed by a liquidation of the collaterals and the lender, operating in the informal sector, gets back the funds loaned out. The effective rate of interest often turns out to be very high as the value of collaterals are often much higher than the amount of credit given. This gap between the market value of collateral and the actual size of credit extended, and the consequent effective rate of interest, however, continuously declined in view of a number of players – in the formal sector – entering the rural credit market over the years, and particularly since early 1970s. The fact however remains that the monopoly operations by the village moneylenders for centuries could ensure a very low effective asset base for the majority of borrowers operating in rural India. Most of the assets offered were liquidated to pay for non-willful defaults, thanks to natural disasters that destroyed crops. Consequently, the capacity of the rural borrowers to absorb credit on the strength of the collaterals they could offer had already declined significantly. Thus, any collateral-based credit delivery system in the post-Independence phase, however strong the intent to help the rural poor might be, was bound to be of little success. The village-based moneylenders had already developed an alternative mechanism, in the form of inter-linkages across the markets where the borrowers mostly operate – labor, other complementary inputs, like fertilizers, seeds etc. and output. Bluntly put, Grameen Bank experiment has been a novel attempt to

conceive of 'collective collateral" as a guarantee to minimize default. To add, such collaterals do consist not only of tangible assets of the members, but also their intangible assets – self-respect among the members of the group as well as trust. That self-respect and trust have been used as collateral in an SHG model is amply evident from a number of SHG farmers committing suicides in Andhra Pradesh while their crops had failed.

3.10 Designing the principles of "collective collaterals" and operationalizing it successfully are no doubt the achievements of the SHG model in reducing the incidence of willful default. However, it could not effectively factor in the problems associated with non-willful default that often cripple a borrower – even to the extent of taking one's own life. In the coming sections we shall argue that the BASIX experiment not only contributed to the formation of "collective collaterals" to reduce the risks of willful default, but also designed mechanisms that seem to have considerably reduced the risks of non-willful defaults.

Section 3: Conceptualization of the Existing Credit Delivery System

3.11 We use the table below to identify the typologies in Indian rural credit market in a chronological fashion across the continuum of the attempted crafting of different institutional mechanisms to ensure not only an efficient delivery mechanism of credit to the rural poor, but also to reduce the risk of non-payment to the creditors. We have identified five distinct, but always interdependent, characteristics to differentiate across six characteristically different institutional structures that emerged in the Indian credit market over the last century. The institutional parameters are:

1. Production System;
2. Purpose of credit;
3. Source of risk;
4. Risks covered by creditors, and
5. Hierarchical pressure.

3.12 Risks covered by creditors can be divided into two components: willful and non-wilful, with the risks of non-wilful default being further categorized under risks due to

- Crop failure: failure in production due to natural calamities, pest infestations etc.
- Market failure: failure to realize the value of production due to crash of prices in the market or non-availability of market support
- Capacity failure: failure to produce due to illness of family members or death/illness of draught animals.

3.13 The institutional structures also underwent considerable changes over the last century, and more rapidly since Independence. We distinguish among the following:

1. Village moneylenders
2. Traditional Local Primary Agricultural Credit Cooperative Societies (PACS);
3. State-owned Commercial & Regional Rural Banks;
4. Para-statal or Mutually Aided Co-operative Societies;
5. Micro-finance Institutions (MFIs), in general, and
6. BASIX as a specialized class of MFIs.

3.14 While in the present section we shall discuss the variations in stylised features of the first five institutional structures in respect of the characteristic features identified above, we reserve the next section for exclusive discussion on BASIX.

3.15 We first take up the village moneylenders who have been operating in Indian villages since time immemorial. As the village production system was totally centred around subsistence requirements – the farmers did not have to sell most of their produce to realize the value of output – and the inputs too were mostly generated from within the households, loans were mainly used for consumption smoothing. Demand for consumption smoothing arose from the need to provide subsistence requirements for the lean period between sowing and harvesting. Collaterals were there to reduce risks of willful default. However, no formal institutional mechanism was in place to cover the risks of non-willful default to the creditors that might have been there due to crop or

capacity failures. Extra-economic coercion and inter-linkage between labor, land and output markets were often used to pass on the incidence of such risks to the debtor, leading to gradual and even rapid - depending on the severity of risks - erosion of the asset base of the debtors. Immiserization of the rural poor thus went on unabated. The risks of market failure earlier were negligible as an insignificant amount of the output was taken to markets. However, the situation changed rapidly with the introduction of new agricultural technology that exposed the farmers to the vagaries of the market – both for inputs and output. Inter-linkage between credit and inputs markets has been gradually institutionalized to shift the incidence of risks from market failure on to the debtors. Debt rescheduling often remained a useful tool in moderating the severity of shifted incidence of risk on the debtors. Use of intimate knowledge about credit-absorption and income generating capacities of the debtors, in combination with ability to use extra-economic coercive powers to liquidate mortgaged properties helped reduce the risks of both willful and non-willful defaults from the viewpoint of rural moneylenders. There was, however, no hierarchical pressure on the village moneylenders to influence their credit-linked decisions.

3.16 Even though the cooperatives were given a formalized structure with state patronization, especially after Independence, there were sporadic experimentations in institutionalising cooperative credit societies right from the beginning of the last century, thanks to the motivations from Gandhi and Rabindra Nath Tagore. These cooperatives, incidentally, could engage their members in expanding the scope of production beyond consumption, thus bringing in the possibilities of risks linked to market failure. Thus, the purpose of credit was to produce, not just to consume. The risks of market failure to the cooperatives were reduced through supports provided to member-debtors in input procurement and output disposal at competitive prices. But no conscious efforts were initiated to reduce the risks of crop and capacity failures to the debtors. Loans were rescheduled to reduce the severity of the incidence of risks that were passed on to the debtors. The cooperatives, being localized, could minimize willful default using intimate knowledge about the credit-absorption and income generating capacities of the creditors. Use of liquidation of mortgaged collaterals was hardly used to reduce the risks of non-

willful defaults in keeping with the spirit of a people's organization. Being nationalist in spirit, the extent of hierarchical pressure on the earlier cooperatives to influence their credit-linked decisions was quite negligible.

3.17 The onset of Green Revolution with its attendant technological components changed the basic characteristics of Indian agriculture with a distinct general shift from production for consumption to production for the market, thereby increasing the exposure of the rural farmers to risks of market failure. The use of laboratory generated high yielding varieties (HYV) of seeds not only increased the potential output per unit of land in the hands of the farmer and thus increased the demand for credit, but also increased the risks of crop failure due to pest infestation, lack of timely and adequate availability of water, and degradation of land. Increased use of chemicals and accompanying environmental degradation increased the risk of capacity failure as well. New institutional arrangements became necessary to take care of the changed requirements. Nationalization of commercial banks, establishment of Regional Rural Banks (RRBs) and increasing state control of the cooperative banks were considered the policy options not only to increase the quantum of credit supplied but also to reduce the coercive pressure of credit suppliers on the rural debtors. In a sense, the credit market was formalized. However, the formalization did not add much to the comfort of the rural debtors, even though it increased the exposure of the creditor to more risks of both wilful and non-wilful default. Poor and weak governance structure could not facilitate liquidation of mortgaged assets to reduce willful defaults. Lack of coordination across different complementary service providers failed to benefit the borrowers from the positive effects of backward and forward linkages. Thus, a formal and impersonal credit delivery mechanism that did neither offer any credible extension and marketing support to the borrowers nor could institutionalise an effective monitoring system ensured increasing rate of default in case of loans given without collaterals and often against state guarantee. Consequently, the portfolio of non-performing assets of the formal credit sector increased at a rapid rate, rendering it almost non-viable.

3.18 The failure of the formal banking sector in not being able to provide succour to the rural debtors in minimizing the shifting the risk burden of crop, market and capacity failures, and rather increasing the risks of wilful default to the credit delivery system, led to emergence of the SHG model. It played a successful role in reducing the extent of willful default through a built-in group based monitoring system. Further, the scale of credit operation being low, the risks of non-willful default also reduced considerably. However, the SHG experiment is often alleged to be ineffective in being amenable to scaling up. Its capacity to improve the livelihoods of rural poor has been found to be too limited, being confined to interventions mostly in the domain of empowerment. Experiments by BASIX is an attempt to promote a market-led livelihood promotion that consider simultaneous, and with some degree of overlap, investments in both economic and empowerment domains. To simplify, we may argue that while interventions in the empowerment domain help reduce willful defaults, those in the economic domain can play an effective role in strengthening the capacity of the debtors to effectively absorb the risks of output, market and capacity failures – that is, risks often resulting in non-willful defaults on a large scale.

3.19 While the village moneylenders had no incentive to be concerned about improving the livelihoods of the borrowers, the commercial banks and para-statal cooperatives, broadly speaking, intended but could not develop an effective and relevant delivery system to that effect. A typology of credit institutions operating in India both at formal and informal levels is provided in Table 3.1 below. The next section provides glimpses of the interventions initiated by BASIX in effectively linking the economic and empowerment domains to generate a market-led livelihood option for the rural poor in India.

Section 4: The BASIX Experiments

3.20 As elaborated in Table 3.1 below, in sharp contrast to other credit delivery systems prevailing in this country, BASIX has introduced efforts to reduce risks arising out of production, marketing and capacity failures. To elaborate, it has developed market-led products for agricultural crop and cattle insurance to take care of risks of output failure. Compulsory health and life insurance packages linked to credit help reduce the risks of capacity failure. Introduction of business development services (Ag/BDS) takes care of possible risks of market failures.

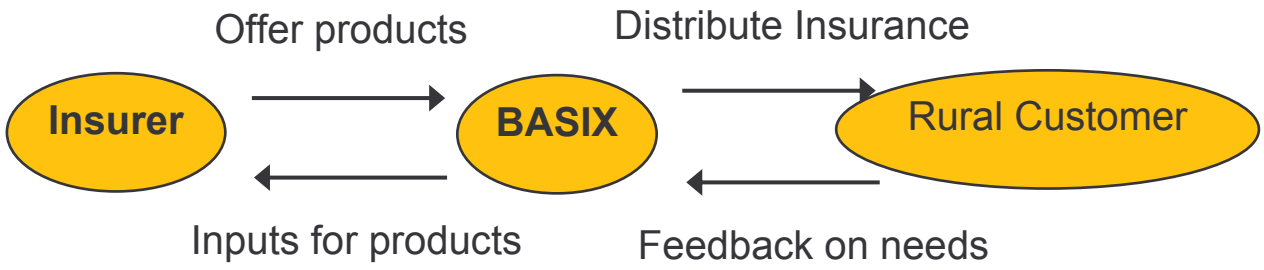
TABLE 3.1: TYPOLOGY OF CREDIT DELIVERY MECHANISMS IN INDIA

PRODUCTION SYSTEM	PURPOSE OF CREDIT	SOURCE OF RISK	RISK COVERED BY CREDITOR				HIERARCHICAL PRESSURE ON CREDITORS
			Non-willful default			Willful default	
			Crop failure	Market Failure	Capacity failure		
1. Village Moneylenders							
Inputs procured from household and outputs consumed within households.	Initially consump-tion, now extended to production as well.	Crop failure, capacity failure & willful or non-willful default	No. Incidence of risk passed on to debtor through extra-economic coercion using socio-political influence, and interlinking factor markets.	Did not arise earlier, but relevant nowadays. At present, incidence of risk passed on to debtor through extra-economic coercion using socio-political influence, and interlinking factor markets.	No. Incidence of risk passed on to debtor through extra-economic coercion using socio-political influence, and interlinking factor markets.	Yes, using intimate knowledge about the credit-absorption and income generating capacities of the debtors.	Negligible
2. Traditional Local Primary Agricultural Credit Co-operative Societies (PACS)							
Some production for the market	Production	Crop failure, market failure, capacity failure & willful or non-willful default.	No. Incidence of risk passed on to debtor, often through rescheduling of debts.	Yes, supported member debtors in input procurement and output disposal at competitive prices.	No.	Yes, intimate local know-ledge of borrower's credit-absorption and income generating capacities used to minimize willful default.	Not significant

3. State-owned Commercial & Regional Rural Banks							
Inputs procured from market and outputs sold in the market.	Production for market, though intention has been to help debtors to augment production and improve livelihood over time.	Crop failure, market failure, capacity failure & willful or non-willful default.	Generally no, incidence of risks passed onto debtors, with provision to reduce the severity of risks through debt rescheduling. However, a few instances of debt waivers also witnessed so far.	Generally no, incidence of risks passed onto the debtors, with provision to reduce the severity of risks through debt rescheduling. However, a few instances of debt waivers also witnessed so far.	Generally no, incidence of risks passed onto the debtors, with provision to reduce the severity of risks through debt rescheduling. However, a few instances of debt waivers also witnessed so far.	Being alien to villages & w/o borrower level information, couldn't check willful default. Political and bureaucratic interventions further eroded the capacity to reduce willful default.	Consider-able bureaucratic intervention from above and political influence from below.
4. Para-statal Co-operative Societies							
Inputs procured from market and outputs sold in the market.	Production for consump-tion, though intended to promote production and livelihood	Crop failure, market failure, capacity failure & willful or non-willful default.	Generally no, incidence of risks passed onto the debtors, with provision to reduce the severity of risks through debt rescheduling.	Good co-ops supported competitive input procurement and output disposal. But most failed due to unwanted political and bureaucratic interventions.	Generally no, incidence of risks passed onto the debtors, with provision to reduce the severity of risks through debt rescheduling.	Due to bureaucracy & political pressure couldn't minimize willful default in spite of intimate local knowledge	Consider-able bureaucratic intervention from above and political influence from below.
5. Micro-finance Institutions (MFIs), in general							
Inputs procured from market and outputs sold in the market.	Production for consumptio n, though intention has been to help creditors to augment production and improve livelihood over time.	Crop failure, market failure, capacity failure & willful or non-willful default.	Generally no, incidence of risks passed onto the debtors, with little provision to reduce the severity of risks through debt rescheduling. However, risks are small due to low scale of operation.	Generally no, incidence of risks passed onto the debtors, with little provision to reduce the severity of risks through debt rescheduling. However, risks are small due to low scale of operation.	Generally no, incidence of risks passed onto the debtors, with little provision to reduce the severity of risks through debt rescheduling. However, risks are small due to low scale of operation.	Use of trusts among members of the group and generating group monitoring mechanism led to considerable reduction in possibilities of willful default.	Donor-driven, often not incorporatin g local realities.

6. BASIX as a distinct category of MFIs							
Inputs procured from market and outputs sold in the market.	Augmentation of production to improve livelihood	Crop failure, market failure, capacity failure & willful or non-willful default.	Yes, compulsory crop insurance linked to credit	Yes, through backward and forward linkage services. Backward linkage services are sold to debtors, while forwards linkage services are provided through networking.	Yes, introduced compulsory health and life insurance tied to credit.	Followed SHG success in using trusts among members of group and generating group monitoring mechanism that led to considerable reduction in possibilities of willful default.	Donor/ Market-driven with space available to initiate creative programs commensurate with local realities

Figure 3.1 BASIX's Insurance Business Model



3.21 Before giving a sketchy profile of the different instruments developed by BASIX to reduce exposure to risks of its borrowers, we provide a background to the organization. BASIX came into being in 1996 as a livelihood promotion institution to cater to the economically active Indian poor through providing them with improved access to both financial and technical services. As on 31st March, 2009, it is operational in 18119 villages spread across 172 districts in 15 states in the country and provides financial and technical services to more than 1.6 million households of which 90% are located in rural India and the rest in urban slums. As per the website of BASIX (http://69.89.31.196/~basixind/index.php?option=com_content&task=view&id=37&Itemid=51 accessed on 11th October, 2009) "*The Holding Company of the BASIX Group is called Bhartiya Samruddhi Investments and Consulting Services (BASICS Ltd.) which started operations in 1996 as India's first "new generation livelihood promotion*

institution". It set up two fund based companies – Bhartiya Samruddhi Finance Ltd, a micro-finance NBFC in 1997 and Krishna Bhima Samruddhi Local Area Bank Ltd in 2001. Both were among the first in class.

3.22 BASIX also started providing fee-based business right from the outset by offering consulting services in microfinance and livelihood promotion, training, HRD and institutional development (ID) and information technology (IT) applications for microfinance and livelihoods.

3.23 Indian Grameen Services, Section 25 not for profit company forms the research and development arm of BASIX. Besides carrying out research and development in the area of livelihood promotion, it also designs and develops financial products for extending credit, evolving distribution channels for delivery of its services and developing necessary systems for service delivery such as accounting and MIS.

3.24 The Livelihood School is an independent society promoted for knowledge building and training of livelihood professionals in NGOs, government agencies, banks and MFIs. It also provides training to BASIX staff. It is involved in building the knowledge base required for supporting livelihoods and disseminating the knowledge so generated for building the implementation capabilities of various organizations and playing a critical role in supporting livelihoods.

3.25 The fund-based, fee-based and social businesses of the BASIX group have a tremendous synergy and contribute to each other's growth and prosperity. The credit business enables customer acquisition, while the insurance business mitigates customer and credit risk, and the Ag/BDS business enables customer retention by enhancing their incomes. The consulting and IT business allows BASIX to earn revenues from offering services that it needs for itself anyway. The social businesses enable research and development, and knowledge building. Figure 3.2 below provides an idea about the outreach of BASIX services in India.

3.26 As an official document from BASIX notes, as part of its mission to deliver comprehensive financial services to rural customer, BASIX began its initiatives to deliver insurance services in 2001, coinciding with the opening up of the insurance sector. From the beginning BASIX has actively partnered with multiple insurance companies to design insurance products for rural customers. BASIX has an articulated vision in providing micro-insurance services in its vision as follows: *"All poor households, especially those served by BASIX, will have access to risk-management services covering their lives and livelihoods, and insurance companies will provide these services willingly on a financially sustainable basis."* (BASIX Insurance Services: Introduction: p.1). As elaborated in Figure 3.1, BASIX acts as a useful intermediary between insurance companies and the rural customers, given its strong rural network. Not only does it sell insurance products to its rural customers for mutual benefit of all three concerned parties – the insurance companies, itself and its customers, but also it is providing useful feedback inputs to the insurance companies in designing and re-designing of products as per the needs, perceptions and experiences of vast and scattered rural customers.

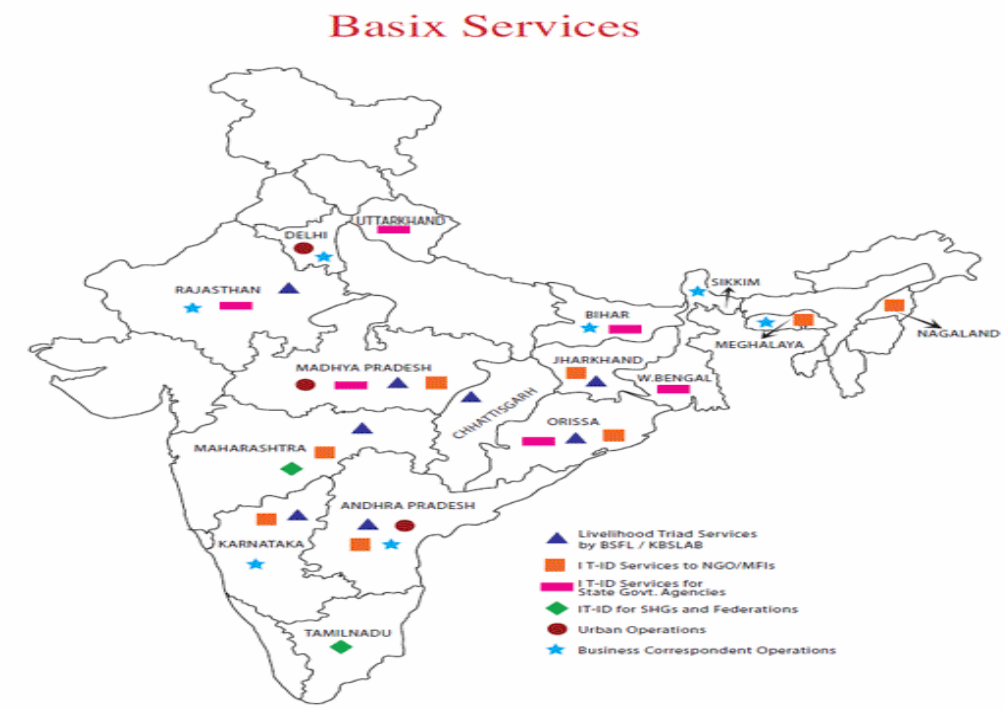
3.27 The huge administrative costs and claim payouts that far exceeded the premium collected in respect of the Comprehensive Crop Insurance Scheme introduced by Government of India in 1985 and later introduced in a revised version in 1999 under a new nomenclature of National Agricultural Insurance Scheme, inspired BASIX to develop a crop insurance product called Raytu Vyasaya Akshaya Nidhi (RVAN) in 2000 as a pilot scheme among 70 farmers in Mungi village from Medak district in Andhra Pradesh. The farmers were offered a very low level of risk cover – Rs. 800 – for sorghum crop. The objectives of the scheme were

- to reduce the high administrative costs experienced in the state-run insurance scheme, and
- to increase the satisfaction of the customers in processing the claims,

by involving the farmers in both administering the product and assessment of the claims. Based on a model of multi level mutual insurance, the risk premium was pooled at different levels. A part of the premium was maintained in a village level account with the rest transferred to a multi-village level account. During the pilot stage farmers received

claim payout that could be paid from within the village level risk pool. Several further exercises later, to take care of the high cost of administrations due to investments necessary to increase the capacity of the farmers to self- administer the scheme and high premium charges in the absence of actuarial data, led to development of an index-based weather insurance product first introduced in Mahabubnagar district, Andhra Pradesh in 2003. Over 11000 farmers were offered insurance package to cover risks from possible crop failures in 2006. By 2006 about 3000 BASIX customers received insurance claim of close to 3 million rupees. The advantages of the weather insurance scheme over traditional crop insurance package offered by the state may be summarized as follows:

Figure 3.2: Outreach of BASIX Services in India



- Access to this form of insurance is not just limited to those who have access to bank credit. Consequently, small and marginal farmers who are not active bank customers could be offered insurance package.

- There is no upper limit fixed for coverage, with the farmer having the options to cover both his investments and yield. With larger participation, the premium rates would also be lowered, implying an incentive for larger insurance cover.
- Index based insurance allows assessment and settlement of claims in an objective manner. The process is also quick.
- There is an early trend that suggests higher financial sustainability of the scheme, in comparison to the state-sponsored crop insurance schemes.

3.28 To ensure protection from the risks of market failure, BASIX introduced a comprehensive package of services to the farmers in the form of Agricultural Business Development Services (AgBDS) to extend risk prevention, productivity enhancement and market linkages to help the borrowers realize higher returns on their investments. Such services are fee-based and getting gradually built into the credit contracts, so that the borrowers cannot decline the services. In 2006, about 18000 farmers were offered these services. AgBDS products so far have been designed for agriculture, agri-allied and non-farm livelihood activities and scaled up across all units of BASIX. For example, 3500 dairy producers were covered in 33 units of BASIX during 2001-05. From 2005, the service consists of

- Bi-monthly general health check up of animals by BASIX livelihood service providers,
- Vaccination (for 2 animals), and
- Health camps.

at an annual fee of Rs. 300 per borrower (plus service tax). Similar service packages with tailored features to suit the needs of the borrowers have been developed for cotton, groundnut and non-farm sectors. Such services considerably increased the scope for market access and value realization for the customers of BASIX.

3.29 Innovative insurance packages to cover risks of capacity failure – due to morbidity and death – of the borrower have also been developed by BASIX. The current product portfolio that BASIX is delivering to its customers is given below:

For Life Insurance

1. Credit Plus: a group life insurance product that covers all credit customers of BSFL.

2. Savings Plus: a group life insurance product that covers all the savings and deposit a/c holders of KBS Bank.

3. *Jan Suraksha*: a pure term insurance product for individuals.

4. *Amar Suraksha*: premium return term product for individuals.

5. *Anmol Suraksha*: savings linked product for individuals.

6. SHG *Parivar Bima Yojana*-Life insurance cover for Self Help Group (SHG) members and their spouses.

For Health Insurance

7. BASIX launched in May, 2005 a health insurance product for its credit customers, which covers risks related to permanent total disability, critical illnesses and hospitalization expenses to a certain limit. In March, 2006 BASIX also launched this product for covering SHG members.

3.30 Tables 3.2 and 3.3 reproduced from an official document of BASIX provide a glimpse of the progress made so far by BASIX in providing insurance coverage of varied characteristics to its customers. In developing the products, it collaborated with following private sector business partners:

- AVIVA :Life insurance
- Royal Sundaram: Livestock Insurance, Health Insurance and Micro-Enterprise Insurance and
- ICICI Lombard: Weather Insurance.

Table 3.2: Insurance Business Performance at BASIX

Group Insurance	Outstanding customers as on 30-Mar-07	Outstanding customers as on 30-Mar-08
Life	*379,791*	*6,15,783 (62.14)*
Health	*375,795*	*6,11,731(62.78)*
Retail Insurance	**Outstanding customers during *Apr-Mar,2007***	**Outstanding customers during *Apr-Mar,2008***
Livestock Insurance	*11,700*	*25,673(119.43)*
Weather Insurance for farmers	*11,670*	*4,639 (-60.09)*
Micro-Enterprises Insurance	*1,261*	*21,386 (1595.96)*
Total	*24,631*	*51,698 (109.89)*

Table 3.3: Cumulative Claims Reported and Settled

Product	As on Mar 31, 2007		As on March 31, 2008	
Claims	**Cumulative No. of Claims**	**Cumulative Claim amount settled (in Rs. Millions)**	**Cumulative No. of Claims**	**Cumulative Claim amount settled (in Rs. Millions)**
Life	*1,338*	*20.78*	*2,975(122.35)*	*44.96(116.36)*
Health	*3,466*	*4.83*	*11,554 (233.35)*	*15.96(230.43)*
Livestock	*916*	*7.04*	*1,411(54.04)*	*11.09(57.53)*
Enterprise	*2*	*0.04*	*25(1100.50)*	*0.26(550.00)*
Total	*5,722*	*32.69*	*15,965(179.01)*	*71.77(119.55)*
Weather Insurance	*3,559*	*3.34*	*4,253(19.50)*	*3.82(14.37)*
Grand Total	*9,281*	*36.03*	*20,218(117.84)*	*75.61(109.85)*

Note: Figures in parentheses indicate percentage change. Source: BASIX Website as on October 13th, 2009 @http://69.89.31.196/~basixind/index.php?option=com_content&task=view&id=97&Itemid=113

3.32 To meet huge in-house demand for appropriately trained professionals with a good mix of commercial sense and social sensitivity, BASIX set up in 2007 BASIX Academy for Livelihoods and Microfinance Practice (B-A-LAMP). This is an entry level and on-the-job training initiative with the mission to "identify potential individuals, including from rural, poor and socially disadvantaged communities, build their competencies (Knowledge, Skill and Attitude) and deploy them as required by the

livelihood sector from time to time". The Academy targets fresh pass outs from college as well as those who are already in the sector, who have long term commitment and are keen to improve their knowledge domain, for entry into microfinance and livelihood promotion sectors. It arranges for their skill enhancement through short-term Executive Development programs, thus meeting the diversified needs of this nascent but growing sector. The first flagship program, One-Year Regular *Triploma Program in Microfinance and Livelihood Promotion*, was primarily designed for preparing fresh graduates to take on Field Executive/equivalent positions in Financial Inclusion Services and in the Development Sector. The uniqueness of the program lies in its 'Hands-on-Training' in the field, which accounts for almost for 50% of the duration.

3.33 For life-long employment opportunities, BASIX has conceived **B-ABLE,** a market driven, technologically supported training system which is being tailored to the aspirations, aptitude and dedication of the student rather than to his/her formal educational qualifications, with the prime focus on building life-long employability of those who have been failed by our school system. BASIX will be supporting them through access to student loans and enabling them through connections with employers. B-ABLE launched their initiative with a model campus at Dehradun inaugurated on August 14th 2009. B-ABLE plans to scale up to 8 campuses by March 2010 focusing on the states of Uttarakhand, Sikkim and Rajasthan. It will provide relevant training courses based on extensive local research on the needs of the industry and the needs of disadvantaged youth through focus groups and employer collaborations, thus creating strong synergies with industry and government. The long term expansion plans of B-ABLE are scheduled to be worked out based on the learning and experience from the pilot projects.

Section 5: Conclusion

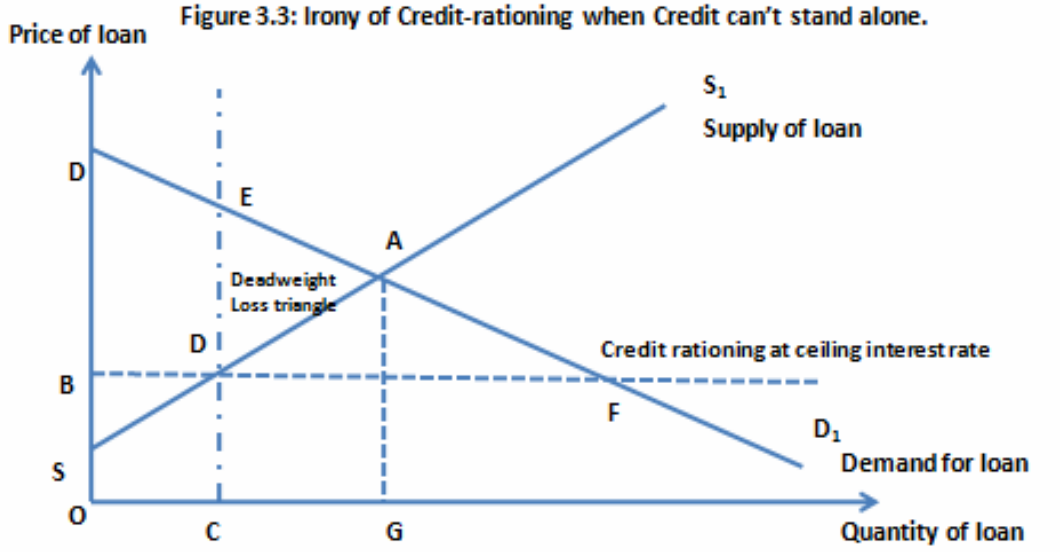
3.34 We emphasised on the prevalent features of credit rationing in Indian villages to offset not only the risks of output, market and capacity failures, but also those of willful default in an earlier section. Such rationing has been there because of the absence of suitable products to fall back on to absorb the risks. From a welfare perspective, the rationing obviously underlines the scope for a movement towards a Pareto-superior general equilibrium solution that happens at the point of intersection of the demand curve for credit and the supply curve of credit, as displayed in Figure 3.3 below. The BASIX experiments clearly indicate an attempt to move towards such a Pareto-optimum point that helps improve the welfare of both the creditors and the debtors through a win-win solution.

3.35 However, given paucity of data at hand, it is too early to confirm empirically if the move towards the optimal solution has really begun as a result of the initiatives taken by BASIX so far. The present chapter is an attempt at placing the interventions in a comparative perspective to present an initial qualitative and typological understanding of the innovative packages introduced by BASIX in its quest for moving towards the desired goal of providing sustainable livelihood options to the rural poor in India.

3.36 Last but not the least, a contrast between leader-driven cooperatives in Gandevi *taluka* and profit-driven BASIX is in order, which we would like to elaborate with reference to the battle between *Kauravas and Pandavas.* The epic battle in Mahabharata between the *Kauravas* and the *Pandavas* saw Lord *Krishna* helping both the sides. While he himself sided with the *Pandavas* and provided them with incisive insights in planning the strategies, he did not disappoint the *Kauravas* either. He provided them with thousands of *Narayani Sena* to fight the war for the *Kauravas*. The *Pandavas* won, thanks to the superior strategies provided by Lord *Krishna*. What would have happened had Lord *Krishna* due to one reason or other failed to strategize for the *Pandavas*? Perhaps the might of the *Narayani Senas* would have proven stronger enough to win the battle for the *Kauravas.* Many a battle in development interventions to empower the poor

in India were won with such mortal *Krishnas* providing able leadership to such efforts. Unfortunately, examples are not very few to see that the efforts dye out once the leader departed or committed mistakes. Gandevi experiment, being leader-centric, runs the risk of meeting such unfortunate end. BASIX, being an effective mix of multiple *Krishnas* and *Narayani Senas* – scores of dedicated and socially conscious middle rung management cadres – is a model more capable of replication and scaling up, provided the vision and mission to share the gains with the community is not lost sight of as time progresses.

Figure 3.3: Irony of Credit-rationing when Credit can't stand alone.



Credit rationing at ceiling rate of OB results in OC amount of credit being disbursed against a larger demand of BF, and eventually an inefficiency as measured by deadweight loss triangle of ADE due to failure of credit to reach the market clearing level of OG, had there been no informational problem in credit and credit market could stand alone. This is where informational flow from a general equilibrium approach can help.

Chapter 4
Summary and Conclusions

Samar K. Datta

Section I: Background, Methodology and Objective of the Study

4.1 The present study aims at applying modern developments in the theory of firm towards management of agri-business organizations with the help of two detailed case studies. Both the case studies are around delivery of credit to rural borrowers along with provision of several important credit-complementary services. In other words, both case studies highlight the role of various important and emerging concepts like market failure, government failure, property rights, stakeholder cooperation, public-private-community partnership, organizational networking etc in the context of a very important agri-business activity - namely, delivery of rural credit, where the country has experienced both market failure in the form of plight of the poor in the hands of rural moneylenders, and government failure, i.e., plight of both poor borrowers and government banking sector organizations under pressure of massive default of loans and acute farmer distress.

4.2 Agri-business propositions have certain distinctive characteristics which, though not sufficiently appreciated by policy makers, demand application of most sophisticated forms of economic tools and organizational innovations. The central hypothesis of this study is that modern developments in the theory of firm have important contributions to make in successful operation of agri-business propositions, in general, and especially in the context of credit, where both market failure and government failures are rules rather exceptions. The two case studies conducted in details have attempted to demonstrate how modern tools and concepts are being used to achieve a fairly high order of success in credit operations. We have deliberately chosen two polar types of organizations – one, primary agricultural cooperative societies (PACS) in a cooperatively vibrant region – namely, Gandevi *Taluka* in South Gujarat, which is traditionally engaged in delivery of credit plus services; and two, BASIX, a for-profit Non-bank Financial Company (NBFC)

engaged in micro-credit operations in several non-banked regions of the country. The latter is also engaged in delivery of credit plus services. The interesting part of the study is to see how, given high incidence of both market failure and government failure in the context of credit, these organizations have been performing pretty well over a fairly long period of time.

4.3 There are certain distinctive characteristics of agri-business operations which tend to make such organizations extremely complex to manage. The most prominent characteristics are as follows:

1. Agri-business operation involves a long value chain beginning from production of primary goods by farmers, on the one end, and marketing of processed and value added products in premium markets, on the other. This means an agri-business proposition has to balance the interests of a large number of players in the long value chain.
2. The large number of stakeholders in the value chain has often conflicting interests and un-even power, which makes evolution of a hierarchical form of organization structure and integration of interests of various stakeholders an extremely difficult proposition.
3. Multiple risks are generally involved in the long value chain, which are both exogenous (for example, due to weather and rainfall) and endogenous (due to presence of a large number of small players, often subject to opportunistic behavior).
4. Since nature and environment are invariably involved, defining private property rights on environmental assets becomes a very difficult proposition.
5. Finally, because of involvement of a large number of diverse players, the cost of organization tends to be very high.

4.4 The present study has therefore accepted the challenge to explain the success in agri-business activities around rural credit using the modern and emerging tools of economics and business organizations.

4.5 The major tools of economics and organizational theory which are being applied in the present context are as follows:

1. We applied the concepts of market failure and government failure with respect to credit, which involves an act of trust between a time point, when a credit is made, and another time point in the future, when credit is to be repaid. Credit therefore, cannot stand alone, as the experiences of rural moneylenders and government and quasi-governmental organizations historically involved in delivery of credit display in abundance. Rural moneylenders have nevertheless succeeded even when they have provided consumption credit, but generally against collaterals which are often undervalued and even misappropriated through creation of default induced by usurious rates of interest and exploitative terms and conditions. Government and quasi-government banks, on the other hand, when they provided credit and credit in isolation, face the destiny of severe loan default. So, the question arises whether good agri-business organizations can be built around the concepts of public-private-community partnership to avoid the twin problems of market failures and government failures. As the experiences of these two case studies show, both cooperatives in Gandevi *Taluka* and BASIX have been able to create a great deal of community awareness and community empowerment resulting in creation of residual control and residual claim rights in borrower communities, which have acted as appropriate checks against market failure and government failure.
2. Since multiple risks are involved, risk mitigation strategies constitutes an important intervention strategy on the part of the two types organizations in our case studies. While Gandevi *Taluka* cooperatives have undertaken input marketing and extension services to tackle input and production risk, they are also smart enough in handling output marketing risks. As a result, these cooperative organizations don't need to apply formal insurance at organizational level to secure the farmers. BASIX, on the other hand, has taken recourse to formal insurance mechanisms to safeguard itself as well as its clients, although BASIX too have started developing local level

organizations using Mutually Aided Cooperative Societies Act to promote community organizations to take care of input marketing as well as output marketing. As multiple stakeholders are involved in either case study, a stakeholder cooperation approach has been followed not only to identify but also to assess the interests of each stakeholder and design suitable organizational format to rope them in.

3. Defining property right over a large complex business organization has always been a very difficult task. Neither cooperatives in Gandevi nor BASIX can afford to take all stakeholders on board. So, both these organizations have taken pains to develop a complex corporate governance structure to define intra-organization, inter-organization and extra-organization linkages. While Gandevi cooperatives have created *Taluka* Union as well as a Fruit Federation to take care of their member's interest through evolution of suitable higher-tier organizations, BASIX has developed a non-profit organization in the form of a Livelihood School not only to undertake pro-active researches in areas of possible future investment by their clients, but also to provide training and consultancy services to solve client's specific problems. This is where both these organizations have applied the concepts of network/handshake type organizations. Finally, both these organizations have applied MIS to the fullest possible extent to guide actions, besides undertaking mid-course corrections and evaluations to fine-tune their activities.
4. The textbook model of a corporate form of organization is engaged in maximizing the rate of return on equity-holders' capital using a vertically integrated pyramid-type control structure (commonly referred to U-form), in which each layer of employees are subservient to directions and control by its immediately higher layer. The multi-divisional or M-form, in which each division of a company was granted more autonomy, allowing each of them to function as independent profit centers, brought elements of a horizontal structure in the functioning of a firm, though not totally dismantling the vertical control of a central office. Decomposition of production processes, and more importantly, diversification of business of a company into related

products and services based on economies of scope seem to have reinforced the tendency to move towards M-form of organization. Irrespective of whether it is a U-form or M-form or a combination of the two, another important trend in the control structure of corporate business observed in recent times pertains to corporate governance. While the need to achieve stakeholder cooperation across major stakeholders is recognized all over the world, especially after the observed success of Japanese form of corporate firms called *Keiretsu,* at the same time strong debate is going on in the literature is how to bring the main levers of control, especially with respect to senior managerial staff, back into the hands of equity holders.

5. Another recent development in organizational format is evolution of public-private-community partnership, though this format is still in the process of evolution and yet to take concrete shape. In traditional public-private partnerships, either the state or the private sector is found to be playing a dominant role, and the community is relegated to the status of either a consumer of the product or service under consideration, or a vendor in charge of supply of certain stipulated service against fixed claims. Community participation in the working of public enterprises and corporate social responsibility are only some examples of this kind of endeavor. In none of these cases, the community is hardly assigned any residual control or residual claim right. In other words, the community is never looked upon as a partner in the production process, who, like other partners, will have some control over decisions about the various processes involved and also have a share in the profits or losses arising from the decision process.

Section II: Lessons from the Case Study of Gandevi Taluka PACS

4.6 Given the generic problems of cooperative inefficiency, PACS in Gandevi *Taluka* region have made special efforts to build up member confidence in attracting huge amount of deposits, so that not a single cooperative in this region is suffering from capital shortage. They have carefully chosen the right tier for each activity, which is chosen by

their farmers. In other words, achieving member-centrality, i.e., catering to the needs of members, is an important distinctive characteristic of cooperatives in this region.

4.7 The second idea they have applied is to design organization in such a manner that members could have a built-in incentives to conduct certain business with them. This is what we have referred to as competitiveness analysis - trying to find out why a member will conduct business with these organizations and not with their rivals, and for what types of gains. Institutional design has been created such that it pays them to become a member rather to remain a non-member to such cooperatives.

4.8 Third, a SWOT analysis of each business activity is performed to highlight possible future directions of development. In case of Basix, near absence of any worthwhile rival organization in its area of operation, doesn't make it amenable to competitiveness analysis, though with growing contestability over time, competitiveness analysis would be a must in the coming days. The presence of a competitive atmosphere in Gandevi has always ensured a fair allocation of the benefits of credit between the two sides – the lender and the borrower, thus creating a win-win situation for sure. The same can't be claimed with so much surety in case of Basix, especially in the absence of detailed data not only from the organization side, but also inter-temporally at micro level from the borrowers' side.

4.9 Fourth, a stakeholder analysis is performed to identify and then to suitably take care of the concerns of various stakeholders. While the concerns of members, order-supplies and clients are being fairly reasonably taken care of at least till now, future problems are likely to emerge sooner or later – due to slack in human resource development (both employees and leaders) and innovative practices to pre-empt loss of business to rivals. In fact, the case study on Gandevi *Taluka* cooperatives also provides a number of weak links in their functioning - especially in promoting second generation leaders and management staff, on the one hand, and also due to their failure to rope in large percentage of small, marginal and landless people, which alone can take their business forward. In other words, Gandevi *Taluaka* cooperatives, though outstanding in

terms of performances so far, seem to be lacking in terms of their replicability on a wider scale.

4.10 Fifth, domain centrality analysis, though not sufficiently developed yet, provides enormous scope for expansion of business activities especially in supply of new services, based on the resources and talents already available in this region.

Section III: Lessons from the Case Study of BASIX

4.11 In order to identify and conceptualize the advances initiated by BASIX in the practice of micro-finance from a qualitative perspective, the case study on BASIX begins with a historical stylization of Indian credit market. A conceptual understanding of the activities of BASIX vis-à-vis other operators is then developed. A broad description of BASIX's experimentation precedes some concluding remarks.

4.12 Indian rural credit scenario has always distinguished between credit for consumption and that for production. Given nearly total dependence of rural families on agricultural activities for subsistence - that too often seasonal and invariably dependent on weather - the traditional Indian credit institutions were suitably designed around the persistent demand for consumption loans. Consumption loans have significant qualitative difference vis-à-vis production loans. While the former is absolutely necessary for making a sustained living, the latter is more relevant in augmenting production, generating surplus, improving quality of living and subsequently reducing demand for consumption loan. As a result, while the bargaining power of a debtor negotiating a consumption loan is often zero, the same for negotiating on a production loan need not necessarily be always so low. Ideally, the bargaining power of the debtor looking for production loan should be increasing over time.

4.13 The shift from production for self-consumption to production for market-assisted consumption has changed the qualitative characteristics of Indian credit delivery mechanism. Earlier the farmers were exposed to natural risks – droughts, floods etc. – and consequent crop failures. Now they have also been exposed to market risks that they

may have to cope with, even in the years of bumper harvest. Traditional credit delivery institutions – the village moneylenders to be specific – designed their credit package such that they could cover only a part of the risk of crop failure, but could often use extra-economic coercive measures to pass on the larger share of such risks on to the farmers. The interventions by the state, consequent upon the near complete nationalization of the banking system in 1969, was at the most an attempt to reduce (through subsidized rate of interest), stagger (through rescheduling of debts) and even absorb a portion of (through loan waiver) the burden of crop failure on the farmer. However, no interventions were ever designed to mitigate the risks associated with market failures – i.e., in the markets for products and activities, which were being supported through credit. And one should never forget that banks were nationalized when Indian farmers were gradually getting into production for market, thanks to the onset of Green Revolution in late 1960s. The onset of Green Revolution also exposed the Indian farmer to the risk of procuring inputs for cultivation and made the farmer more vulnerable to 'double entitlement failure'. The farmer was now forced not only to sell the output in the market, but also to procure most of the inputs from the market as well.

4.14 Traditionally, collaterals have played a significant role in reducing the risk of default for the lender. Any default on the part of the borrower is followed by a liquidation of the collaterals and the lender, operating in the informal sector, gets back the funds loaned out. The effective rate of interest often turns out to be very high as the value of collaterals are often much higher than the amount of credit given. Designing the principles of "collective collaterals" and operationalizing it successfully are no doubt the achievements of the SHG model in reducing the incidence of willful default. However, it could not effectively factor in the problems associated with non-willful default that often cripple a borrower – even to the extent of taking one's own life. We argue that the BASIX experiment not only contributed to the formation of "collective collaterals" to reduce the risks of willful default, but also designed mechanisms that considerably reduce the risks of non-willful defaults.

4.15 By designing a suitable business model to cope up with various risks associated with (i) nature failure (e.g., failure of monsoon), (ii) exchange entitlement failure (i.e., failure in the exchange of inputs and outputs), (iii) capacity failure (due to borrower death and/or morbidity and (iv) moral failure (i.e., opportunism), BASIX seems to have moved in the direction of a Pareto-efficient general equilibrium solution involving several markets beyond credit in both backward and forward directions.

Section IV: Action Points and Limitations of the Study

4.16 Broad action points which arise out of this study can be classified into three groups – first, those pertaining to credit delivery, in general; second, those pertaining to credit delivery through cooperatives; and third, those pertaining to credit delivery by 'for profit' MFIs like Basix. These action points are listed below in Table 4.1 below:

Table 4.1: Action Points to improve upon Credit Delivery System

Action points	***Relevant agencies***
(i) General:	
As credit can never stand alone, no intervention ought to be planned in credit alone; credit intervention must be part of a developmental package.	All government agencies, especially those concerned with development, and credit agencies must take note of this point, put it into practice.
(ii) Credit Cooperatives:	
As multipurpose PACS, engaged in input and/or output marketing, and even in agro-processing, have stronger chances of success in credit delivery, ordinary PACS too must attempt to follow their examples.	All cooperative promotional bodies in this country must put this principle into practice.
(iii) 'For profit' MFIs:	
They must be transparent enough to prove beyond doubt that their credit operations are sustainable and result in a win-win situation for both sides, and are not merely adding to their profits at the cost of the poor	RBI must develop innovative monitoring mechanisms to ensure transparent operations, and not just to regulate and restrict their activities.

4.17 A major limitation of this study is that it is based on only two case studies, and that too pertains to only credit delivery system, to the neglect of other agri-business operations. Even in the context of credit, neither large enterprise level data for cooperatives, formal banking sectors and MFIs, nor intensive micro enterprise level data even for selected units are available for rigorous testing of any hypothesis pertaining to this study. Hopefully, future researches will pave the way to overcome this limitation.

Section V: Concluding Remarks

4.18 The whole exercise elaborated in the study begins with a basic quest for credit delivery models that are capable of empowering the rural borrowers of India, in keeping with the declared spirit of ushering in inclusive growth in the country. Access to credit at affordable cost by the rural producers – in terms of resources and time – is obviously a necessary condition to move along such a desired growth path. Such an accomplishment is often referred to in the literature as 'financial inclusion'. Given the risks of default – willful and non-willful – staring at the lenders, such models also have to ensure that such risks are neutralized endogenously within the models themselves.

4.19 The experiences from BASIX and Gandevi are exciting enough to emerge as alternative models for credit delivery mechanism in rural India, given the failure of public system banking to provide the necessary services on the one hand, and the much hyped political desire to get rid of "usurious" village moneylenders, on the other. A couple of strengths and weaknesses of the two alternative models described in details in earlier chapters are necessary to be noted, if they are to be taken up for replication across the length and breadth of the country.

4.20 Replication of any successful model is dependent on two inherent characteristics, namely, feasibility and sustainability. Feasibility of a model is dependent on its capacity to enhance the credit worthiness of rural borrowers by reducing the risk of non-willful defaults and to simultaneously generate relevant information data base in the hands of the lender to reduce the risks of willful defaults at any given point in time. Sustainability of the model, on the other hand, calls for steadily maintaining the characteristics of

feasibility over a longer period of time. The shift from a feasible model to a sustainable model is often the challenge many of the Indian efforts failed to accomplish.

4.21 Both the experiments discussed in detail passed the feasibility test. However, questions remain about their sustainability. While Gandevi efforts are feasible today, one is not very sure if the same efforts can be maintained in case of a change in leadership. Further, operating at a low scale – confined within the boundaries of a *Taluka* – one is not sure if enough space will be available to it, given the existing structure of cooperatives operating primarily as not-for-profit entities in the country, to generate and tap economies of scale and scope to grow further in the future. Lack of other supporting policy measures to help its borrowers raise their credit worthiness can also inhibit the sustainability of the efforts over time. There is no doubt, however, that Gandevi cooperatives have contributed meaningfully to the process of empowering its borrowers and hence ushering in the process of financial inclusion for their members.

4.22 BASIX, on the other hand, being modeled as a for-profit organization, is structurally much more capable of tapping the benefits of economies of scale and scope. Although no detailed statistical data are available, the gains seem to be somehow distributed between the borrowers and the lender. The borrowers benefit primarily in terms of gaining access to credit, even if they end up paying a relatively high rate of interest. BASIX, by design, consciously operates in non-banked regions of rural India, where the borrowers have hardly any formal sector borrowing alternative. But at the same time, BASIX, as a lender, introduced innovative products to reduce risks of default and thus benefit the borrowers. However, uncertainties remain as to how these gains are exactly distributed – due to non-availability of hard data. This is an area where future researchers must concentrate on, if the Basix model is to be replicated on a wider scale.

Bibliography:

Alchian, A. A. (1993), "Thoughts on the Theory of the Firm," *Journal of Institutional and Theoretical Economics*, 149, 365-369.

Alchian, A. A. and H. Demsetz (1972), "Production, Information Costs, and Economic Organization," *American Economic Review*, 62, 777-795.

Barzel, Y. (1987), "The Entrepreneur's Reward for Self-policing", *Economic Inquiry*, 25: 103-116.

BASIX, Annual Reports, 1998-99 to 2007-08.

Coase, R. H. (1937), "The Nature of the Firm," *Economica*, 4, 386-405. Reprinted in G. J. Stigler and K. E. Boulding (Eds.), *Readings in Price Theory*, Chicago: Irwin, 331-351.

Carroll , Archie B. and Buchholtz, Ann K. (2000): *The Stakeholder Approach to Business, Society, and Ethics,* Cenagauge Learning, 7th Edition

Collin, Sven-Olof (1993), "The Brotherhood of the Swedish Sphere: A Third Institutional Form for Economic Exchange", *International Studies of Management and Organization*, Vol. 23, No. 1, pp. 69-86.

Datta, Samar K. & S. Kapoor (1996), "Collective Action, Leadership and Success in Agricultural Cooperatives – A Comparative Study of Gujarat & West Bengal", Oxford & IBH Publishers, NEW Delhi.

Datta, Samar K., Sen, Satyajit & Gupta, Kriti B. (2003): *Contract Theory and Its Application to Sugar Enterprises in India,* CMA Monograph # 204, IIM, Ahmedabad.

Hart, O.D. (1988), "Incomplete contracts and the theory of the firm", *Journal of Law, Economics, and Organization* 4, 119–141.

Jensen, M.C. and Meckling,W.H., (1992), "Specific and general knowledge, and organizational structure", In: Werin, L., Wijkander, H. (Eds.), *Contract Economics*, Blackwell Publishers, Cambridge, pp. 251–274.

Jensen, M. C. and W. H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics*, 3, 305-360.

Johl, S. S. (2006), "Report of the Working Group to Suggest Measures to Assist Distressed Farmers", Reserve Bank of India Report.

NAFSCOB (2006), "Performance of Primary Agricultural Credit Societies, 2005-2006)", National Federation of State Cooperative Banks Limited, Navi Mumbai, India.

NCUI (2006), “Indian Cooperative Movement, A Profile”, National Cooperative Union of India, New Delhi.

Tirole, J. (1986), “Hierarchies and Bureaucracies: On the Role of Collusion in Organizations”, *Journal of Law, Economics and Organizations,* 2, 181-214

Turnbull, S. (1998), “Should Ownership Last Forever?”, *Journal of Socio-Economics*, 27:3, pp. 341–63, <http://papers.ssrn.com/paper.taf?abstract_id=137382>.

Vaidyanathan, A. (2004) “Report of the Taskforce on Revival of Cooperative Credit Institutions”, Reserve Bank of India Report.

Williamson, O.E., (2002), “The Theory of the Firm as Governance Structure: From Choice to Contract” Working Paper, Berkeley

Zingales, Luigi and Rajan, Raghuram G. (1998), "Power In A Theory Of The Firm", *The Quarterly Journal of Economics*, MIT Press, vol. 113(2), pages 387-432