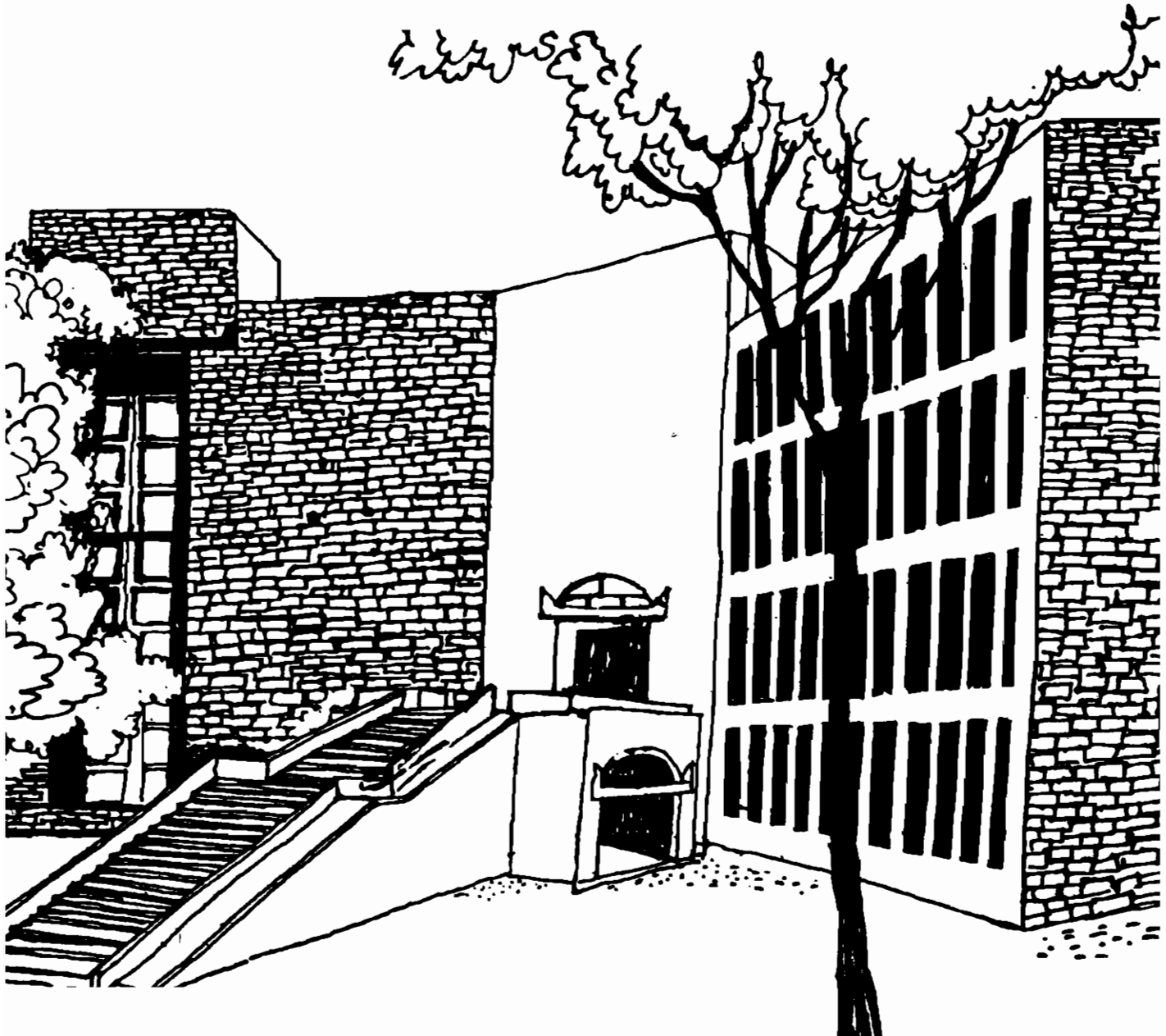




Working Paper



A PERSPECTIVE ON FARMER-MARKET INTERFACE
- RESULTS OF A REVISIT TO SELECTED
VILLAGES FROM WEST BENGAL, GUJARAT
AND MAHARASHTRA

By

Samar K. Datta

W.P.No.99-08-03/1537
August 1999

WP1537

WP

99-08-03
(1537)

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

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD - 380 015
INDIA

250015

PURCHASED

APPROVAL

GRATIS, EXCHANGE

PRICE

ACC NO.

VIREN M SARADHAI LTD

L. L. M. ANKLESHAW

A Perspective on Farmer-Market Interface - Results of a Revisit to Selected Villages from West Bengal, Gujarat and Maharashtra

Samar K. Datta
Center for Management in Agriculture
Indian Institute of Management
Vastrapur, Ahmedabad 380015

August, 1999

Abstract

Markets do not operate in vacuum. They need an institutional structure for them to function competitively and efficiently. This revisit study based on intensive study of eight villages - six from West Bengal and one each from Gujarat and Maharashtra - shows that cooperatives or cooperative-like autonomous and democratic organisations are an important tool to perfect the market. With historically determined institutional imperfections given from the past, neither the so-called free market system nor government-initiated process of intervention and development nor even exclusive reliance on the cooperative route can really achieve sustainable growth and equity in the countryside. Cooperatives too need supporting background rules and structures to make them function properly. In the absence of the necessary supporting structure, cooperatives tend to be parastatal and inefficient organisations, and hence totally irrelevant organisations in the process of development. There is no short-cut to achieve development. This study therefore favors promoting multiple organisations including NGOs, which can act as competitive check on one another. The country has a lot of bad experiences in development, but at the same time it has enough good experiences too to see and learn from. There is no better way to achieve dissemination of knowledge than providing to our villagers, their leaders and Panchayats a direct exposure to worthwhile experiences.

The author gratefully acknowledges financial support from the Research & Publications Committee of IIM, Ahmedabad, and research assistance from Prasanta Swarnakar Ashis De in conducting this revisit study. The author alone is however responsible for the views and opinion expressed herein.

Section 1. Background of the Study

Most of the existing analysis of production, consumption and investment in the context of rural areas of less developed countries like India has abstracted from the nature of short-term agrarian contracts in land, labor, capital, inputs and outputs, which condition economic activities, and also from the pre-existing non-governmental and indigenous institutions, which influence the terms and conditions of such contracts. It is unfortunate *albeit* true that the existing analysis has also often abstracted from taking into account the nature of interaction between formal and governmental/semi-governmental organisations, on the one hand, and the pre-existing and less formal indigenous organisations, on the other. The result has been misplaced emphasis on one or the other of the three extremes - that is, either governmental and parastatal organisations or unqualified free-market forces or NGOs. Such an extreme approach has almost invariably led to serious loss of time and resources with very little or even disastrous consequence in terms of agrarian development. There are certain fundamental problems with this approach.

First, institutions do not fall like 'manna from heaven'; it requires conscious efforts and often collective support and initiative to generate institutions. Second, as all man-made institutions are amenable to control by vested interests and even liable to subsequent decay, evolution of sound and effective institutions needs appropriate checks and balances often in the form of evolution of a set of rival institutions, which can act as competitive check on each other, besides providing scope for learning by doing from mutual experiences; no single form of institution can be panacea for all sections of the population and for all time to come. Third, institutions appropriate for development cannot be built overnight; it requires sustained efforts and continuous learning by doing to generate such institutions.

It is against this background that a three and a half year's research study was conducted with financial support from the Indian Council of Agricultural Research (ICAR) by the present author in eight carefully selected villages (six from West Bengal and one each from Gujarat and Maharashtra, the latter two villages, which have undergone a fairly long process of development under the auspices of well-known cooperative societies, acting as controls) to overcome to some extent the above-stated lacuna in the existing literature. Assuming both the village-level and individual household-level resources and institutions (including intra-household, long-term and often implicit arrangements within households like extension, fertility, marriages, old-age security, migration etc.) as given, this study has brought out how the terms and conditions of various short-term agrarian contracts are determined and also how these in turn influence household income and investment levels.

For agrarian economies the relevant institutions for development are those which - through suitable influences over and interventions in the underlying economic forces - can provide a healthy interface between the agrarian community, in general and the farmers, in particular, on the one hand, and the markets for resources and outputs, on the other. A healthy interface between the farming community and the markets for inputs and outputs means mechanisms to minimize input risks, output risks, price risks besides maximizing farm incomes through higher productivity, greater value-addition and better marketing of the primary produce as well as of the processed products. The above-stated ICAR study has already brought out how the terms and conditions of input purchase and output sale are decided under the broad influence of various underlying structural parameters including the existing agrarian institutions - governmental and non-governmental. It has also brought out in broad terms the strengths and weaknesses of various village institutions as revealed through the responses of individual households in the context of various short-term agrarian contracts. Unfortunately, there was no scope in that ICAR-sponsored study to go a few steps forward to record the reactions of the various existing institutions to the findings of this study and also to develop a perspective on how the existing institutions can also be moulded to influence the future outcomes in various agrarian markets.

Section 2. Objectives

The present study therefore aims to take the above-stated ICAR-sponsored study to its logical end by accommodating the reactions as well as action plans of the various pre-existing village institutions in response to the findings and observations of that study. It also proposes to bring out the institutional gaps which need to be filled in during the coming years for future growth and development of the relevant village economies. The precise objective is to develop a perspective for evolving strategies, ways and means to fill in the observed institutional gaps in the study villages.

This action-oriented research seems to have provided three distinct advantages. First, it has allowed the author to apprise and sensitize the villagers as well as their local institutions about the study findings together with their implications through interactions and discussion with them. Second, even though institutional changes are usually a long-drawn process, the interactions undertaken during the present study seem to have provided at least an initial feel for the directions in which the local institutions are likely to be moving in the coming years. Third, it gives to the author an opportunity to modify and refine his earlier findings, besides allowing him to develop a future perspective on the subject.

Section 3: Major Hypotheses and the Findings

Before we proceed to describe the design and the major issues confronting the present study, it would be useful to summarise the major hypotheses and findings of the earlier study. This section attempts to do the same, so that it becomes easier to identify the gaps in the earlier study and frame issues for the present exercise accordingly. The hypotheses and findings of the earlier study arise from examination of the incidence, terms and conditions and implications for income and investment of individual short-term agricultural contracts in the form of production input, input service and output contracts, as summarised in Tables 1 through 7.

Table 1
Major Hypotheses & Findings on Agricultural Input Purchase Contracts

Hypotheses	Findings
<p>(1) A strong co-operative organization in a village with appropriate backward and forward linkages is expected to provide incentive for higher cropping intensity, scope for greater value addition through agro-processing and thrust among the producers to shift from subsistence production to production for the market, giving rise to a scale effect. Production at a higher scale obviously involves input demand at a higher scale as well. Thus the first hypothesis is that the existence of strong institutions in village economies tends to increase the scale of input demand. The increase in input demand resulting from such effect may be so high that the cooperative sources may not be adequate to fulfill the total demand and consequently, private sources will also thrive in the process.</p> <p>(2) Just as there is a scale effect from the existence of people's institutions at the village level, there is also scope for reducing the problem of informational asymmetry in input market transactions through institutional interventions. When the quality of inputs cannot be instantly judged, the input market would be typically characterized by the phenomenon of the seller having greater information about the materials than the buyer. A long-standing people's institution as supplier of input would then have the prospect of reducing the information gap between the buyers and the sellers, if such organisations are managed democratically, efficiently and in a transparent manner. On the other hand, in case of a private seller, the risks of adverse selection stand a chance of getting accentuated. Moreover, opportunistic behaviour on the part of private traders may create periodic and artificial shortage in the market for inputs, besides tampering with weights. Therefore, the second hypothesis is that the buyers will have a bias in favour of the cooperatives in so far as their input purchases are concerned.</p>	<p>(1) The first hypothesis regarding the scale effect stands partially confirmed, as is evident from the simultaneous access to both institutional and private sources by the residents of the control villages in general and by the owner-cultivator group of residents from the cooperative villages in particular.</p> <p>(2) The second hypothesis - namely 'bias' in favour of input purchases from cooperative organisations also stands to have tested positive in the villages characterized by existence of strong co-operatives especially for buyers performing at a somewhat lower scale, i.e., the labourers, tenants and others.</p> <p>(3) The interlinking characteristics across the villages and their variations according to the sources of inputs lends further support to the second hypothesis. The institutional sources seem to have concentrated more on factors that are directly related to the quality of the inputs provided. As the institutions are going for more credit and agricultural output interlinkages, it is suggestive of the fact that they are providing the buyers inputs with such quality attributes probably in the spirit of sharing the "gains from trade" mutually among the parties at contract.</p>

Table 2
Major Hypotheses & Findings on Agricultural Input Services Contracts

Hypotheses	Findings
<p>(1) In order to overcome the unevenness in the distribution of the two basic resources - land and labour, in agricultural operations, on the one hand, and also to have enough control over the labour process, on the other hand, a tendency is likely to set in, especially under modern and more commercialised agricultural operations, to substitute labour by capital implements like tractors, pumpsets, threshers etc. Since almost all these equipments have certain minimum capacities, their procurement may not be a profitable proposition unless the owner possesses enough land to ensure capacity utilization. At the same time, a service contract involves considerable risk on the part of the owner of the service equipment. There may be severe moral hazards and opportunistic behaviour on the part of the user with the possibility of an ultimate market failure. Against this background, the first hypothesis is that in case people's institutions like cooperatives enter the market as providers of these equipment services, they may stand a lower chance of risking their assets, provided such organization can effectively solve the market failure problem through evolution of suitable rules and norms of behaviour, besides evolving a mechanism for contract enforcement. In the presence of intensive agricultural activities resulting from higher cropping intensity, greater scope for value addition and strong market orientation, the villagers unable to muster necessary resources to individually own such costly implements by themselves, will feel a strong urge to set up such institutional mechanisms to sort out the market failure problem through hiring in/out of these assets.</p> <p>(2) A pre-existing collective body like a people's cooperative is in a better position to generate markets for hiring in/out of agricultural implement services. In the absence of such organizations, renting services in such equipments will tend to be restrictive and/or involve high rental charges (to hedge against the large private risks). The private rental charges are also likely to involve large monopoly rent elements.</p>	<p>(1) The extent of agricultural input service contracts is closely related to two main factors: (i) the strength of demand - namely, the intensity of agricultural operations, which is quite high for the two agriculturally advanced control villages (Ancheli and Nilewadi) as well as for the two cooperative villages (Sridharpur and Tantibaksha) and the other agriculturally prosperous village of Sarul, and (ii) the supply-side - namely, the extent to which the 'market failure' problem typical of leasing contracts in costly equipments have been overcome through conscious efforts on the part of individuals and village institutions.</p> <p>(2) At both individual and institutional levels, the interface between the two contracting sides developed through physical proximity, familiarity, repeated transactions in the past, and interlinked sets of transactions, seems to have played a crucial role in overcoming the typical 'market failures' problem in such contracts.</p> <p>(3) The special efforts made by some of the collective bodies like Sridharpur Cooperative Bank (catering to the villages of Sridharpur and Tantibaksha), the Netaji Sangh (Kalyanpur) and the Shyamaprasad Institute of Culture (SPIC) (near Sirol) are worth mentioning. The first one - primarily an economic organisation, has clear advantages in designing and managing agricultural implement service contract as compared to the other two organisations, which are primarily non-profit cultural organisations.</p> <p>(4) Not only the service charges of the Sridharpur Cooperative Bank for hiring out the equipments are moderate, but also the presence of this organisation in these markets provides a 'normative' signal to the private market about 'how to behave'.</p> <p>(5) The village level cooperative organisations in the two control villages who used to perform 'market intervention' operations at the initial stages of development, have started gradually withdrawing as the private market for supply of such implement services is stabilizing around a reasonable number of private suppliers who can provide competitive check on one another's behaviour.</p>

Table 3
Major Hypotheses & Findings on Land Leasing Contracts

Hypotheses	Findings
<p>(1) The greater the inequality in the distribution of agricultural land resulting in unevenness in the land-labor ratio within households, the greater the need for leasing in or leasing out of land, other things remaining the same.</p> <p>(2) While the sharing system is predominant all over the world and especially in second-best situations of less developed countries beset with institutional imperfections of one kind or the other, the fixed rent system is generally preferred when the landowner wants to economise on supervision, on the one hand, and the tenant possesses entrepreneurial capabilities to handle the total risks in production and appropriate the residual gains beyond fixed rental payments to the landlord. The incidence of non-registered sharecropping is higher wherever sharecropping is legally banned and/or the general policy climate is prejudiced against sharecropping.</p> <p>(3) Regarding relative input application rates, yield rates and return to the farmer across share and rent contracts, while the traditional theory stipulates that all these figures would be higher in a rent vis-a-vis a share contract, modern thinking is that it need not be the case in the presence of institutional imperfections and also in commercial crops, especially when the landowner actively participates in cost-sharing of inputs.</p> <p>(4) A rent contract considerably economises on cost of supervision, as may be reflected in percentage of supervision time spent by the user-owner during crucial harvesting and threshing operations.</p> <p>(5) The functioning of the farmer-cultivator being largely independent of the decisions of the landowner, the extent of interlinking would be higher in share rather than in rent contracts.</p>	<p>(1) Given fairly strong inequalities in the distribution of land, on the one hand, and the growing problems of monitoring labor, in general and especially in the context of W. Bengal, on the other, entering into land contracts through leasing in/out of land has become a must for a fairly large number of rural households, irrespective of whether such contracts are legally banned or discouraged. Although the incidence of rent contracts and one-season contracts are on the rise, given the legal stipulations and also the expanding commercial settings, sharecropping in both open and concealed form continues to be the most dominant form of land contract in all the villages under the study.</p> <p>(2) Probably because of a mix between traditional and modern settings across the study villages, a rent contract does not usually lead to greater input application rates, output yield rates and return for the farmer. In fact, rent contracts seem to have captured some of the features of a sharing system - in terms of minor cost-sharing and fairly large doses of supervision during the crucial harvesting and threshing operations necessary to ensure prompt rent payment after these operations.</p> <p>(3) Leasing-in contracts in land interlinked with additional labor sale, credit and even output sale contracts between the tenant and the landlord are quite common. The data seems to suggest that, given the market imperfections limiting access of poor tenants to the markets for various resources, interlinking and cost-sharing contribute to efficiency and even greater absolute income to the tenant, although interlinked sharecropping may not be the best option to the tenant in all crops.</p> <p>(4) Across the villages, much greater urge to apply higher doses of modern inputs to augment production and also greater initiative for cost-sharing and interlinked land contracts have been displayed by the relatively advanced cooperative and market-dominated villages. However, interlinking is common everywhere and still continues to cover even apparently non-economic dimensions like 'giving additional allowance to the tenant during a social festival' and 'the tenant approaching the landlord for emergency help'.</p>

Table 4

Major Hypotheses & Findings on Agricultural Labor Contracts

Hypotheses	Findings
<p>(1) Other things remaining equal, supply of labor services will be larger, the greater the incidence of labor and tenant households possessing very little land. However, the entire supply of labor may not find matching demand within the village itself unless there is strong internal demand arising from intensive agricultural operations but with little mechanisation, from elaborate agro-processing activities, or from non-agricultural activities.</p> <p>(2) The incidence of labor contracts will be high and stable in villages engaged in intensive agricultural operations.</p> <p>(3) The larger the scope for application of labor where quality does not matter much and performance can easily be judged through <i>ex-post facto</i> supervision, the greater the incidence of piece-rate contracts in labor.</p> <p>(4) The greater the incidences of sudden peak-level demands in labor, which cannot easily be met through employment of casual labor, the larger the potential use of attached agricultural labor. Since attached agricultural labor enjoying greater trust of the employer is often used for supervising other employees and particularly casual employees, high incidence of attached labor use may simply indicate high order of absenteeism among the owners of land.</p> <p>(5) Attached labor is often employed to hedge against periodic scarcity of casual hands, sometimes in spite of overall abundance of labour.</p> <p>(6) Attached labor is usually paid less than its casual counterpart. But in order to generate more loyalty, payment of wages in kind and supply of perquisites are more frequently resorted to in cases of attached labor rather than in casual wage employment.</p> <p>(7) Because of a longer-term interface between the employer and the employee and the consequent trust generated between the two sides, the incidence of interlinked transactions tends to be higher and along-side supervision during crucial agricultural operations like harvesting and threshing tends to be lower with attached labor than in cases of casual labor.</p>	<p>(1) While the labor and tenant-cultivator households are the major suppliers of labour in all the village types under the study, given odd land-man ratio in general, the owner-cultivator households and even households belonging to the 'others' category of occupations are sometimes found to be sellers of labor in the market place. Given the supply side picture, however, steadiness in labor employment across seasons is observed only in those villages, where there is steady demand arising from mainly intensive agricultural operations as well as elaborate agro-processing activities throughout the year. Initiation of some government programmes through joint forest management has hardly contributed to the steadiness in demand for labor, in view of the meagre scale and size of such operations.</p> <p>(2) Although agricultural labor is predominantly hired against time-rate wages (mostly daily wages), piece-rate wage payments are also observed in some of the villages mainly in plantation-type activities where quality is not an important attribute of the job and that too can easily be monitored after the fact. Attached labor employment for at least one agricultural season is observed in those villages with fairly continuous nature of agricultural activities with occasional short-duration peaks, to overcome the risks of non-availability of casual hands, or to monitor casual hands through more-trusted attached laborers by absentee landlords.</p> <p>(3) Incidence of kind payment and supply of meals to casual laborers, though less as compared to the same for attached agricultural laborers, are still observed in some of the villages primarily as a means of economising on labourer's time and the risks of market transactions by the laborers. The same device also ensures that the laborer himself (rather than his other family members) consumes enough to maintain his work efficiency.</p> <p>(4) Perquisite payments whether in the form of advances, supply of clothings and special benefits during social festival are also used in varying degrees across the study villages, presumably to build up goodwill and thus influence future labor supply.</p> <p>(5) Yet another device used to influence labor supply is to enter into labor transactions which are interlinked with mostly credit and to a lesser extent with input purchase and output sale by the labourer. This last-mentioned device, though more common with attached laborers, is also frequently used in casual labour employment in the government activity dominated and market-dominated villages. Interlinked labor transactions with consequent exploitative overtures are seen relatively less in the cooperatively-active villages.</p> <p>(6) While all agricultural employment is especially monitored during the crucial harvesting and threshing operations, its incidence is still higher for casual rather than for attached labor employments. Again, the cooperative villages seem to be emphasising more as compared to the other villages on supervision of casual labor.</p>

Table 5
Major Hypotheses & Findings on Agricultural Credit Contracts

Hypotheses	Findings
<p>(1) With the process of development, in general, and of formal sources of credit (whether from commercial banks or from cooperatives), in particular, the incidence of informal (i.e., private) sources of credit would go down.</p> <p>(2) The relative incidence of fixed capital as well as working capital loans (as opposed to other types of loans) is likely to be higher in the relatively developed villages and especially in those villages, which are engaged in production of long duration commercial crops and/or engaged in agro-processing and value-addition activities.</p> <p>(3) The traditional impression about the private credit market, especially in the context of backward villages, is that this market is dominated by an exclusive class of rural moneylenders, who underprice collateral, charge usurious rates of interest and use various manipulative devices even to misappropriate the collateral belonging to poor borrowers. These traditional problems may have been overcome in the sample villages with progress of time.</p>	<p>(1) There is a strong 'scale' effect of development - that is, strong demand for both formal and informal credit arising from intensive agricultural operations and larger value-addition activities. There is also some amount of bias in favour of cooperative credit created in the process of development.</p> <p>(2) The larger demand for both types of credit (that is, complementary of the two sources of credit) in response to development seems to have arisen from the tendency of formal credit to specialize relatively more in production loans and of informal credit to specialize relatively more in consumption loans.</p> <p>(3) Although the cooperatives too have started supplying small amounts of consumption credit to members and even to trusted non-member customers (especially in case of Ancheli), neither it has replaced nor is it likely to replace private credit.</p> <p>(4) The bulk of credit requirements being fulfilled by well-managed cooperatives, in cooperatively strong villages, cooperative credit has not only restricted the market for informal credit but also provided a competitive check on the functioning of informal credit.</p> <p>(5) While the formal sector non-cooperative credit has usually insisted on marketable collaterals like land and farm/non-farm assets, the cooperatives have often given interlinked loans against institutional membership (that is, loans against input purchases and output sale by the borrowers). Both cooperative and commercial bank credit has supplied IRDP, JRY-type loans on political considerations against no collateral but with highly debatable prospects of loan repayment. The informal sector, on the other hand, has almost invariably supplied interlinked credit at nearly zero explicit interest rate and in a large number of cases without any collateral. Most of these private credit cases often involve interlinked labour sale transactions and interlinked output sale transactions (i.e., forward labour and output sales) and less frequently interlinked input purchase transactions, where the borrower pays/receives a price different from the spot market price, the difference accruing to the lender as implicit interest charges.</p> <p>(6) Given the fairly high seasonal fluctuations in output price especially in the West Bengal context, on the one hand, and the general incapability of the farmers to hold and store the harvest for a more remunerative price in the future, on the other, there is huge scope for implicit interest earning on interlinked credit against forward output purchases by the lenders.</p> <p>(7) While interlinked cooperative credit has added to the efficiency of credit, interlinked private credit seems to have sometimes added another dimension - a rent element within the implicit and effective interest charges.</p> <p>(8) While no exclusive class of private moneylenders could be found in any of the eight villages, interlinked credit transaction is the rule rather than an exception especially in case of private credit. Moneylending seems to be a part of the regular business activities, which use credit as an interlinked device to ensure enough input and output marketing activities for the lenders besides timely repayment of loan. Private</p>

	<p>lenders who are owner-cultivators or labour households in terms of main occupation, however, use credit as an interlinked device to ensure timely availability of labour on their lands usually at a price lower than the market price.</p> <p>(9) While there appears to be a 'rent' element in these observed price differences, these can hardly be described as ruthless exploitation as the traditional notion of a moneylender seems to suggest.</p> <p>(10) Given the person-specific functions the private moneylenders have been providing through interlinked credit, it appears there is no close substitute for these functions, especially in the context of consumption credit.</p> <p>(11) Only in cases of production credit, well-functioning local cooperatives seem to have created fairly good alternative to private credit as well as the commercial bank credit. While these cooperatives are not totally free from bias in favour of economically strong classes like owner-cultivators, traders and salaried class, the bias seems to be much moderate as compared to the same for commercial bank credit.</p> <p>(12) It appears commercial bank credit, which is often non-interlinked in nature and sometimes given against no collateral purely on political consideration, does not seem to have much promises for the future, at least in the rural segment of the country.</p>
--	---

Table 6

Major Hypotheses & Findings on Agricultural Output Sale Contracts

Hypotheses	Findings
<p>(1) The smaller the significance of subsistence farmers producing for home production and/or the greater the significance of cash crop production, the greater the incidence of output sale.</p> <p>(2) In the absence of regulated markets in primary agricultural produce, the farmer's gain is critically dependent on the existence of genuine cooperative organisations which can undertake at least some sorting and grading operations to achieve a better price for the farmer's produce.</p> <p>(3) The gain to the farmer and the village community is larger, the greater the scope for value-addition on crop and the greater the control the farmer can exercise on such activities through a suitable farmer-owned and farmer-managed organisation.</p> <p>(4) The existence of a competitive market in secondary commodities (i.e., agro-processed materials) ensures a steady flow of returns to the farmer-owned marketing organisations, other things remaining the same.</p>	<p>(1) The incidence of annual output sales is no reliable index of the extent of marketable/marketed surplus in the context of the studied villages for a number of reasons.</p> <p>(2) One cannot lose sight of the affluence reflected in the fairly stable (across seasons) and large number of output sales (a significant proportion taking place through cooperatives) in the cooperatively active villages both inside and outside of W. Bengal.</p> <p>(3) While owner-cultivators and households belonging to the 'others' category of occupational groups are the largest participants in output sales, quite a few tenant-cultivators and labor households have also been found to be participating in such sales in the cooperative villages.</p> <p>(4) Although the role of cooperative in agro-processing, value-addition and sale in premium markets, typical of such organisations in the control villages, is largely missing in the W. Bengal context, it has enabled the farmer - irrespective of his occupational class, to take advantage of some storage facilities and realise at least the prevailing market price, if not a higher price, without incurring any significant amount of transaction costs. This is especially true in the cooperatively-active villages of Sridharpur and Tantibaksha.</p>

	<p>(5) The experience cooperatively-active villages from W. Bengal further reveals that cooperative intervention has also a 'sobering' effect on the character, terms and conditions of private output sales. In the absence of similar intervention in the other villages of W. Bengal, private output sale generally involves realisation of less than the market price, besides higher transaction costs and larger and unplanned delay in receipt of payments.</p> <p>(6) The situation is quite dismal with respect to less known crops, where the producers based on their traditional and intimate knowledge of the local agro-climatic features are quite justified in continuing their efforts in raising such crops, but their knowledge base for scientific interventions in production, processing and marketing is conspicuously zero or near-zero, inspite of the existence of a number of government and semi-government organisations in a number of crops across the length and breadth of the country.</p> <p>(7) In spite of the traditional prejudice against interlinked transactions, it is the interlinked credit-input-output transaction, which is the root of cooperative success, as evidenced in the cooperatively active villages of W.Bengal, Gujarat and Maharashtra. This is in sharp contrast to the typical credit-labor-output interlinkages of private transactions, which lead to quite a few losses to the seller.</p>
--	--

Table 7

Impact of Participation in Short-term Agricultural Contracts

<p>(1) In view of the longer and more effective process of development in the study villages of Gujarat and Maharashtra, it is understandable that the incomes per head and total household investment per annum would be larger in these villages as compared to the West Bengal villages, but the wide gap in terms of incomes especially with respect to the backward forestry villages of West Bengal and also the deplorably low levels of investment in West Bengal in general appear quite disturbing.</p> <p>(2) West Bengal has apparently succeeded in generally and sharply raising the incomes of tenant and labor households having strong political clouts, but it seems it has often happened at the cost of incomes of the owner-cultivators and without the necessary positive effects on investment to sustain the process of development.</p> <p>(3) Regression models to explain variations in per head annual income and per head annual investment have brought out three important facts in this context (besides confirming the roles of usual factors like per head agricultural land availability, the extent of irrigation, percentage of earning members in family and percentage of household income from business and salaries):</p> <ul style="list-style-type: none"> - Only land contracts have positive income-augmenting effects. - Labor sale and implement hiring contracts have negative effects and the other contracts do not have any stable and significant effect either on income or on investment. - An intangible asset like household familiarity has strong income-augmenting effect, meaning thereby that markets are not anonymous in terms of their distributional implications. - SC/ST/OBC households have consistently higher incomes especially as compared to their caste-Hindu counterparts - not simply because of their statistical dominance, but because of ownership and control of major productive resources by them in the context of Gujarat and Maharashtra. The same pattern is also observed in West Bengal, but apparently because of an altogether different reason - namely, their
--

stronger political clout. This trend in West Bengal, unless properly qualified beyond a limit, may have deleterious implications for sustainability of the development process.

- A good and sound cooperative, irrespective of the states, has a strong positive effect on investment, as it facilitates transactions and create a favorable inclination and atmosphere for commercial transactions. This is however not true of para-statal and ineffective cooperatives as usually seen in the country (also seen in the context of Kalyanpur and Sarul).

Section 4. Conceptual Framework & Study Design

There are six broad contractual institutional arrangements for farmer-market interface in agricultural commodities (displayed in Table 8). One of the options - namely, captive farming by industry, which tends to degenerate farmers into wage labourers, has not found much favor with the policy-makers in this country. Another option - namely, contract farming is relatively new, is restricted to only certain small segments of the country and to only certain agricultural commodities and has evoked only mixed reactions not only from the industry but also from the farming community. So, only the rest four options have maximum relevance in most rural areas of the country and especially in the context of the study villages. These four options in the output market are then coupled with alternative institutional arrangements with respect to supply of various factor inputs including services. With respect to factor inputs, the institutional arrangements include purchase and sale through private market, through government and quasi-government organisations and through NGOs and cooperative bodies. As Table 9 demonstrates, there are actually four options. While the first - interlinked market transactions - often relate to pre-market (e.g., semi-feudal) institutional system, the second and the third alternatives correspond to the regular free market and government regulated systems, respectively. The fourth scenario is one where farmer-controlled and farmer-managed organisations play significant roles as countervailing powers to free market and government controlled systems in deciding on the final outcomes in the market place.

Table 8
Broad Institutional Options for Farmer-Market Interface in Relation to Agricultural Output

Sl. No.	Farmer producing primary goods, i.e. raw materials	Agri-business firm engaged in agro-processing
1	Farmer as wage labor to captive farm	Captive farming
2	Sale in primary spot market	Purchase from primary spot market
3	Sale through commission agent in primary spot market	Purchase through commission agent from primary spot market
4	Sale through farmers' cooperative engaged in pooling and at most primary processing	Purchase from farmers' cooperative
5	Direct sale to industry under contract farming	Direct purchase from farmer under contract farming
6	Farmers' cooperative owning, controlling & managing agro-processing industry and selling in secondary market	Professionals working in farmers' cooperatives

Table 9
Broad Institutional Options for Purchase & Sale of Inputs & Input Services

Sl. No.	Alternative options
1	Interlinked market transaction
2	Non-interlinked market transaction
3	(Usually) Non-interlinked transactions with government and quasi-government organisations
4	Interlinked/non-interlinked transactions with local farmer organisations / NGOs

As it can be seen from Table 10, the selected villages capture fairly well the broad spectrum of institutional arrangements with respect to purchase and sale of agri-inputs as well as agri-outputs.

Table 10
Prevailing Pattern of Institutional Arrangements with respect to Purchase and Sale of Agri-Inputs and Agri-Outputs in the Selected Villages

Broad Patterns	Absolutely free market	Government intervention	Cooperative intervention	NGO-intervention
1. Spot market for agri-inputs and primary agri-outputs with/without commission agents	Sarul (Bengal)	Kalyanpur (Bengal) Dharrasole (Bengal)	Ancheli(Gujarat) Nilewadi(Maha'tra) Sridharpur(Bengal) Tantibaksha (Bengal)	Kalyanpur (Bengal) Sirol (Bengal)
2. Market for secondary (i.e. agro-processed) outputs	-	-	Ancheli(Gujarat) Nilewadi (Maha'tra)	-

The present study approached all the village level collective bodies (shown in Annexure 1) irrespective of whether these are directly involved in agrarian contracts (a list of the organisations directly involved in agrarian contracts provided in Annexure 2). The methodology followed for conducting this study was interaction through group interview and discussion with all relevant institutions within these study villages, followed up by further interaction with a limited number of relevant governmental and non-governmental organisations at higher and policy-making levels (for example, the higher-tier *panchayat* bodies, the Directorate of Land Records & Survey - especially in the context of W. Bengal, the relevant District Central Cooperative Banks, the relevant District Rural Development Agencies (DRDAs), the Forest Department, Government of W. Bengal, the R.K. Mission *Lokasiksha Praishad* at Narendrapur). All these meetings were fixed in advance and held in two different stages. During the first stage, the interaction had taken place between the Research Assistant, who had conducted the earlier study in these villages, and the selected households from each village (about 20) picked up earlier following a stratified random sampling procedure to study the details of various short-term contractual arrangements. During the second stage, the interaction meetings were held between the author and the relevant collective bodies in the study villages. In both the stages, however, discussion and interaction were preceded by circulation of results of the earlier ICAR study. The following are some of the major questions/issues, which were taken up for detailed discussion in course of the above-stated meetings and interaction sessions:

Issues relating to production inputs (like seeds, fertilizer, pesticide etc.):

- What differences does the existence of a strong cooperative or cooperative-like organisation make in terms of agricultural input supply to farmers? Why have a large number of cooperatives in the study area failed to perform this input supply function?
- How do cooperatives and private traders in inputs coexist even in areas having strong records of cooperative success? Is there any complementary between the two types of organisations? If so, can this complementary be translated into strategic alliances between the two (i.e., private traders and cooperatives/NGOs) in relatively backward regions for future rural development? What has been the effect of functioning of successful cooperatives on the behaviour of private traders in the context of Ancheli and Nilewadi (taken as control villages in the earlier study)?

Issues relating to credit services:

- What strategies are being followed by the formal credit institutions (including cooperatives) in view of the strong complementary displayed between their loans and loans from informal moneylenders in the context of these villages? Why have the formal credit institutions failed to take care of the entire production credit needs, in which they have specialised?
- Why have not the formal credit institutions been able to effectively apply the idea of interlinked credit (where the loanee is required to purchase certain inputs from the creditor and also sell his output through the creditor - a process which allows the creditor not only to monitor the use of the loan but also to ensure timely repayment) to take care of the mounting problems of default, in general and especially

with respect to the IRDP type loans, which are given mostly on extra-economic considerations ? What are the roles and future action plans of the *panchayats* in the context of credit defaults ?

- Why have not the notion of self-help groups made much headway in the context of W.Bengal villages in general and in the context of the selected villages in particular, especially when a significant proportion of credit is being handled by private moneylenders and there is enormous scope for profitable trade through storage?
- How to boost up savings and investment in W. Bengal at individual as well as at collective levels, following upon the examples of the control villages of Gujarat and Maharashtra ?

Issues relating to land lease contracts:

- How can the large number of sharecroppers (most of whom are already registered) in the context of W.Bengal be made a part of the development process through increase in their input rates, yields and value-addition on their output ?

Issues relating to labor contracts:

- How to overcome the limitations of a meagre quantity of induced labor employment generated by the government departments in the context of forestry villages, especially when there is huge scope for value-addition and even complementary activities, which are allied to forestry ? How to strengthen the financial position of the Forest Protection Committees? Is it possible to convert the Forest Protection Committees into self-help groups, which can generate enough employment opportunities from within the villages by undertaking a large number of developmental activities for themselves, without keeping them critically dependent on governmental help in one form or the other?
- How to overcome the problem of declining labor standards and labor efficiency often alleged by agricultural employers in the context of W.Bengal ? How to free the labourers from the 'exploitative' mode of labor contracts which are generally interlinked with credit? What is the thinking pattern of *panchayats* and other developmental organisations especially in the context of W.Bengal ?

Issues relating to other input services:

- How has the 'market failure' problem typical of the markets for agricultural implement services been or not been overcome by the cooperatives and NGOs in the context of these villages ? Why are the cooperatives and NGOs displaying signs of withdrawal from their market intervention strategies with respect to these input services? Is it happening as a matter of a deliberate strategy or due to certain compulsions and/or failures ?

Issues relating to output:

- Given high seasonal variation in output prices, especially in the context of W.Bengal, why have not collective bodies seriously taken up the problem of storage of agricultural crops, instead of allowing such crops to be sold in large quantities at almost throwaway prices immediately after the harvest?
- Why have not the cooperatives in W.Bengal taken up horizontal diversification as well as vertical integration of their activities unlike their successful counterparts in the control villages of Gujarat and Maharashtra ? If interlinked credit-input-output transactions are at the roots of cooperative success in the control villages, why cannot the cooperatives or NGOs in W.Bengal follow the same practices? Do the constraints lie in their lack of funds, or in poor leadership or in inappropriate policy climate or something else ? Can strategic alliance with private traders and industry help overcome the constraints ? Can the traditionally condemned village functionaries like local merchants, commission agents, moneylenders be assigned a developmental role through appreciation and promotion of their functions under suitable checks and balances ?
- How to promote the farmers producing less well-known crops like rid, beetle leaf, mustard, various types of forest produce, which are quite suitable to their agro-climatic conditions and financial means ?

- How to stop 'drainage' of incomes of W.Bengal farmers - apparently due to high labor costs and low realization of market prices on primary sales ?

General issues:

- While traditional economic theory preaches only gains from trade for all trading partners, why is this standard theorem far from true with respect to a number of agrarian contracts in the context of these study villages ? How to account for these facts ? Is it due to the phenomenon of 'unequal exchange' ?
- Doesn't the finding that an intangible asset like household familiarity with local VIPs has strong income augmenting effect undermine the role of markets and highlight the role of political and other extra-economic considerations in the development process? How to cope with this finding ?
- How to change the mindset and functioning of parastatal local bodies including cooperatives and even NGOs who are perennially dependent on the government exchequer ?

Section 5. Findings from the Revisit Study

Tables 11 and 12 provide the overall farmer-market interface scenario in the study villages with respect to various input and output transactions. The detailed responses to the questions/issues raised in the earlier section are given below.

Sale of Physical Inputs of Production: There are four main types of physical inputs the farmers buy for conducting crop production in their fields - fertilizer, pesticide, manure and seed. Contrary to the high importance of modern hybrid seeds, no cooperative in the study villages is supplying seed excepting in the cases of Ancheli and Nilewadi, where the sugar cooperatives are supplying good planting materials to their members only for sugarcane cultivation. It appears the country in general and the cooperatives and farmer organizations in particular are yet to appreciate the virtue of good seeds. But given the fact that there is an informational asymmetry problem with respect to seeds in view of the fact that a seller would usually have more information than the buyer on the materials being sold, there is an acute need for a farmer organization which can mediate between the seed producing laboratories/companies, on the other hand, and the farmers, on the other, through sale of authentic seeds and provision of extension services at reasonable prices. In the absence of consistent efforts to promote and popularise use of good seeds by the cooperatives, the seed business is currently being handled mostly by the private traders and multinational companies, and still the results are far from optimum. It is not clear why the national level organisations like IFFCO and KRIBHCO are not taking advantage of the existing gap in seed business, inspite of their strong financial position and a fairly good distribution network across the country. In the seed business, even if the parastatal state or national level cooperative organisations do not go for production and distribution of quality seeds, there is ample scope for strategic alliance between the private producers of seeds, on the one hand, and farmer organisations at the ground level, on the other. The latter can substantially augment the use of quality seeds through providing the necessary extension service alongside marketing of seeds to the farmers.

There is ample scope for producing quality manure at the village/taluka level with the help of suitable farmer organisations through application of modern scientific methods. Currently, this is being practised by the cooperatives in only two of the study villages (namely, Ancheli and Nilewadi). As this activity does not require huge capital investment, this can be taken up easily by the existing cooperatives or local NGOs in the villages of Sridharpur, Tantibaksha, Kalyanpur, Sarul and Sirol. In case of Dharrasole, the Forest Protection Committee itself or a sub-group under it may be encouraged to undertake this function.

As the pesticides market is relatively more competitive as compared to the same for other physical inputs, probably there is no need for cooperative action to prevent charging of excessive price by the private traders. But a farmer organisation can still perform two important functions. First, it can prevent possible tampering in the quality of pesticides by corrupt traders. Second and probably more important, cooperatives can educate and convince the farmers about unwarranted use of pesticides by switching over to better bio-technological practices, which can in fact lead to larger production of high-valued organic products in the countryside. Although the first function is being performed by the cooperatives in the

villages of Ancheli, Nilewadi and to a lesser extent in the villages of Sridharpur and Tantibaksha, the second function seems to be conspicuously absent even in these villages.

Table 11
Broad Features of the Input Market Situation in the Study Villages

Villages	Factor Inputs: fertilizer etc.	Land	Labor	Credit	Other factor services
Ancheli	Coop supplying everything except seeds	Informal sharing system with clear stipulation on cost-sharing occasionally found	Labor scarcity; high wages & hardly any attached labor	Dominant coop credit usually interlinked; good repayment; low incidence of DRDA loans	Input equipment services provided or arranged through group loan; extension service provided
Nilewadi	Coop supplying everything except seeds	Informal sharing system with clear stipulation on cost-sharing occasionally found	Labor scarcity; high wages & hardly any attached labor	Dominant coop credit usually interlinked; good repayment; low incidence of DRDA loans	Input equipment services provided or arranged through group loan; extension service provided
Sridharpur & Tantibaksha	Coop supplying everything except seeds	Both formal & informal sharing system coexisting with rising trend toward fixed renting; support services to farmers available from coop	Labor scarcity; high wages & hardly any attached labor	Dominant coop credit usually interlinked; good repayment; attempt to start SHGs	Input equipment services provided or arranged through group loan; extension service provided
Kalyanpur	Mostly supplied by private traders; a local club has only initiated input sale activity	Both formal & informal sharing system coexisting with rising trend toward fixed renting; coop support services to farmers not available	Unemployment & low wages; attached labor exists	Mostly private loans; limited commercial bank lending but beset with recovery problem; fairly high incidence of DRDA loans	Some input equipment services provided by local club
Dharnasole	Supplied exclusively by private traders	Both formal & informal sharing system coexisting with rising trend toward fixed renting; coop support services to farmers not available	Unemployment & low wages; attached labor exists	Mostly private loans; limited commercial bank lending but beset with recovery problem; fairly high incidence of DRDA loans	Supplied exclusively by private market
Saral	Galsi SKUS meeting only a small fraction of the needs; farmers almost totally dependent on private traders	Both formal & informal sharing system coexisting with rising trend toward fixed renting; coop support services to farmers not available	Low unemployment & high wages; highly organised labor with occasional labor unrest	Mostly private & commercial bank loans; limited coop sector loan, but beset with recovery problem; low incidence of DRDA loans	Supplied exclusively by private market
Siral		Both formal & informal sharing system coexisting with rising trend toward fixed renting; coop support services to farmers not available	Unemployment but high wages due to proximity to Calcutta	Mostly private & commercial bank loans; limited coop sector loan, but beset with recovery problem; low incidence of DRDA loans	Some input equipment services & irrigation provided by local NGO called SPIC

In the villages of Ancheli, Nilewadi, Sridharpur and Tantibaksha, not only is the farmers' demand for fertilizer relatively high, but also this demand is fully met by the local cooperatives through interlinked sale of fertilizer against sale of farmers' produce (sapota, paddy, mango etc. in case of Ancheli, sugarcane in case of Nilewadi and paddy and potato in cases of Sridharpur & Tantibaksha) through the cooperative network. In the other villages, there are three types of problems. First, in some of them there is no such

farmer organisation. Even when a Forest Protection Committee or a local NGO/club exists, such an organisation is not yet mentally prepared to undertake this function. Second, even if mental preparation is there, working capital shortages stand in the way of making withdrawals of fertilizer for redistribution. Third, presence of certain restrictions in the distribution of fertilizer (which favor large cooperatives) has led to corrupt practices with respect to fertilizer distribution by private traders and even by some cooperatives. As a result, cooperatives couldn't make much impact in some of the study villages even when they were found to be existing. Where fertilizer use is high, a farmer organisation can create awareness about judicious use of it, whereas if the use rate is low, the farmers can be encouraged by such organisations to use more of it to raise productivity or the farmer may be guided to move in the direction of organic production. Given considerably lower level of environmental awareness in India in general, such a perspective is simply missing even in the cooperatively strong villages.

Table 12
Broad Features of the Output Market Situation in the Study Villages

Villages	Field crops	Dairy products	Forestry products	Grocery items
Ancheli	Coop involved in value-addition and marketing of field crops and dairy products		Not applicable	Mostly sold through coop consumer store
Nilewadi	Coop involved in value-addition and marketing of field crops and dairy products		Not applicable	Mostly sold through coop consumer store
Sridharpur & Tantibaksha	Coop involved in storage and marketing of raw materials	No organised effort for marketing of dairy products	Not applicable	Mostly sold through coop consumer store
Kalyanpur	Private sale through interlinked credit and/or input purchase transactions	No organised effort for marketing of dairy products	Mostly private sale through market; some attempts being made by local club to have organised sale	Purely market transaction
Dharrasole	Private sale through interlinked credit and/or input purchase transactions	No organised effort for marketing of dairy products	Exclusively private sale through market	Purely market transaction
Sarul	Private sale through interlinked credit and/or input purchase transactions	No organised effort for marketing of dairy products	Not applicable	Purely market transaction
Sirol	Private sale through interlinked credit and/or input purchase transactions	No organised effort for marketing of dairy products	Not applicable	Purely market transaction

Leasing of Agricultural Land: Gujarat and Maharashtra being part of the erstwhile Bombay state, land reforms have been fairly well implemented in the villages of Ancheli and Nilewadi. As tenancy is not formally allowed in these two states, only informal sharing system of tenancy is observed, but too very infrequently. In the West Bengal villages, on the other hand, we observe both formal as well as informal share-cropping, besides a recent trend toward seasonal sharecropping and even fixed-renting (though the latter is prohibited by law). Although the cooperatives have no formal agenda in this regard, the relatively greater bargaining power of tenants in the cooperatively strong villages of Sridharpur and Tantibaksha is reflected in lesser incidence of informal and seasonal sharecropping and of fixed-renting in these villages as compared to the other villages under this study. The second prominent feature of the cooperatively strong villages is that the cooperatives have provided the tenants access to the necessary inputs, which are complementary to land, and also the facility of better storage and marketing of their output - all leading to steady improvement in the status of the tenants and thus success in the program of land reforms. This is conspicuously missing in the villages where cooperatives are weak or non-existent. Although the villages of Kalyanpur and Sirol have one local club or NGO, they are still too weak - both financially and in terms of knowledge and skill - to perform this function. Although the state of West Bengal is known for its emphasis on land reforms, it seems to have taken a narrow view of land reforms in the sense that it has apparently been more serious about distribution of surplus land to land-hungry people and protecting the rights of tenants through registration rather than in providing the complementary modern inputs including credit, irrigation, extension, agro-processing and marketing services etc. to these people to raise their productivity and income levels. There seems to be a general lack of awareness and conviction in West-Bengal about

the role of autonomous farmer economic organisations and self-help groups in improving the lot of laborers, tenants and small farmers. The little bit of efforts by the Sridharpur Cooperative Bank to help these economically weaker communities through self-help group approach and other devices seems quite insignificant as compared to the requirement (see Table 13).

Labor Employment: The West Bengal rural employment scenario provides a sharp contrast to the generally abundant employment opportunities available against favorable terms and conditions in the two study villages from Gujarat and Maharashtra. The reasons seem to be three-fold. First, West Bengal does not have farmer economic organisations which can be looked upon as counterparts to the Amalsad Society (for Anchell) or the Warana Cooperative Complex (for Nilewadi). Second, most existing cooperatives in West Bengal are financially weak and parastatal in nature. As a result, neither do they have the will nor the financial capability to undertake agro-processing, value-addition and business diversification activities to multiply income and employment opportunities in the countryside. Third, even when the funds are not the problem (as for example the case with Sridharpur Cooperative Bank), irresponsible trade union movement often discourages investment in forward linkage activities. Although the local club named Netaji Sangh in Kalyanpur and the local NGO called SPIC in Sirol do have interests, they lack the necessary exposure and experience to start the necessary value-addition activities to augment income and employment opportunities. While Forest Protection Committees have been formed in Kalyanpur and Dharrasole with the primary focus on forest protection, neither the Forest Departments nor the sister governmental departments have come forward to improve their vision and capabilities so that these organisations themselves can spearhead the process of rural development.

Table 13
Coverage and Default on Loans to Self-help Groups and Unemployed Youth by the Sridharpur Cooperative Bank

Year	No. of Persons Benefited	Loan Amount (Rs.)	Default Amount (Rs.)
Self-Help Group Scheme			
1993-94	1	3,000	-
1994-95	8	52,110	-
1995-96	6	53,867	5,295
Unemployed Youth Credit			
1988-89	8	30,000	-
1989-90	4	16,000	-
1990-91	5	15,000	-
1991-92	1	1,000	-
1992-93	2	20,000	3,000
1993-94	3	3,000	15,000
1994-95	11	1,19,000	16,000
1995-96	12	1,20,000	17,225

Supply of Rural Credit: With respect to rural credit, the following four features came out prominently in course of discussion and further interaction with the villagers as well as the various collective bodies in these villages:

- Formal commercial bank as well as cooperative credit have in general failed to meet the credit needs of the villagers - partly because of their own credit design and partly in response to the high incidence of default on loans, which has choked the continuous flow of funds back to the banking system. Credit cannot stand alone. Unless credit leads to higher productivity and incomes of the borrower, there is no way the borrower can repay the credit with interest, even if he has the will to repay. This means credit can succeed if and only if it is supported by bankable projects, which goes deeper into the borrower's consumption pattern, input purchases, production, processing, marketing as well as savings and investment systems and it is also monitored vigorously not only to ensure that the benefit-cost ratio is well above unity, but also to ensure that risks of one kind or the other do not jeopardise the calculations. Unfortunately, that systemic view of credit is hardly taken either by the banks, or by the political system including the *panchayats*, which seem to be suffering from an acute deficiency of knowledge of how to prepare, monitor and implement credit-worthy projects at both individual and collective level, and how actually such projects are being successfully implemented in other parts of the country without running into the problem of willful or non-willful defaults. In the absence of an appropriate response from either the formal commercial banking system or from the local cooperative banks, the result is invariably high

incidence of DRDA-type loans provided through political rather than economic considerations and finally leading to high rate of defaults, on the one hand, or high order of informal sector consumption and even production loans usually provided against explicitly or implicitly high rates of interest. The implicitly high interest on informal loans arises from various interlinking devices whereby the lender appropriates money through combinations of interlinked labor purchase transactions, or interlinked input sale transactions, or interlinked output purchase transactions vis-a-vis the borrower at prices different from the prevailing market price. This is the general picture in most of the selected villages - especially in the villages of Kalyanpur, Dharrasole, Sarul and Sirol. Given this general picture about credit, it is therefore no wonder that states like West Bengal would have low credit-deposit ratio and the deposits from such states would flow to other states to support their credit-worthy projects, while the former group of states would have little alternative other than approaching international agencies for supporting their public sector projects.

- One type of response to the above-stated scenario is provided by the formal credit system itself through creation of self-help groups (SHGs) among the borrowers so as to use peer pressure as a device to cut down the usually high risk of loan default. There are three observed problems with the SHG approach in general and especially in the context of West Bengal. First, it has not picked up well except in certain pockets of the country - partly because of lack of knowledge and exposure of the people who matter in this regard, and also partly because of a general lack of political will to free the poor rural households from their regular dependence on the political masters. Second, even if it has taken some roots - as for example in the case of Sridharpur and Tantibaksha, thanks to the efforts of the Sridharpur Cooperative Bank - it is quite insignificant as compared to the needs. One cannot replicate the same scheme (e.g., rickshaw-pulling, vegetable-vending, tailoring shop) successfully across a large number of people in one village. So, unless fresh and innovative schemes are developed, SHG approach is bound to create an insignificant impact. Third, unless SHGs are preceded and continuously nourished by formation of thrift groups among economically weaker sections including the women-folk, the SHG movement too is likely to flourish merely in terms of quantity and size and not in terms of quality. It is high time for the Panchayats and rural banks - more so for those from West Bengal - to give the necessary exposure to the successfully functioning women thrift groups, which have been functioning for quite some time under the guidance of the Cooperative Development Foundation in the state of Andhra Pradesh.
- The success of cooperative credit with nearly cent per cent recovery in the context of Ancheli, Nilewadi and also Sridharpur and Tantibaksha seems to be due to four main reasons. First, the cooperatives are autonomous democratic organisations and not parastatal bodies. They provide credit after thorough and objective scrutiny of each case and not because of political reasons, and even after a loan is given, they monitor each case whether loans are being properly used. Second, they have an incentive-disincentive structure to handle good and bad performance of loans. Regular repayment of loan is rewarded with lower interest rates, whereas willful default, if any, is heavily penalised by blacklisting such borrowers and denying them any future access to loans. All of them have a flexible structure to handle cases of non-willful default - through rescheduling of repayment installments. Sridharpur Bank has even once cultivated the borrowers' land using the borrowers as wage laborers, when the latter became financially broke to meet the costs of cultivation. Amalsad PACS gives interest-free loans upto certain amounts to reward its loyal members, if loans are repaid within three months. Third, almost all loans are interlinked with input purchases and sale of output through the same or affiliated cooperative organisations, which not only facilitates loan monitoring and repayment, but also takes care of risks in input purchase and output sale, which might affect the farmers' income and repayment performance in the absence of cooperative intervention. Some of the commercial banks in these areas have started following the successful examples of interlinked loans, by coordinating their loaning activities with the activities of local input and output selling organisations. Last but not the least, all these cooperatives have come up with their own banks to make sure that local initiatives and efforts don't suffer because of absence of loan support from commercial banks, which generally demand marketable collaterals against loans, which many local area people don't possess.
- Another very important feature of the credit activity of the cooperatively strong villages of Ancheli, Nilewadi, Sridharpur and Tantibaksha is deposit mobilisation by the respective cooperative banks (Tables 14 & 15). Transparency in functioning, good business practices, flexible working hours, friendly disposition and services (including additional services like free income tax consultancy in case of Amalsad PACS) have enabled these banks to attract huge bank deposits at moderate rates of interest. Without even approaching their higher tiers and local developmental agencies like the *Zilla Parishad*, these areas have therefore achieved the distinction of becoming capable of supporting all their local

business as well as local developmental activities including construction of roads, dams, schools, colleges, hospitals etc.

Table 14
Portfolio of Business Activities and Profit and Rebate in the Amalsad Society (1995-96)

(Rs. in lakh)						
Activity/Service	Year Started	Turnover	Gross Profit	Rate of Profit (%)	Rebate (%)	
INPUT MARKETING						
Sale of Fertilizer	1941	87.76	2.25	2.56	N.A.	
Sale of Pesticides	1966	10.04	.92	9.19	5.00	
Sale of Paddy Seed	1966	.81	.3	4.01	N.A.	
Sale of Implements	1968	.28	.2	9.84	N.A.	
Sale of Building Materials	1975	136.36	3.04	2.23	N.A.	
OUTPUT MARKETING						
Marketing of Chikku	1957	453.19	43.05	9.5	9.5	
Marketing of Mango	1957	58.04	5.22	9.0	9.0	
Marketing of Banana and Suran (Elephant Foot)	1957	00.33	Nil	Nil	Nil	
Marketing of Paddy	1957	96.15	Nil	Nil	Nil	
CONSUMER ACTIVITY						
Consumer Store	1941	817.89	37.04	4.53	*4.00	
Medical Store	1985	5.16	.79	15.33	3.00	
SERVICES						
Tractor Service	1960	2.19	.33	15.48	N.A.	
Motor-truck Service	N. A.	3.55	.40	11.41	N.A.	
Flour Mill	1959	2.92	.29	10.03	N.A.	
FINANCIAL ACTIVITY						
Deposits	1941	426.10	N.A.	N.A.	N.A.	
Credit	1941	119.01	N.A.	N.A.	N.A.	
* Applicable only on selected items on cash purchase						

Other Input Services: All the four cooperatively active villages have from the beginning instituted their own system of implement hire services (e.g., of tractors, threshers etc.) at reasonable rates to facilitate farming activities. These rates being moderate have put a constraint on possible opportunistic behavior of private suppliers of such services, who have a tendency to charge more. Although the villages of Kalyanpur and Sirol don't have such well-functioning cooperatives, the local club at Kalyanpur and the local NGO at Sirol have already initiated similar activities using their own wisdom. If a suitable exposure to the experiences of successful cases could be given to the local clubs, NGOs, forest protection committees, Panchayats and farmer leaders, it would go a long way in solving many of the problems of these areas without recourse to any government initiative and funds.

It is true that there is a tendency on the part of the successful cooperatives within the study area to withdraw to some extent from these services. But it must be noted that in most cases the withdrawal is only partial as when the market comes into being and starts functioning fairly competitively, cooperatives can withdraw to some extent and economise on the cost of maintaining unduly large capacities. Even when they have withdrawn totally - as for example the case with availability of canal or dam irrigation, the cooperatives have encouraged formation of informal or formal cooperation among the user groups. Institutionally backward villages like Kalyanpur, Dharrasole, Sarul and Sirol ought to learn from the experiences of the other villages under this study.

Value-addition on and Marketing of Crops & Products: The cooperative organisations in and around the villages of Ancheli, Nilewadi, Sridharpur and Tantibaksha have designed their organisational systems around the main crops their farmers produce - Amalsad PACS around sapota, Warana Sugar Cooperative around sugarcane and Sridharpur Bank around paddy and potato, although the extent of value-addition varies across them. Amalsad started sorting, grading and marketing of sapota in the premium Delhi market. But as the farmers produce mango, paddy, suran, banana etc. as well, they started producing canned mango pulp, while they engaged in pooling and marketing of the relatively small quantities of the other crops with the help of their taluka union (see Table 16 displaying growth in sale of various crops through this Society). Sale of inputs and groceries became important components of their cooperative activities in course of time (see Table 17 for the diversified set of activities of Amalsad PACS). In case of

the Warana Sugar Cooperative, it became in course of about 50 years a cooperative complex, which started processing each and every component of the bio-mass in cane to produce not only sugar, but also electricity out of bagasse to run the factories, paper out of excess bagasse, alcohol out of molasses and field manure out of press mud. It didn't stop there. to take care of the problems of landless and small farmers, Warana diversified its activities to include dairy, poultry, consumer stores, banking, fruit-processing, *mahila griha udyog* and various educational and rural development activities. The Sridharpur Bank has concentrated on storage and marketing of paddy and rice (though recently they have started rice milling), besides continuing with banking activities and starting consumer stores (see Table 15 for the diversified set of activities of Sridharpur Cooperative Bank). although Amalsad and Sridharpur are also engaged in some rural development and welfare activities, their list and scale of such activities are not as broad as in the case of Warana.

Table 15
Business Activities of the Sridharpur Cooperative Bank (1995-96)

(Rs. in lakh)					
Activity/Service	Year Started	Annual Business	Gross Profit	Net Profit	
INPUT MARKETING					
Sale of Fertilizer	1954	24.54	1.32	1.00	
Sale of Pesticides	1966	0.90	N.A.	0.06	
OUTPUT MARKETING					
Marketing of Paddy	1959	1.03	0.09	0.06	
Marketing of Potato	1972	11.72	N.A.	0.74	
CONSUMER ACTIVITY					
Grocery Shop	1949	11.29	0.44	0.22	
Coal Business	1965	0.60	0.10	0.07	
Cloth Business	1949	2.75	0.41	0.39	
FINANCIAL ACTIVITY					
Deposits	1926	982	N.A.	N.A.	
Credit	1918	58.24	15.84	0.85	
Lending against Pledging of Utensils	1982	0.12	N. A.	N. A.	
SERVICES					
Cold Storage	1977	46.36	24.50	13.85	
Sinking of Mini Deep Tubewell	1988	0.05	0.42	-0.37	
Aiding Cultivation	1971	-	-	-	
OTHER ACTIVITIES					
Dharamgola	1951	0.81	N.A.	0.27	
Pisciculture, etc.	1971	1.38	0.22	-0.52	
Total				57.76	

Table 16
Sale of Crops by the Amalsad Society (in maunds)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
Chikku	346190	447963	398831	536416	568269	619589	542956	656680	484523	626232	576874
Mango	53642	108596	30811	61927	69486	64797	40699	63800	34065	72910	11363
Banana	14950	6836	5692	8851	7432	121	839	387	607	40	670
Paddy	NA	61663	77324	87680	65382	120875	90804	69994	65859	103901	NA
Suran	499	498	326	375	2092	217	89	Nil	Nil	109	227

Note: 1 maund = 20 kg.

The villages of Kalyanpur and Dharrasole are engaged in subsistence farming of most crops, though the farmers are often required to make distress sale of their crops immediately after harvesting in order to get enough cash to make obligatory payments to lenders or to sustain their immediate consumption needs. There are no farmer organisations even in the nearby areas which can help them to do better marketing, nor is the small size of their marketable surplus favorable toward establishment of such an organisation. As in the case of Amalsad, some taluka level cooperative body could be of help to them in terms of primary sale through storage and pooling. The village of Sarul has a lot of marketable surplus in paddy and potato, but unlike Sridharpur and Tantibaksha the former village does not have a good cooperative to help them in storage, processing

and marketing at an opportune place and time. Sirol too has marketable surplus in beetle leaves and rid, but no one has so far thought of studying these produce as well as their current marketing system through traders. Even if there is some knowledge base on these produce at ICAR, it has never flown to the villagers. As a result, the NGO called SPIC is engaged in mostly welfare activities based on mainly outside sources of funds. It has a serious sustainability problem as it is neither a beneficiary of regular governmental funds flowing through the *Panchayati Raj* system, nor has it been able to develop a strong economic organisation on the solid foundations of any crop/commodity. Sales of almost the entire marketed surplus of crops in these four villages are undertaken through the existing and highly exploitative market system through various interlinked transactions.

Table 17
Activities of the Amalsad Society

1. Agricultural Credit	6. Agricultural Input Supply Services
2. Agriculture Extension Services, Special Fruit Fly Project.	7. Petrol and Diesel Oil Supply
3. Running of Consumer Stores at 17 places and Flour Mills at eight places.	8. Marketing of: Mango, Chikoo, Paddy, Elephant Foot, Banana, etc.
4. Two godowns with capacity of 1500 M.T. and 1000 M.T. respectively.	9. Supply of Consumer Goods and Services, including Cement, Textiles, Readymade Garments, Medicine, etc.
5. Golden Jubilee Funds for Agricultural Research	10. Supply of Agriculture Implements
Soil Testing	11. Member Welfare Activities
Water Analysis	Homeopathic Clinic Medical Service.
Student Scholarship	Eye and Health Clinic
Agricultural Literature	Donations for School Buildings,
	Relief Works

Dairy Products: Warana is tapping fully the dairy potential of its member households and has been marketing almost all modern milk products in the premium markets of Bombay and Delhi. Amalsad has also milk societies to encourage dairy. In spite of huge potential, dairying seem to be totally missing in the West Bengal villages under this study. The same is also true of fisheries. These are areas where future attentions need to be paid through exposure and awareness-building.

Forestry Products: Although Kalyanpur and Dharrasole are currently engaged in joint forest management, marketing of their timber forest produce takes place through the Forest Department, which in turn is engaged in sale of the final product - namely, timber through a bidding process, where a Forest Protection Committee can hardly compete. Although the local club at Kalyanpur are quite enthusiastic about participation in government biddings and also in sale of minor forest produce, they have neither the money nor any experience to pursue the matter.

Consumer Stores Only Ancheli, Nilewadi, Sridharpur and Tantibaksha have well-functioning consumer stores to provide good quality groceries and other consumable items to the villagers at very reasonable prices. Probably, the NGO sector must come forward to take advantage of the gaps in the other four villages. Using the example of *Grahak Peth* in Pune, one should try to run consumer movement alongside consumer store, because consumer knowledge is very much lacking in the countryside. One should depend upon the NGO route rather than direct government support and control to promote farmer managed consumer stores.

Section 6. Conclusions

Markets do not operate in vacuum. They need an institutional structure for them to function competitively and efficiently. This revisit study based on intensive study of eight villages - six from West Bengal and one each from Gujarat and Maharashtra - shows that cooperatives or cooperative-like autonomous and democratic organisations are an important tool to perfect the market. With historically determined institutional imperfections given from the past, neither the so-called free market system nor government-initiated process of intervention and development nor even exclusive reliance on the cooperative route can really achieve sustainable growth and equity in the countryside. Cooperatives too need supporting background rules and structures to make them function properly. In the absence of the necessary supporting structure, cooperatives tend to be parastatal and inefficient organisations, and hence totally irrelevant organisations in the process of development. There is no short-cut to achieve development. This study therefore favors promoting multiple

organisations including NGOs, which can act as competitive check on one another. The country has a lot of bad experiences in development, but at the same time it has enough good experiences too to see and learn from. There is no better way to achieve dissemination of knowledge than providing to our villagers, their leaders and *Panchayats* a direct exposure to worthwhile experiences.

Annexure 1
Village Level Collective Bodies in the Selected Villages

Sl. No.	Village	PACS/ LAMPS	Milk Coop	Youth Club Cultural Ass.	Public Library	Mahila Samity Association	NGO	Tubewell Waterbox Committee
1.	Ancheli	Y	Y	Y	-	Y	-	Y
2.	Nilewadi	Y	Y	Y	Y	Y	-	-
3.	Sridharpur	Y	-	Y	Y	-	-	Y
4.	Tantibaksa	Y	-	Y	-	-	-	Y
5.	Kalyanpur	*	-	Y	Y	Y	Y	-
6.	Dharrasole	*	-	Y	-	-	-	-
7.	Sarul	Y	-	Y	-	-	-	-
8.	Sirol	-	-	Y	-	-	Y	-

Note: Y stand for yes, i.e., it exists. * means existing organization is hardly relevant.

Annexure 2

Village Institutions Directly Involved in Agrarian Contracts in the Selected Villages of West Bengal, Gujarat & Maharashtra

Name of Village	Contract Types				
	Land	Credit	Input	Service	Output
Ancheli	-	1. Amalsad PACS	1. Amalsad PACS	1. Amalsad PACS	1. Amalsad Coop. Mahila Dairy
Nilewadi	-	1. Nilewadi PACS 2. Primary Teachers Coop. Bank 3. Warana Coop. Bank 4. Bank of India 5. Bank of Baroda 6. Nagarik Coop Bank 7. Hanuman Dudh Society 8. Joy Bhavani Dudh Society	1. Warana Sugar Cooperative 2. Nilewadi PACS 3. Joy Bhavani Dudh Society. 5. Hanuman Dudh Society. 6. Gopal Krishna Dudh Society	1. Ishwar Parbati Irrigation Society	1. Warana Sugar Cooperative 2. Joy Bhavani Dudh Society 3. Gopalkrishna Dudh Society 4. Hanuman Dudh Society
Sridharpur	-	1. Sridharpur PACS 2. Satgachia Panchayat	1. Sridharpur PACS	1. Sridharpur PACS	1. Sridharpur PACS
Tantibaksha	1. Masjid Committee	1. Sridharpur PACS 2. Satgachia Panchayat	1. Sridharpur PACS	1. Sridharpur PACS	1. Sridharpur PACS
Kalyanpur	-	1. Punjab National Bank (Patharmora)	-	1. Forest Protection Committee	-
Dharrasole	-	1. UCO Bank (Chandra Branch)	-	-	-
Sarul	-	1. State Bank of India (Galsi Branch)	1. Sarul PACS 2. Galshi PAMS 3. Galshi DVC	-	-
Sirol	1. Masjid Committee	1. UCO Bank (Motin Branch)	-	1. SPIC	

PURCHASED
APPROVAL
GRATIS/EXCHANGE
PRICE
ACC NO.
VIKRAM SARABHAI LIBRARY
11 M. AHMEDABAD